Risk Factors Comparison 2024-02-09 to 2023-02-24 Form: 10-K

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Investing in our Class A common stock involves a high degree of risk. You should carefully consider the following risks, together with all of the other information contained in this Annual Report on Form 10- K, before deciding to invest in our Class A common stock. Our business, financial condition and results of operations could be materially adversely affected by any of these risks or uncertainties. In that case, the trading price of our Class A common stock could decline, and you may lose all or part of your investment. Risk Factors Summary The following is a summary of the principal factors that make an investment in our Class A common stock speculative or risky. Risks Relating to Market and Industry Dynamics and Competition • Economic, political and market conditions may reduce trading volumes. • We may fail to compete successfully. • If we are unable to adapt our business effectively to keep pace with industry changes, we may not be able to compete effectively. • We may face consolidation and concentration in the financial services industry. Risks Relating to the Operation and Performance of our Business • We are dependent on our dealer clients to support our marketplaces by transacting with our other institutional, wholesale and retail clients. • We do not have long- term contractual arrangements with most of our liquidity taking clients. • Our business could be harmed if we are unable to maintain and grow the capacity of our trading platforms, systems and infrastructure. • We may experience design defects, errors, failures or delays with our platforms or solutions. • We rely on third parties to perform certain key functions, are dependent on third parties for our pre- and post- trade data, analytics and reporting solutions and are dependent upon trading counterparties and clearinghouses to perform their obligations. • Our ability to conduct our business may be impacted by unforeseen, catastrophic or uncontrollable events. • Our quarterly results may fluctuate significantly. • Failure to retain our senior management team or the inability to attract and retain qualified personnel could materially adversely impact our ability to operate or grow our business. • We could face damage to our reputation or brand. • We may incur impairment charges for our goodwill and other indefinite- lived intangible assets. • We may be unable to achieve our environmental, social and governance goals. Risks Relating to our Growth Strategies and other Strategic Opportunities • We may fail to maintain our current level of business or execute our growth plan. • It is possible that our entry into new markets will not be successful, and potential new markets may not develop quickly or at all. • We may undertake acquisitions or divestitures, which may not be successful. • If we enter into strategic alliances, partnerships or joint ventures, we may not realize the anticipated strategic goals for any such transactions. Risks Relating to our International Operations • Our business, financial condition and results of operations may be materially adversely affected by risks associated with our international operations. • Fluctuations in foreign currency exchange rates may adversely affect our financial results. Risks Relating to Cybersecurity and Intellectual Property • We could face actual or perceived security vulnerabilities in ~~our~~ **the** systems, networks and infrastructure **that we own or use**, breaches of security controls, unauthorized access to confidential or personal information or cyber- attacks. • We could be subject to systems failures, interruptions, delays in service, catastrophic events and resulting interruptions in the availability of our platforms or solutions. • We may not be able to adequately protect our intellectual property or rely on third- party intellectual property rights. • Third parties may claim that we are infringing or misappropriating their intellectual property rights. • Our use of open source software could result in litigation or impose unanticipated restrictions on our ability to commercialize our platforms and solutions. Risks Relating to Legal, Regulatory and Tax Considerations • Extensive regulation of our industry results in ongoing exposure to significant costs and penalties, enhanced oversight and restrictions and limitations on our business. • Our business, and the businesses of many of our clients, could be materially adversely affected by new laws, rules or regulations or changes in existing laws, rules or regulations. • Our actual or perceived failure to comply with privacy, data protection and information security laws, rules, regulations and obligations could harm our business. • We may face new ~~U. S.~~ tax legislation **and regulation** as well as unanticipated changes in effective tax rates or adverse outcomes resulting from examination of our income or other tax returns. • Our compliance and risk management programs might not be effective. • We are exposed to litigation risk, including securities litigation risk. Risks Relating to our Indebtedness • The credit agreement that governs the **2023** Revolving Credit Facility imposes ~~significant~~ **certain** operating and financial restrictions on us and our restricted subsidiaries. • Any borrowings under the **2023** Revolving Credit Facility will subject us to interest rate risk ~~. • The phase- out, replacement or unavailability of LIBOR and / or other interest rate benchmarks could adversely affect our indebtedness~~. Risks Relating to our Organizational Structure and Governance • Refinitiv controls us and its interests may conflict with ours or yours. • We are a " controlled company " within the meaning of the corporate governance standards of Nasdaq. • Anti- takeover provisions in our organizational documents and Delaware law might discourage or delay acquisition attempts for us that you might consider favorable. • Our amended and restated certificate of incorporation designates the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders. • Our principal asset is our equity interest in TWM LLC, and, accordingly, we depend on distributions from TWM LLC to pay our taxes and expenses, including payments under the Tax Receivable Agreement. • The Tax Receivable Agreement with the Continuing LLC Owners requires us to make cash payments to them in respect of certain tax benefits to which we may become entitled. • Our organizational structure, including the Tax Receivable Agreement, confers certain benefits upon the Continuing LLC Owners that will not benefit Class A common stockholders or Class B common stockholders to the same extent as it will benefit the Continuing LLC Owners. • In certain cases, payments under the Tax Receivable Agreement to the Continuing LLC Owners may be accelerated or significantly exceed the actual benefits we realize. • We will not be reimbursed for any payments made to the Continuing LLC Owners under the Tax Receivable Agreement in the event that any tax benefits are disallowed. • If we are deemed to be an investment company under the Investment Company Act of 1940, applicable restrictions could make it impractical for us to continue our business as contemplated and could have a material adverse effect on our business. Risks Relating to Ownership of our Class A Common Stock • Refinitiv and Continuing LLC Owners may require us to issue additional shares of our Class A common stock. • The market price of our Class A common stock may be highly volatile. • Sales, or the potential for sales, of a substantial number of shares of our Class A common stock in the public market could cause our stock price to drop significantly. • If securities or industry analysts cease publishing research or reports about us, adversely change their recommendations or publish negative reports regarding our business or our Class A common stock, our stock price and stock trading volume could materially decline. • We intend to continue to pay regular dividends, but our ability to do so may be limited. • The timing and amount of any share repurchases are subject to a number of uncertainties. • The requirements of being a public company may strain our resources, increase our costs and divert management' s attention, and we may be unable to comply with these requirements in a timely or cost- effective manner. Economic, political and market conditions may reduce trading volumes, which could have a material adverse effect on our business, financial condition and results of operations. The electronic financial services industry is, by its nature, risky and volatile. Our business performance is impacted by a number of global and regional factors that are generally beyond our control. The occurrence of, or uncertainty related to, any one of the following factors may cause a substantial decline in the U. S. and / or global financial markets, which could result in reduced trading volumes and profitability for our business: • economic, political and social conditions in the United States, the UK, the EU and / or its member states, China or other major economies around the world, including, among other things, the strength and direction of the U. S. and global economy ~~and~~ **,** the **war in Ukraine** ~~ongoing effects of COVID- 19~~ and ~~its variants~~ **the Israel Hamas war** ; • the impact of foreign exchange fluctuations (see " — Risks Relating to our International Operations **—** ~~--~~ Fluctuations in foreign currency exchange rates may adversely affect our financial results " for further information); • the effect of Federal Reserve Board and other central banks' monetary policy, increased capital requirements for banks and other financial institutions and other regulatory requirements; • adverse market conditions, including unforeseen market closures or other disruptions in trading; • broad trends in business and finance, including the number of new issuances and changes in investment patterns and priorities; • concerns over a potential recession (in the United States or globally), inflation **, the banking industry, including as a result of any bank failures** and weakening consumer and investor confidence levels; • the level and volatility of interest rates, including actual and anticipated increases in the federal funds rate by the Federal Reserve; • consolidation or contraction in the number, and changes in the financial strength, of market participants; • the availability of capital for borrowings and investments by our clients; • liquidity concerns, including concerns over credit default or bankruptcy of one or more sovereign nations or corporate entities; • legislative, regulatory or government policy changes, including changes to financial industry regulations and tax laws, including the Inflation Reduction Act of 2022 (the " IRA ") and central clearing requirements for the U. S. Treasury market, that could limit the ability of market participants to engage in a wider array of trading activities or make certain corporate activities less desirable or more expensive; • actual or threatened trade war, including between the United States and China, or other governmental action related to tariffs, international trade agreements or trade policies; and • the current or anticipated impact of climate change, extreme weather events, natural disasters and other catastrophic events, actual or threatened acts of war ~~,~~ ~~including Russia' s invasion of Ukraine~~ , terrorism or other armed hostilities or outbreaks of pandemic or contagious diseases. These factors also affect the degree of volatility (the magnitude and frequency of fluctuations) in the U. S. and global financial markets, including in the prices and trading volumes of the products traded on our platforms. Volatility increases the need to hedge price risk and creates opportunities for investment and speculative or arbitrage trading, and thus increases trading volumes. Although we generally experience increased trading volumes across our marketplaces during periods of volatility, use of our platforms and demand for our solutions may decline during periods of significant volatility as market participants in rapidly moving markets may seek to negotiate trades and access information directly over the telephone instead of electronically. In the event of stagnant or deteriorating economic conditions or periods of instability or prolonged stability or decreased activity in the U. S. and / or global financial markets, we could experience lower trading volumes. A general decline in trading volumes across our marketplaces would lower revenues and could materially adversely affect our results of operations if we are unable to offset falling volumes through changes in our fee structure. If trading volumes decline substantially or for a sustained period, the critical mass of transaction volume necessary to support viable markets and generate valuable data could be jeopardized, which, in turn, could further discourage clients from using our platforms and solutions and further accelerate the decline in trading volumes. Additionally, if our total market share decreases relative to our competitors, our trading venues may be viewed as less attractive sources of liquidity. If our marketplaces are perceived to be less liquid, we could lose further trading volumes and our business, financial condition and results of operations could be materially adversely affected. There have been significant declines in trading volumes in the financial markets generally in the past and there may be similar declines in trading volumes generally or across our marketplaces in particular in the future. During periods of lower trading volumes or during an economic downturn, our clients may become more price sensitive and exert pricing pressure on us, and we may be forced to reduce our fees or to maintain our fees during periods of increased costs. Because our cost structure is largely fixed, if use of our platforms and demand for our solutions decline for any reason or if we are forced to reduce fees, we may not be able to adjust our cost structure to counteract the associated decline in revenues, which would materially harm our profitability. Failure to compete successfully could materially adversely affect our business, financial condition and results of operations. We face intense competition in both the financial services industry generally and the markets that we serve in particular, and we expect competition with a broad range of competitors to continue to intensify in the future. Within the electronic financial services industry in which we operate, we compete based on our ability to provide a broad range of solutions, trading venues with a broad network of market participants and deep liquidity, a competitive fee structure and comprehensive pre- trade, trade and post- trade functionality, as well as the reliability, security and ease of use of our platforms and solutions. We primarily compete with other electronic trading platforms and trading business conducted directly between dealers and their institutional, wholesale and retail client counterparties over telephone, email or instant messaging. We also compete with securities and futures exchanges, other inter- dealer brokers and single bank systems. For example, our trading platforms face existing and potential competition from large exchanges, which have in recent years developed electronic capabilities in- house or through acquisitions. We also face competition from individual banks that offer their own electronic platforms to their institutional clients **and from providers of execution management services and order management services** . In addition, we may face competition from companies with strong market share in specific markets or organizations and businesses that have not traditionally competed with us but that could adapt their products and services or utilize significant financial and information resources, recognized brands, or technological expertise to begin competing with us. We expect that we may compete in the future with a variety of companies with respect to our platforms and solutions. If we are not able to compete successfully in the future, our business, financial condition and results of operations could be materially adversely affected. Certain of our current and prospective competitors are substantially larger than we are and have substantially greater market presence than we do, as well as greater financial, technological, marketing and other resources. These competitors may be better able to withstand reductions in fees or other adverse economic or market conditions than we can. Some competitors may be able to adopt new or emerging technologies, or incorporate customized features or functions into existing technologies, to address changing market conditions or client preferences at a relatively low cost and / or more quickly than we can. In addition, because we operate in a rapidly evolving industry, start- up companies can enter the market with new and emerging technologies more easily and quickly than they would in more traditional industries. If we are unable or unwilling to reduce our fees or make additional investments in the future, we may lose clients and our competitive position may be adversely affected. In addition, our competitive position may be adversely affected by changes in regulations that have a disproportionately negative affect on us or the products or trading protocols we offer our clients. Competition in the markets in which we operate has intensified due to consolidation, which has resulted in increasingly large and sophisticated competitors. In recent years, our competitors have made acquisitions and / or entered into joint ventures and consortia to improve the competitiveness of their electronic trading offerings. For example, ICE acquired BondPoint, TMC Bonds and IDC, in an effort to expand its portfolio of fixed income products and services. In addition, in 2018, CME Group completed its acquisition of NEX Group, which expands CME Group' s offerings to include NEX Group' s OTC foreign exchange and rates products and market data. Further, in 2022, TP ICAP completed its acquisition of Liquidnet to further diversify its business. If, as a result of industry consolidation, our competitors are able to offer lower cost (including fixed cost fees compared to our variable fees for certain offerings) and / or a wider range of trading venues and solutions, obtain more favorable terms from third- party providers or otherwise take actions that could increase their market share, our competitive position and therefore our business, financial condition and results of operations may be materially adversely affected. Our operations also include the sale of pre- and post- trade services, analytics and market data (including through a distribution agreement with ~~Refinitiv~~ **LSEG**). There is a high degree of competition among market data and information vendors in solutions for pre- and post- trade data, analytics and reporting, and such businesses may become more competitive in the future as new competitors emerge. Some of these companies are already in or may enter the electronic trading business. Accordingly, some of our competitors may be able to combine use of their electronic trading platforms with complementary access to market data and analytical tools and / or leverage relationships with existing clients to obtain additional business from such clients, which could preempt use of our platforms or solutions. For example, Bloomberg and ICE have trading platforms that compete with ours and also have data and analytics relationships with the vast majority of institutional, wholesale and retail market participants. If we are not able to compete successfully in this area in the future, our revenues could be adversely impacted and, as a result, our business, financial condition and results of operations would be materially adversely affected. The industry in which we operate is rapidly evolving. If we are unable to adapt our business effectively to keep pace with industry changes, we may not be able to compete effectively, which could have a material adverse effect on our business, financial condition and results of operations. The electronic financial services industry is characterized by rapidly changing and increasingly complex technologies and systems, changing and increasingly sophisticated client demands (including access to new technologies and markets), frequent technology and service introductions, evolving industry standards, changing regulatory requirements and new business models. If we are not able to keep pace with changing market conditions or client demands or if our competitors release new technology before we do, our existing platforms, solutions and technologies may become obsolete or our competitive position may be materially harmed, each of which could have a material adverse effect on our business, financial condition and results of operations. Operating in a rapidly evolving industry involves a high degree of risk and our future success will depend in part on our ability to: • enhance and improve the responsiveness, functionality, accessibility and reliability of our existing platforms and solutions; • develop, license or acquire new platforms, solutions and technologies that address the increasingly sophisticated and varied needs of our existing and prospective clients, and that allow us to grow within our existing markets and to expand into new markets, asset classes and products; • achieve and maintain market acceptance for our platforms and solutions; • adapt our existing platforms and solutions for new markets, asset classes and products; • respond to competitive pressures, technological advances, including new or disruptive technology **such as artificial intelligence** , emerging industry standards and practices and regulatory requirements and changes on a cost- effective and timely basis; • attract highly- skilled technology, regulatory, sales and marketing personnel; • operate, support, expand, adapt and develop our operations, systems, networks and infrastructure; • manage cybersecurity threats; • take advantage of acquisitions, strategic alliances and other opportunities; and • obtain any applicable regulatory approval for our platforms and solutions. Further, the development of new internet, networking, telecommunications or blockchain technologies may require us to devote substantial resources to modify and adapt our marketplaces. In particular, because our platforms and solutions are designed to operate on a variety of electronic systems, we will need to continuously modify and enhance our marketplaces to keep pace with changes in internet- related hardware and other software, communication and browser technologies. We cannot assure you that we will be able to successfully adapt our existing technologies and systems to incorporate new, or changes to existing, technologies. The success of new platforms or solutions, or new features and versions of existing platforms and solutions, depends on several factors, including the timely and cost- effective completion, introduction and market acceptance of such new or enhanced platform or solution. Development efforts entail significant technical and business risks. We may use new technologies ineffectively, fail to adequately address regulatory requirements, experience design defects or errors or fail to accurately determine market demand for new platforms, solutions and enhancements. Furthermore, development efforts may require substantial expenditures and take considerable time, and we may experience cost overrun, delays in delivery or performance problems and not be successful in realizing a return on these development efforts in a timely manner or at all. We cannot assure you that we will be able to anticipate or respond in a timely manner to changing market conditions, and new platforms, technologies or solutions, or enhancements to existing platforms, technologies or solutions, may not meet regulatory requirements, address client needs or achieve market acceptance. If we are not able to successfully develop and implement, or face material delays in introducing, new platforms, solutions and enhancements, our clients may forego the use of our platforms and solutions and instead use those of our competitors. Any failure to remain abreast of changing market conditions and to be responsive to market preferences could cause our market share to decline and materially adversely impact our revenues. Consolidation and concentration in the financial services industry could materially adversely affect our business, financial condition and results of operations. There has been significant consolidation in the financial services industry over the past several years and several of our large broker- dealer clients have reduced their sales and trading businesses in certain products. Further consolidation in the financial services industry could result in a smaller client base and heightened competition, which may lower our trading volumes. If our clients merge with or are acquired by other companies that are not our clients, or companies that utilize our offerings to a lesser degree, such clients may discontinue or reduce their use of our platforms and solutions. Any such developments could materially adversely affect our business, financial condition and results of operations. The substantial consolidation of market share among companies in the financial services industry has resulted in concentration in markets by some of our largest dealer clients. Because our trading platforms depend on these clients, any event that impacts one or more of these clients or the financial services industry in general could negatively impact our trading volumes and revenues. In addition, some of our dealer clients have announced plans to reduce their sales and trading businesses in the markets in which we operate. This is in addition to the significant reductions in these businesses already completed by certain of our dealer clients. The consolidation and concentration of market share and the reduction by large clients of certain businesses may lead to increased revenue concentration among our dealer clients, which may further increase our dependency on such clients and reduce our ability to negotiate pricing and other matters with such clients. Additionally, the sales and trading global market share has become increasingly concentrated over the past several years among the top investment banks, which will increase competition for client trades and place additional pricing pressure on us. If we are not able to compete successfully, our business, financial condition and results of operations could be materially adversely affected. We rely on our dealer clients to provide liquidity on our trading platforms by posting prices on our platforms and responding to client inquiries, and certain of our dealer clients account for a significant portion of our total trading volume on our platforms. In addition, our dealer clients also provide us with data via feeds and through the transactions they execute on our trading platforms, which is an important input for our data and analytics offerings ~~. We have historically earned a substantial portion of our revenues from dealer clients that were also stockholders~~ . Market knowledge and feedback from dealer clients have been important factors in the development of many of our offerings and solutions. There are inherent risks whenever a significant percentage of our trading volume and revenues are concentrated with a limited number of clients, and these risks are especially heightened for us due to the potential effects of increased industry consolidation and financial regulation on our business. The contractual obligations of our clients to us are non- exclusive and subject to termination rights by such clients. Any failure by us to meet a key dealer client' s or other key client' s expectations could result in cancellation or non- renewal of the contract. In addition, our reliance on any individual dealer client for a significant portion of our trading volume may also give that client a degree of leverage against us when negotiating contracts and terms of services with us. Our dealer clients also buy and sell through traditional methods, including by telephone, e- mail and instant messaging, and through other trading platforms. Some of our dealer clients have developed electronic trading networks that compete with us or have announced their intention to explore the development of such electronic trading networks, and many of our dealer clients are involved in other ventures, including other trading platforms or other distribution channels, as trading participants and / or as investors. In particular, certain of our dealer clients have their own competing trading platform and frequently invest in such businesses and may acquire ownership interests in similar businesses, and such businesses may also compete with us. These competing trading platforms may offer some features that we do not currently offer or that we are unable to offer, including customized features or functions. Accordingly, there can be no assurance that such dealer clients' primary commitments will not be to one of our competitors or that they will not continue to rely on their own trading platforms or traditional methods instead of using our trading platforms. Although we have established and maintain significant long- term relationships with our key dealer clients, we cannot assure you that all of these relationships will continue or will not diminish. Any reduction in the use of our trading platforms by our key dealer clients, for any reason, and any associated decrease in the pool of capital and liquidity accessible across our marketplaces, could reduce the volume of trading on our platforms, which could, in turn, reduce the use of our platforms by their counterparty clients. In addition, any decrease in the number of dealer clients competing for trades on our trading platforms, could cause our dealer clients to forego use of our platforms and instead use platforms that provide access to more competitive trading environments and prices. The occurrence of any of the foregoing may have a material adverse effect on our business, financial condition and results of operations. We do not have long- term contractual arrangements with most of our liquidity taking clients, and our trading volumes and revenues could be reduced if these clients stop using our platforms and solutions. Our business largely depends on certain of our liquidity taking clients to initiate inquiries on our trading platforms. A limited number of such clients can account for a significant portion of our trading volumes, which in turn, results in a significant portion of our transaction fees.

Most of our liquidity taking clients do not have long- term contractual arrangements with us and utilize our platforms and solutions on a transaction- by- transaction basis and may choose not to use our platforms at any time. These clients buy and sell a variety of products within various asset classes using traditional methods, including by telephone, e- mail and instant messaging, and through other trading platforms. Any significant loss of these clients or a significant reduction in their use of our platforms and solutions could have a material negative impact on our trading volumes and revenues, and materially adversely affect our business, financial condition and results of operations. We rely on our information technology environment and certain critical databases, systems and applications to support key product and service offerings. Our success depends on our clients' confidence in our ability to provide reliable, secure, real- time access to our trading platforms. If our trading platforms cannot cope, or expand to cope, with demand, or otherwise fail to perform, we could experience disruptions in service, slow delivery times and insufficient capacity. Any material disruptions in our trading platforms could result in our clients deciding to stop using or to reduce their use of our trading platforms, either of which would have a material adverse effect on our business, financial condition and results of operations. We will need to continually improve and upgrade our trading platforms, systems and infrastructure to accommodate increases in trading volumes, changes in trading practices of new and existing clients or irregular or heavy use of our trading platforms, especially during peak trading times or at times of increased market volatility. The maintenance and expansion of our trading platforms, systems and infrastructure has required, and will continue to require, substantial financial, operational and technical resources. As our operations grow in both size and scope, these resources will typically need to be committed well in advance of any potential increase in trading volumes. We cannot assure you that our estimates of future trading volumes will be accurate or that our systems will always be able to accommodate actual trading volumes without failure or degradation of performance, especially during periods of abnormally high volumes. If we do not successfully adapt our existing trading platforms, systems and infrastructure to the requirements of our clients or to emerging industry standards, or if our trading platforms otherwise fail to accommodate trading volumes, our business, financial condition and results of operations could be materially adversely affected. If we experience design defects, errors, failures or delays with our platforms or solutions, our business could suffer serious harm. Despite testing, our platforms and solutions may contain design defects and errors or fail when first introduced or when major new updates or enhancements are released. In our development of new platforms, platform features and solutions or updates and enhancements to our existing platforms and solutions, we may make a design error that causes the platform **feature** or solution to fail or operate incorrectly or less effectively than planned. Many of our solutions also rely on data and services provided by third- party providers over which we have no or limited control and may be provided to us with defects, errors or failures. Our clients may also use our platforms and solutions together with their own software, data or products from other companies. As a result, when problems occur, it might be difficult to identify the source of the problem and responsibility for any loss. In addition, we could experience delays while developing and introducing new or enhanced platforms, platform features and solutions, primarily due to difficulties in technology development, obtaining any applicable regulatory approval, licensing data inputs or adapting to new operating environments. If design defects, errors or failures are discovered in our current or future platforms or solutions, we may not be able to correct or work around them in a cost- effective or timely manner, or at all. The existence of design defects, errors, failures or delays that are significant, or are perceived to be significant, could also result in rejection or delay in market acceptance of our platforms **, features** or solutions, damage to our reputation, loss of clients and related revenues, diversion of resources, product liability claims, regulatory actions or increases in costs, any of which could materially adversely affect our business, financial condition or results of operations. We rely on third parties to perform certain key functions, and their failure to perform those functions could result in the interruption of our operations and systems and could result in significant costs and reputational damage to us. We rely on a number of third parties to supply, support and maintain critical elements of our operations, including our trading platforms, information technology and other systems. In addition, we depend on third parties, such as telephone companies, online service providers, hosting services and software and hardware vendors, for various computer and communications systems, such as our data centers, telecommunications access lines and certain computer software and hardware. Our clients also depend on third- party middleware and clearinghouses for clearing and settlement of certain trades on our trading platforms, which could impact our trading platforms. We cannot assure you that any of these third- party providers will be able or willing to continue to provide these products and services in an efficient, cost- effective or timely manner, or at all, or that they will be able to adequately expand their services to meet our needs. In particular, like us, third- party providers are vulnerable to operational and technological disruptions, and we may have limited remedies against these third parties in the event of product or service disruptions. In addition, we have little control over and limited recourse to third- party providers, which increases our vulnerability to errors, failures, interruptions or disruptions or problems with their products or services. Further, the priorities and objectives of third- party providers may differ from ours, which may make us vulnerable to terminations of, or adverse changes to, our arrangements with such providers, and there can be no assurance that we will be able to maintain good relationships or the same terms with such providers. If an existing third- party provider is unable or unwilling to provide a critical product or service, and we are unable to make alternative arrangements for the supply of such product or service on commercially reasonable terms or a timely basis, or at all, our business, financial condition and results of operations could be materially adversely affected. Further, we also face risks that providers may perform work that deviates from our standards or contracts. Moreover, our existing third- party arrangements may bind us for a period of time to terms that become uncompetitive or technology and systems that become obsolete. If we do not obtain the expected benefits from our relationships with third- party providers, we may be less competitive, which could have a material adverse effect on our business, financial condition and results of operations. In the future, if we choose to transition a function previously managed by us to a third party, we may spend significant financial and operational resources and experience delays in completing such transition, and may never realize any of the anticipated benefits of such transition. We are dependent on third- party providers and our clients for our pre- and post- trade data, analytics and reporting solutions. The success of our trading platforms depends in part on our pre- and post- trade data, analytics and reporting solutions. We depend upon data and information services from external sources, including data received from certain competitors, clients, self- regulatory organizations and other third- party data providers for information used on our platforms and by our solutions, including our data, analytical tools and other pre- and post- trade services. In particular, we depend on ~~Refinitiv~~ **LSEG** to source certain reference data for products that trade on our platforms. Our data sources and information providers, some of which are our competitors, could increase the price for or withdraw their data or information services for a variety of reasons. For example, data sources or information providers may enter into exclusive contracts with other third parties, including our competitors, which could preclude us from receiving certain data or information services from these providers or restrict our use of such data or information services, which may give our competitors an advantage. In addition, our clients, the majority of which are not subject to long- term contractual arrangements, may stop using or reduce their use of our trading platforms at any time, which would decrease our volume of trade data and may diminish the competitiveness of our market data offerings. If a substantial number of our key data sources and information providers withdraw or are unable to provide us with their data or information services, or if a substantial number of clients no longer trade on our platforms or use our solutions, and we are unable to suitably replace such data sources or information services, or if the collection of data or information becomes uneconomical, our ability to offer our pre- and post- trade data, analytics tools and reporting solutions could be adversely impacted. If any of these factors negatively impact our ability to provide these data- based solutions to our clients, our competitive position could be materially harmed, which could have a material adverse effect on our business, financial condition and results of operations. In addition, pursuant to a market data license agreement, ~~Refinitiv~~ **LSEG** currently distributes a significant portion of our market data. The cancellation of, or any adverse change to, our arrangement with ~~Refinitiv~~ **LSEG** or the inability of ~~Refinitiv~~ **LSEG** to effectively distribute our data may materially harm our business and competitive position. We are dependent upon trading counterparties and clearinghouses to perform their obligations. Our business consists of providing consistent two- sided liquidity to market participants across numerous geographies, asset classes and products. In addition, in the normal course of our business we, as an agent, execute transactions with, and on behalf of, other brokers and dealers. See Part II, Item 7A. – " Quantitative and Qualitative Disclosures about Market Risk – Credit Risk. " In the event of a systemic market event resulting from large price movements or otherwise, certain market participants may not be able to meet their obligations to their trading counterparties, who, in turn, may not be able to meet their obligations to their other trading counterparties, which could lead to major defaults by one or more market participants. Many trades in the securities markets, and an increasing number of trades in the over- the- counter derivatives markets, are cleared through central counterparties. These central counterparties assume and specialize in managing counterparty performance risk relating to such trades. However, even when trades are cleared in this manner, there can be no assurance that a clearinghouse' s risk management methodology will be adequate to manage one or more defaults. Given the counterparty performance risk that is concentrated in central clearing parties, any failure by a clearinghouse to properly manage a default could lead to a systemic market failure. **For example, historically we have used ICBC Financial Services (" ICBC "), a wholly- owned subsidiary of the Industrial and Commercial Bank of China Limited to clear U. S. Treasury trades executed by non- FICC members on our wholesale trading platform. Following the November 2023 ransomware attack on some ICBC operating systems, including those used to clear U. S. Treasury and repurchase agreement financings, we have and may continue to self- clear these U. S. Treasury trades.** If trading counterparties do not meet their obligations, including to us, or if any central clearing parties fail to properly manage defaults by market participants, we could suffer a material adverse effect on our business, financial condition, results of operations and cash flows. Our ability to conduct our business may be materially adversely impacted by unforeseen, catastrophic or uncontrollable events. In addition, our U. S. and European operations 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, catastrophic or uncontrollable events, including fire, natural disasters, extreme weather events, global health crises (including COVID- 19 and its variants), power loss, telecommunications failure, software or hardware malfunctions, theft, cyber- attacks, acts of war, terrorist attacks or other armed hostilities **(including the war in Ukraine and the Israel Hamas war)** . In addition, employee misconduct, fraud or error, such as improperly using confidential information or engaging in improper or unauthorized activities or transactions, could expose us to significant liability, losses, regulatory sanctions and reputational harm. These unforeseen, catastrophic or uncontrollable events could adversely affect our clients' levels of business activity and precipitate sudden significant changes in regional and global economic conditions and cycles. Certain of these events also pose significant risks to our employees and our physical facilities and operations around the world, whether the facilities are ours or those of our third- party providers or clients. If our systems, networks or infrastructure were to fail or be negatively impacted as a result of an unforeseen, catastrophic or uncontrollable event, our business functions could be interrupted, our ability to make our platforms and solutions available to our clients could be impaired and, as a result, we could lose critical data and revenues. If we are unable to **deploy or** develop adequate plans to ensure that our business functions continue to operate during and after an unforeseen, catastrophic or uncontrollable event, and successfully execute on those plans should such an event occur, our business, financial condition, results of operations and reputation could be materially harmed. In addition, our U. S. operations are heavily concentrated in the New York metro area and our European operations are heavily concentrated in London, United Kingdom. Any event that affects either of those geographic areas could affect our ability to operate our business. Our quarterly results may fluctuate significantly and may not fully reflect the underlying performance of our business. Our quarterly operating results may vary significantly in the future, and period- to- period comparisons of our operating results may not be meaningful. Accordingly, the results of any one quarter should not be relied upon as an indication of future performance. Our quarterly financial results may fluctuate as a result of a variety of factors and, as a result, may not fully reflect the underlying performance of our business. Fluctuations in quarterly results may negatively impact the price at which our Class A common stock trades. Factors that may cause fluctuations in our quarterly financial results include, but are not limited to: • fluctuations in overall trading volumes or our market share for our key products; • the addition or loss of clients; • the unpredictability of the financial services industry; • our ability to drive an increase in the use of our trading platforms by new and existing clients; • the mix of products and volumes traded, changes in fee plans and average variable fees per million; • the amount and timing of expenses, including those related to the maintenance and expansion of our business, operations and infrastructure; • network or service outages, internet disruptions, the availability of our platforms, **cyber- attacks,** security breaches or perceived security breaches; • general economic, political, social, industry and market conditions; • changes in our business strategies and pricing policies (or those of our competitors); • the timing and success of our entry into new markets or introductions of new or enhanced platforms or solutions by us or our competitors, including disruptive technology, or any other change in the competitive dynamics of our industry, including consolidation or new entrants among competitors, market participants or strategic alliances; • the timing and success of any acquisitions, divestitures or strategic alliances; • the timing of expenses related to the development or acquisition of platforms, solutions, technologies or businesses and potential future charges for impairment of goodwill from acquired companies; • new, or changes to existing, regulations that limit or affect our platforms, solutions and technologies or which increase our regulatory compliance costs; and • the timing and magnitude of any adjustments in our consolidated financial statements driven by changes in the liability under the Tax Receivable Agreement. The success of our business depends upon the skills, experience and efforts of our executive officers and other key personnel. Although we have invested in succession planning, the loss of key members of our senior management team or other key personnel could nevertheless have a material adverse effect on our business, financial condition and results of operations. Should we lose the services of a member of our senior management team or other key personnel, we may have to conduct a search for a qualified replacement. This search may be prolonged, and we may not be able to locate and hire a qualified replacement. Our business also depends on our ability to continue to attract, motivate and retain a large number of highly qualified personnel in order to support our clients and achieve business results. There is a limited pool of employees who have the requisite skills, training and education. Identifying, recruiting, training, integrating and retaining qualified personnel requires significant time, expense and attention, and the market for qualified personnel, particularly those with experience in technology, clearing and settlement, product management and regulatory compliance, has become increasingly competitive as an increasing number of companies seek to enhance their positions in the markets we serve. In particular, we compete for technology personnel with highly innovative technology companies and large companies focused on technology development both in and outside our traditional geographic markets. Many of these companies have significant financial resources and more recognizable brands than ours and may be able to offer more attractive employment opportunities and more lucrative compensation packages. Our inability to attract, retain and motivate personnel with the requisite skills could impair our ability to develop new platforms, platform features or solutions, enhance our existing platforms and solutions, grow our client base, enter into new markets, operate under various regulatory frameworks or manage our business effectively. Damage to our reputation or brand could negatively impact our business, financial condition and results of operations. Our reputation and the quality of our brand are critical to our business, and we must protect and grow the value of our brand in order for us to continue to be successful. Any incident that erodes client loyalty for our brand could significantly reduce its value and damage our business. We may be adversely affected by any negative publicity, regardless of its accuracy, including with respect to, among other things, the quality and reliability of our platforms and solutions, the accuracy of our market data, our ability to maintain the security of our data and systems, networks and infrastructure and any impropriety, misconduct or fraudulent activity by any person formerly or currently associated with us. Also, there has been a marked increase in the use of blogs, social media platforms and other forms of Internet- based communications that provide individuals with access to a broad audience of interested persons. The opportunity for dissemination of information, including inaccurate information, is seemingly limitless and readily available. Information may be posted on such sites and platforms at any time. Information posted may be adverse to our interests or may be inaccurate, each of which may harm our business and reputation. The harm may be immediate without affording us an opportunity for redress or correction. Ultimately, the risks associated with any negative publicity or actual, alleged or perceived issues regarding our business or any person formerly or currently associated with us cannot be completely eliminated or mitigated and may materially harm our reputation, business, financial condition and results of operations. We may incur impairment charges for our goodwill and other indefinite- lived intangible assets which would negatively impact our operating results. As of December 31, ~~2022~~ **2023** , we had goodwill of $ 2. 8 billion and indefinite- lived intangible assets of $ 0. 3 billion. The carrying value of goodwill represents the fair value of an acquired business in excess of identifiable assets and liabilities as of the acquisition date. The carrying value of indefinite- lived intangible assets represents the fair value of licenses and trade names as of the acquisition date. Determining the fair value of certain assets acquired and liabilities assumed is judgmental in nature and requires management to use significant estimates and assumptions, including assumptions with respect to future cash flows, discount rates, growth rates and asset lives. We do not amortize goodwill and indefinite- lived intangible assets that we expect to contribute indefinitely to our cash flows, but instead we evaluate these assets for impairment at least annually, or more frequently if changes in circumstances indicate that a potential impairment could exist. Significant negative industry or economic trends, disruptions to our business, inability to effectively integrate acquired businesses, unexpected significant changes or planned changes in use of the acquired assets, divestitures and market capitalization declines may impair our goodwill and other indefinite- lived intangible assets. Any charges relating to such impairments could materially adversely affect our financial condition and results of operations. We may be unable to achieve our environmental, social and governance (" ESG ") goals. We have established ESG goals for our business. These goals reflect our current plans and aspirations and we may not be able to achieve them. Our failure to adequately update, accomplish or accurately track and report on these goals on a timely basis, or at all, could adversely affect our reputation, financial performance and growth, and expose us to increased scrutiny from the investment community, special interest groups and enforcement authorities. Our ability to achieve any ESG objective is subject to numerous risks, many of which are outside of our control. Examples of such risks include our ability to accurately track Scope 1, 2 and 3 greenhouse gas emissions, the evolving regulatory requirements affecting ESG standards or disclosures and our ability to recruit, develop and retain diverse talent in our workforce. Standards for tracking and reporting ESG matters continue to evolve. Our selection of voluntary disclosure frameworks and standards, and the interpretation or application of those frameworks and standards, may change from time to time or differ from those of others. Methodologies for reporting ESG data may be updated and previously reported ESG data may be adjusted to reflect improvement in availability and quality of third- party data, changing assumptions, changes in the nature and scope of our operations and other changes in circumstances. Our processes and controls for reporting ESG matters across our operations are evolving along with multiple disparate standards for identifying, measuring, and reporting ESG metrics, including ESG- related disclosures that may be required by the SEC and European and other regulators, and such standards may change over time, which could result in significant revisions to our current goals, reported progress in achieving such goals, or ability to achieve such goals in the future. If our ESG practices and goals do not meet evolving investor or other stakeholder expectations and standards, then our reputation or our attractiveness as an investment, business partner, acquirer, service provider or employer could be negatively impacted. If we fail to maintain our current level of business or execute our growth plan, our business, financial condition and results of operations may be materially harmed. We have experienced significant growth in our operations over the years, including, in part, as a result of favorable industry and market trends, such as the increased electronification of markets, growing global markets and evolving regulatory requirements. However, we cannot assure you that our operations will continue to grow at a similar rate, if at all, or that we will continue to benefit from such favorable industry and market trends. In particular, we cannot assure you that the growth of electronic means of trading will continue at the levels expected or at all. Our future financial performance depends in large part on our ability to successfully execute our growth plan. To effectively manage the expected growth of our operations, we will need to continue to improve our operational, financial and management processes and systems. The success of our growth plan depends, in part, on our ability to implement our business strategies. In particular, our growth depends on our ability to maintain and expand our network by attracting new clients, increasing the use of our platforms and solutions by existing clients and by integrating them across geographies and a wide range of asset classes, products, trade types and trade sizes within our marketplaces. Our growth also depends on, among other things, our ability to increase our market share, add new products, enhance our existing platforms and solutions, develop new offerings that address client demand and market trends and stay abreast of changing market conditions and regulatory requirements. Our growth may also be dependent on our ability to further diversify our revenue base. As of December 31, ~~2022~~ **2023** , we derived approximately ~~51~~ **52** % of our revenue from our Rates asset class. Our long- term growth plan includes expanding the number of products we offer across asset classes, by investing in our development efforts and increasing our revenues by growing our market share in our existing markets and entering into new markets. We cannot assure you that we will be able to successfully execute our growth plan or implement our business strategies within our expected timing or at all or be able to maintain or improve our current level of business, and we may decide to alter or discontinue certain aspects of our growth plan at any time. Execution of our growth plan entails significant risks and may be impacted by factors outside of our control, including competition, general economic, political and market conditions and industry, legal and regulatory changes. Failure to manage our growth effectively could result in our costs increasing at a faster rate than our revenues and distracting management from our core business and operations. For example, we may incur substantial development, sales and marketing expenses and expend significant management effort to create a new platform, platform feature or solution, and the period before such platform, platform feature or solution is successfully developed, introduced and / or adopted may extend over many months or years, if ever. Even after incurring these costs, such platform, platform feature or solution may not achieve market acceptance. Our long- term growth plan includes expanding our operations by entering into new markets, including new asset classes, products and geographies, including markets where we have little or no operating experience. We may have difficulties identifying and entering into new markets due to established competitors, lack of recognition of our brand and lack of acceptance of our platforms and solutions, as has occurred with certain of our initiatives in the past. Expansion, particularly in new geographic markets, may require substantial expenditures and take considerable time. In particular, we may need to make additional investments in management and new personnel, infrastructure and compliance systems. Furthermore, our expansion efforts may divert management' s attention or inefficiently utilize our resources. If we are not able to manage our expansion effectively, our expansion costs could increase at a faster rate than our revenues from these new markets. If we cannot successfully implement the necessary processes to support and manage our expansion, our business, financial condition and results of operations may suffer. We cannot assure you that we will be able to successfully adapt our platforms, solutions and technologies for use in any new markets. Even if we do adapt our products, services and technologies, we cannot assure you that we will be able to attract clients to our platforms and solutions and compete successfully in any such new markets. These and other factors have led us to scale back our expansion efforts into new markets in the past, and there can be no assurance that we will not experience similar difficulties in the future. ~~For example, although we have since re- entered the Asian market, following the 2008 financial crisis, we did not continue to actively invest in our operations in Asia, following our entry into that market in 2004.~~ There can be no assurance that we will be able to successfully maintain or grow our operations abroad. It is possible that our entry into new markets will not be successful, and potential new markets may not develop quickly or at all. If these efforts are not successful, we may realize less than expected earnings, which in turn could result in a material decrease in the market value of our Class A common stock. We may undertake acquisitions or divestitures, which may not be successful, and which could materially adversely affect our business, financial condition and results of operations. From time to time, we consider acquisitions, which may not be completed or, if completed, may not be ultimately beneficial to us. We have made several acquisitions in the past, including the purchase of the Hilliard Farber & Co. business in 2008, the Rafferty Capital Markets business in 2011, BondDesk in 2013, CodeStreet in 2016 ~~and~~ **,** Nasdaq' s U. S. fixed income electronic trading platform in 2021 **, Yieldbroker in 2023 and r8fin in 2024** . We also may consider potential divestitures of businesses from time to time. We routinely evaluate potential acquisition and divestiture candidates and engage in discussions and negotiations regarding potential acquisitions and divestitures on an ongoing basis; however, even if we execute a definitive agreement, there can be no assurance that we will consummate the transaction within the anticipated closing timeframe, or at all. Moreover, there is significant competition for acquisition and expansion opportunities in the electronic financial services industry. Acquisitions involve numerous risks, including (i) failing to properly identify appropriate acquisition targets and to negotiate acceptable terms; (ii) incurring the time and expense associated with identifying and evaluating potential acquisition targets and negotiating potential transactions; (iii) diverting management' s attention from the operation of our existing business; (iv) using inaccurate estimates and judgments to evaluate credit, operations, funding, liquidity, business, management and market risks with respect to the acquisition target or assets; (v) litigation relating to an acquisition, particularly in the context of a publicly held acquisition target, that could require us to incur significant expenses, result in or delay or enjoin the transaction; (vi) failing to properly identify an acquisition target' s significant problems, liabilities or risks; (vii) not receiving required regulatory approvals on the terms expected or such approvals being delayed or restrictively conditional; and (viii) failing to obtain financing on favorable terms, or at all. In addition, in connection with any acquisitions, we must comply with various antitrust requirements, and it is possible that perceived or actual violations of these requirements could give rise to litigation or regulatory enforcement action or result in us not receiving the necessary approvals to complete a desired acquisition. Furthermore, even if we complete an acquisition, the anticipated benefits from such acquisition may not be achieved unless the operations of the acquired business, platform or technology are integrated in an efficient, cost- effective and timely manner. The integration of any acquisition includes numerous risks, including an acquired business not performing to our expectations, our not integrating it appropriately and failing to realize anticipated synergies and cost savings as a result, and difficulties, inefficiencies or cost overruns in integrating and assimilating the organizational cultures, operations, technologies, data, products and services of the acquired business with ours. The integration of any acquisition will require substantial attention from management and operating personnel to ensure that the acquisition does not disrupt any existing operations, or affect our reputation or our clients' opinions and perceptions of our platforms and solutions. We may spend time and resources on acquisitions that do not ultimately increase our profitability or that cause loss of, or harm to, relationships with key employees, clients, third- party providers or other business partners. Divestitures also involve numerous risks, including: (i) failing to properly identify appropriate assets or businesses for divestiture and buyers; (ii) inability to negotiate favorable terms for the divestiture of such assets or businesses; (iii) incurring the time and expense associated with identifying and evaluating potential divestitures and negotiating potential transactions; (iv) management' s attention being diverted from the operation of our existing business, including to provide on-going services to the divested business; (v) encountering difficulties in the separation of operations, platforms, solutions or personnel; (vi) retaining future liabilities as a result of contractual indemnity obligations; and (vii) loss of, or damage to our relationships with, any of our key employees, clients, third- party providers or other business partners. We cannot readily predict the timing or size of any future acquisition or divestiture, and there can be no assurance that we will realize any anticipated benefits from any ~~such~~ **recent or any potential future** acquisition or divestiture. If we do not realize any such anticipated benefits, our business, financial condition and results of operations could be materially adversely affected. From time to time, we may enter into strategic alliances, partnerships or joint ventures as a means to accelerate our entry into new markets, provide new solutions or enhance our existing capabilities. Entering into strategic alliances, partnerships and joint ventures entails risks, including: (i) difficulties in developing or expanding the business of newly formed alliances, partnerships and joint ventures; (ii) exercising influence over the activities of joint ventures in which we do not have a controlling interest; (iii) potential conflicts with or among our partners; (iv) the possibility that our partners could take action without our approval or prevent us from taking action; and (v) the possibility that our partners suffer reputational harm during the pendency of the partnership, become bankrupt or otherwise lack the financial resources to meet their obligations. In addition, there may be a long negotiation period before we enter into a strategic alliance, partnership or joint venture or a long preparation period before we commence providing trading venues and solutions and / or begin earning revenues pursuant to such arrangement. We typically incur significant business development expenses, and management' s attention may be diverted from the operation of our existing business, during the discussion and negotiation period with no guarantee of consummation of the proposed transaction. Even if we succeed in developing a strategic alliance, partnership or joint venture with a new partner, we may not be successful in maintaining the relationship. We cannot assure you that we will be able to enter into strategic alliances, partnerships or joint ventures on terms that are favorable to us, or at all, or that any strategic alliance, partnership or joint venture we have entered into or may enter into will be successful. In particular, these arrangements may not generate the expected number of new clients or increased trading volumes or revenues or other benefits we seek. Unsuccessful strategic alliances, partnerships or joint ventures could harm our reputation and have a material adverse effect on our business, financial condition and results of operations. We ~~have operations~~ **are a global company serving clients** in ~~the United States~~ **over 70 countries with offices in North America** , ~~China~~ **Europe** , ~~France~~ **Asia** , **Australia** ~~Japan, Hong Kong, Singapore, the UK~~ and the ~~Netherlands~~ **Middle East** . We may further expand our international operations in the future. We have invested significant resources in our international operations and expect to continue to do so in the future. However, there are certain risks inherent in doing business in international markets, particularly in the financial services industry, which is heavily regulated in many jurisdictions. These risks include: • local economic, political and social conditions, including the possibility of economic slowdowns, hyperinflationary conditions, political instability, social unrest or outbreaks of pandemic or contagious diseases ~~, such as COVID- 19 and its variants~~ ; • differing legal and regulatory requirements, and the possibility that any required approvals may impose restrictions on the operation of our business; • changes in laws, government policies and regulations, or in how provisions are interpreted or administered and how we are supervised; • the inability to manage and coordinate the various legal and regulatory requirements of multiple jurisdictions that are constantly evolving and subject to change; • varying tax regimes, including with respect to imposition or increase of taxes on financial transactions or withholding and other taxes on remittances and other payments by subsidiaries; • currency exchange rate fluctuations, changes in currency policies or practices and restrictions on currency conversion; • limitations or restrictions on the repatriation or other transfer of funds; • potential difficulties in protecting intellectual property; • the inability to enforce agreements, collect payments or seek recourse under or comply with differing commercial laws; • managing the potential conflicts between locally accepted business practices and our obligations to comply with laws and regulations, including anti- corruption and anti- money laundering laws and regulations; • compliance with economic sanctions laws and regulations; • difficulties in staffing and managing foreign operations; • increased costs and difficulties in developing and managing our global operations and our technological infrastructure; and • seasonal fluctuations in business activity. Our overall success depends, in part, on our ability to anticipate and effectively manage these risks and there can be no assurance that we will be able to do so without incurring unexpected or increased costs. If we are not able to manage the risks related to our international operations, our business, financial condition and results of operations may be materially adversely affected. In certain regions, the degree of these risks may be higher due to more volatile economic, political or social conditions, less developed and predictable legal and regulatory regimes and increased potential for various types of adverse governmental action. For the year ended December 31, ~~2022~~ **2023** , 36 % of our revenues derived from our international operations. Since we operate in several different countries outside the United States, most notably the UK, the Netherlands, Japan, as well as **Australia,** China, Singapore, Hong Kong and Canada, among others, significant portions of our revenues, expenses, assets and liabilities are denominated in non- U. S. dollar currencies, most notably the British pound sterling and euros, as well as Japanese Yen **, Australian dollars** , Chinese Yuan Renminbi, Singapore dollars, Hong Kong dollars and Canadian dollars, among others. Because our consolidated financial statements are presented in U. S. dollars, we must translate non- U. S. dollar denominated revenues, income and expenses, as well as assets and liabilities, into U. S. dollars at exchange rates in effect during or at the end of each reporting period. Accordingly, increases or decreases in the value of the U. S. dollar against other currencies may affect our business, financial condition and results of operations. In recent years, external events have caused, and may continue to cause, significant volatility in currency exchange rates, especially among the U. S. dollar, the British pound sterling and the euro. While we engage in hedging activity to attempt to mitigate currency exchange rate risk, these hedging activities may not fully mitigate the risk. Accordingly, if there are adverse movements in exchange rates, we may suffer significant losses, which would materially adversely affect our financial condition and results of operations. Actual or perceived security vulnerabilities in our systems, networks and infrastructure, breaches of security controls, unauthorized access to confidential or personal information or cyber- attacks could harm our business, reputation and results of operations. The operation of our electronic trading platforms relies on the secure processing, storage and transmission of a large amount of transactional data and other confidential sensitive data. Because of our reliance on technology (including through our use of third- party service providers), we are susceptible to various cyber- threats to our systems, networks and infrastructure, in particular those that power our platforms and solutions. Similar to other financial services companies that provide services online, we have experienced, and likely will continue to experience, cyber- threats, cyber- attacks and attempted security breaches. Cyber- threats and cyber- attacks vary in technique and sources, are persistent, frequently change and have become more sophisticated, targeted and difficult to detect and prevent against. These threats and attacks may come from external sources such as governments, crime organizations, hackers and other third parties or may originate internally from an employee or a third- party service provider, and can include unauthorized attempts to access, disable, interrupt, improperly modify or degrade our information, systems, networks and infrastructure or the introduction of computer viruses, ransomware, malware, and other malicious codes and fraudulent " phishing " emails or other forms of social engineering that seek to misappropriate data and information. Due to political uncertainty in certain regions, ~~including military actions associated with Russia' s invasion of Ukraine,~~ we, like other financial services companies, may be subject to a heightened risk of such attacks from nation- state and affiliated actors, including attacks that could materially disrupt our systems, operations and platforms. While we maintain insurance coverage that is designed to address certain aspects of cyber risks, such insurance coverage may be insufficient to cover all losses or all types of claims that may arise in the event we experience a cybersecurity incident, data breach, disruption, unauthorized access, interruption, significant delay, failure or malfunction in our systems, networks, infrastructure and other operations, affecting, in particular, our platforms and solutions, which could result in reputational damage, financial losses, client dissatisfaction, regulatory enforcement actions, fines and penalties and / or private litigation. While we have dedicated personnel who are responsible for maintaining our cybersecurity program and training our employees on cybersecurity, and while we utilize third- party technology products and services to help identify, protect and remediate our systems, networks and infrastructure, such measures and security controls may not be adequate or effective to prevent, ~~identify~~ **detect** or mitigate a cyber- attack, security breach, data breach, disruption, unauthorized access, interruption, significant delay, failure or malfunction. We are also dependent on security measures, if any, that our third- party service providers and clients take to protect their own systems, networks and infrastructures. Because techniques used to obtain unauthorized access to, or to sabotage, systems, networks and infrastructures change frequently and generally are not recognized until launched against a target, we, our third- party service providers or our clients may be unable to anticipate these techniques or to implement adequate defensive measures or security controls. Additionally, we may be required in the future to incur significant costs to continue to minimize, mitigate against or alleviate the effects of cyber- attacks, security and data breaches or other security vulnerabilities and to protect against damage caused by such events. There have been an increasing number of cyber- attacks in recent years in various industries, including ours, and cybersecurity risk management has been the subject of increasing focus by U. S. and foreign regulators. **See Part I** ~~We have an Enterprise Risk Committee~~ , **Item 1C** ~~chaired by the Chief Risk Officer, and comprised of the Chief Information Security Officer and heads of Risk Management, Global Compliance, Human Resources, Internal Audit and various business lines, as well as the General Counsel~~ . **– "** Cybersecurity **– Governance " for further detail regarding our cybersecurity** risk **management** ~~is overseen by our board of directors and audit committee. The Chief Risk Officer and the Chief Information Security Officer provide regular updates to the Executive Committee~~ , **strategy** ~~our audit committee~~ and **governance structure** ~~the board of directors~~ . As regulatory focus increases, we may be required to devote significant additional financial, operational and technical resources to modify and enhance our defensive measures and security controls and to identify and remediate any security vulnerabilities. In addition, any adverse regulatory actions that may result from a cybersecurity incident or a finding that we have inadequate defensive measures and security controls, could result in regulatory enforcement actions, fines and penalties, private litigation and / or reputational harm. Although we have not been a victim of a cyber- attack or other cybersecurity incident that has had a material impact on our operations or financial condition, we have from time to time experienced cybersecurity incidents, including attempted distributed denial of service attacks, malware infections, phishing and other information technology incidents that are typical for an electronic financial services company of our size. If an actual, threatened or perceived cyber- attack or breach of our security occurs, our clients could lose confidence in our security measures and the reliability of our platforms and solutions, which would materially harm our ability to retain existing clients and gain new clients. As a result of any such attack or breach, we may be required to expend significant resources to repair system, network or infrastructure damage and to protect against the threat of future cyber- attacks or security breaches. We could also face litigation or other claims from impacted individuals as well as substantial regulatory sanctions or fines. Systems failures, interruptions, delays in service, catastrophic events and resulting interruptions in the availability of our platforms or solutions could materially harm our business and reputation. Our business depends on the efficient and uninterrupted operation of our systems, networks and infrastructure, in particular those that power our platforms and solutions. From time to time, we have experienced, and we cannot assure you that we, or our third- party providers, will not experience, systems failures, delays in service or business interruptions. Our systems, networks, infrastructure and other operations, in particular our platforms and solutions, are vulnerable to impact or interruption from a wide variety of causes, including: irregular or heavy use of our trading platforms and related solutions during peak trading times or at times of increased market volatility; power, internet or telecommunications failures; hardware failures or software errors; human error, acts of vandalism or sabotage; catastrophic events, including those that are occurring with increasing frequency due to climate change such as natural disasters and extreme weather events; acts of war, terrorism or other armed hostilities; malicious cyberattacks, cyber- warfare or cyber incidents, such as unauthorized access, ransomware, loss or destruction of data, computer viruses or other malicious code; and the loss or failure of systems over which we have no control, such as loss of support services from critical third- party providers. In addition, we may also face significant increases in our use of power and data storage and may experience a shortage of capacity and / or increased costs associated with such usage. Any failure of, or significant interruption, delay or disruption to, or security breaches affecting, our systems, networks or infrastructure could result in: disruption to our operations, including disruptions in service to our clients; slower response times; distribution of untimely or inaccurate market data to clients who rely on this data for their trades; delays in trade execution; incomplete or inaccurate accounting, recording or processing of trades; significant expense to repair, replace or remediate systems, networks or infrastructure; financial losses and liabilities to clients; loss of clients; or legal or regulatory claims, proceedings, penalties or fines. Any system failure or significant interruption, delay or disruption in our operations, or decreases in the responsiveness of our platforms and solutions, could materially harm our reputation and business and lead our clients to decrease or cease their use of our trading platforms and solutions. We internally support and maintain many of our systems and networks, including those underlying our trading platforms; however, we may not have sufficient personnel to properly respond to all systems, networks or infrastructure problems. Our failure to monitor or maintain our systems, networks and infrastructure, including those maintained or supported by our third- party providers, or to find a replacement for defective or obsolete components within our systems, networks and infrastructure in a timely and cost-effective manner when necessary, would have a material adverse effect on our business, financial condition and results of operations. While we generally have disaster recovery and business continuity plans that utilize industry standards and best practices for much of our business, including redundant systems, networks, computer software and hardware and data centers to address interruption to our normal course of business, our systems, networks and infrastructure may not always be fully redundant and our disaster recovery and business continuity plans may not always be sufficient or effective. Similarly, although some contracts with our third- party providers, such as our hosting facility providers, require adequate disaster recovery or business continuity capabilities, we cannot be certain that these will be adequate or implemented properly. Our disaster recovery and business continuity plans are heavily reliant on the availability of the internet and mobile phone technology, so any disruption of those systems would likely affect our ability to recover promptly from a crisis situation. In addition, ~~recent~~ supply chain disruptions could affect our ability to procure hardware needed to recover from a crisis situation. If we are unable to execute our disaster recovery and business continuity plans, or if our plans prove insufficient for a particular situation or take longer than expected to implement in a crisis situation, it could have a material adverse effect on our business, financial condition and results of operations, and our business interruption insurance may not adequately compensate us for losses that may occur. In addition, high- profile system failures in the electronic financial services industry, whether or not involving us directly, could negatively impact our business. In recent years, U. S. and foreign regulators have imposed new requirements on operations such as ours that have been costly for us to implement and that could result in a decrease in the use of our platforms and demand for some of our solutions or result in regulatory investigations, fines and penalties. For example, the SEC' s Regulation Systems Compliance and Integrity and the system safeguards regulations of the CFTC subject portions of our trading platforms and other technological systems related to our SEFs to more extensive regulation and oversight. **The** ~~In January 2022, the~~ SEC **has** proposed amendments which, among other things, would extend Regulation Systems Compliance and Integrity to systems involving U. S. government securities trading **and impose additional cybersecurity- related obligations on covered entities** . Ensuring our compliance with these (and any future proposed) regulations requires significant ongoing costs and there can be no assurance that government regulators will not impose additional costly obligations on us in the future. If system failures in the industry continue to occur, it is possible that confidence in the electronic financial services industry could diminish, leading to materially decreased trading volumes and revenues. We may not be able to adequately protect our intellectual property or rely on third- party intellectual property rights, which, in turn, could materially adversely affect our brand and our business. Our success depends in part on our proprietary technology, processes, methodologies and information and on our ability to further build brand recognition using our tradenames and logos. We rely primarily on a combination of U. S. and foreign patent, copyright, trademark, service mark and trade secret laws and nondisclosure, license, assignment and confidentiality arrangements to establish, maintain and protect our proprietary rights as well as the intellectual property rights of third parties whose content, data, information and other materials we license (see also " — We rely on third parties to perform certain key functions, and their failure to perform those functions could result in the interruption of our operations and systems and could result in significant costs and reputational damage to us. "). We can give no assurances that any such patents, copyrights, trademarks, service marks and other intellectual property rights will protect our business from competition or that any intellectual property rights applied for in the future will be issued, or that the intellectual property rights licensed to us from third- parties will not be subject to challenge. In addition, the steps we take to protect our intellectual property may not adequately protect our rights or prevent third parties from infringing or misappropriating our rights, and third parties may successfully challenge the validity and / or enforceability of our intellectual property rights. Furthermore, we cannot assure you that these protections will be adequate to prevent our competitors from independently developing platforms, solutions technologies or logos that are substantially equivalent or superior to our own. The protection of our intellectual property may require the expenditure of financial and managerial resources. Litigation brought to protect and enforce our intellectual property rights or bring a claim against a third- party licensor could be costly, time- consuming and distracting to management and may result in the impairment or loss of portions of our intellectual property. In addition, the laws of some countries in which we now or in the future provide our platforms and solutions may not protect intellectual property rights to the same extent as the laws of the United States. If our efforts to secure, protect and enforce our intellectual property rights are inadequate, or if any third party misappropriates, dilutes or infringes on our intellectual property, the value of our brand may be harmed, which could have a material adverse effect on our business. Third parties may claim that we are infringing or misappropriating their intellectual property rights, which could cause us to suffer competitive injury, expend significant resources defending against such claims or be prevented from offering our platforms and solutions. Our competitors, as well as other companies and individuals, may have obtained, and may be expected to obtain in the future, intellectual property rights related to the types of platforms and solutions we currently provide or plan to provide. In particular, as the number of trading platforms increases and the functionality of these platforms and related solutions further overlaps, the possibility of intellectual property rights claims against us grows. We cannot assure you that we are or will be aware of all third- party intellectual property rights that may pose a risk of infringement or misappropriation to our platforms, solutions, technologies or the manner in which we operate our business. We have in the past been, are currently, and may from time to time in the future become subject to legal proceedings and claims relating to the intellectual property rights of others. The costs of supporting legal and dispute resolution proceedings are considerable, and there can be no assurance that a favorable outcome will be obtained. We may need to settle litigation and disputes on terms that are unfavorable to us, or we may be subject to an unfavorable judgment. The terms of any settlement or judgment may require us to cease some or all of our operations, pay substantial amounts to the other party and / or seek a license to continue practices found to be in violation of third- party intellectual property rights, which may not be available on reasonable terms and may significantly increase our operating expenses. A license may not be available to us at all, and we may be required to develop alternative non- infringing platforms, solutions, technologies or practices or discontinue use of such platforms, solutions, technologies or practices. Any development efforts could require significant effort and expense and, as result, our business, results of operations and financial condition could be materially adversely affected. We use open source software in our technology, most often as small components within a larger solution. Open source code is also contained in some third- party software we rely on. The terms of many open source licenses are ambiguous and have not been interpreted by U. S. or other courts, and these licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our ability to commercialize our platforms and solutions, license the software on unfavorable terms, require us to re- engineer our platforms and solutions or take other remedial actions, any of which could have a material adverse effect on our business. Extensive regulation of our industry results in ongoing exposure to significant costs and penalties, enhanced oversight and restrictions and limitations on our ability to conduct and grow our business. The financial services industry, including our business, is subject to extensive regulation by governmental and self- regulatory organizations in the jurisdictions in which we operate. These regulators have broad powers to promulgate and interpret laws, rules and regulations that often serve to restrict or limit our business. The SEC, the CFTC, FINRA, the ~~National Futures Association ("~~NFA ~~")~~ and other authorities extensively regulate the U. S. financial services industry, including most of our operations in the United States. Much of our international operations are subject to similar regulations in their respective jurisdictions, including regulations overseen by the FCA ~~in the UK~~, **the** ~~De Nederlandsche Bank ("~~DNB ~~")~~, the ~~Netherlands Authority for the Financial Markets ("~~AFM ~~")~~, the **AMF** ~~Monetary Authority of Singapore~~, the ~~Hong Kong Securities and Futures Commission~~ **ACPR, the BaFin, the JFSA, the JSDA, the SFC, the MAS, the ASIC, the CBNV, the FINMA**, the Investment Industry Regulatory Organization of Canada and provincial regulators in Canada ~~, the Japanese Financial Services Agency, the Japan Securities Dealers Association~~ and the **DFS** ~~Australian Securities and Investment Commission~~. Most aspects of our business, and in particular our broker- dealer, SEF and introducing broker subsidiaries, are subject to laws, rules and regulations that cover all aspects of our business, including manner of operation, system integrity, anti- money laundering and financial crimes, handling of material non- public information, safeguarding data, capital requirements, reporting, record retention, market access, licensing of employees and the conduct of officers, employees and other associated persons. See Part I, Item 1. – " Business – Regulation, " for a further description of the laws, rules and regulations that materially impact our business. There can be no assurance that we or our directors, officers and employees will be able to fully comply with these laws, rules and regulations. Any failure to comply with such legal and regulatory requirements could subject us to increased costs, fines, penalties or other sanctions, including suspensions of, or prohibitions on, certain of our activities, revocations of certain of our licenses or registrations, such as our membership in

FINRA or our registration as a broker- dealer, or suspension of personnel. Certain of our subsidiaries are subject to net capital and similar financial resource requirements. For example, our SEF subsidiaries are required to maintain sufficient financial resources to cover operating costs for at least one year. These net capital and related requirements may restrict our ability to withdraw capital from our regulated subsidiaries in certain circumstances, including through the payment of dividends, stock repurchases or the making of unsecured advances or loans. Some of our subsidiaries are subject to regulations, including under FINRA, the FCA and the DNB, regarding changes in control of their ownership or organizational structure as defined by the applicable regulatory body. These regulations generally provide that prior regulatory approval must be obtained in connection with any transaction resulting in a change in control or organizational structure of the subsidiary, such as changes in direct and indirect ownership or changes in the composition of the board of directors or similar body or the appointment of new officers, and may include similar changes that occur at the Company or any of its stockholders that may be deemed to hold a controlling interest as defined by the applicable regulatory body. As a result of these regulations, our future efforts to sell shares or raise additional capital, or to make changes to our organizational structure, may be delayed or prohibited in circumstances in which such a transaction would give rise to a change in control or organizational structure as defined by the applicable regulatory body. Our ability to operate our trading platforms or offer our solutions in a particular jurisdiction is dependent on continued registration or authorization in that jurisdiction (or the maintenance of a valid exemption from such registration or authorization). In addition, regulatory approval may be required to expand certain of our operations and activities, and we may not be able to obtain the necessary regulatory approvals on a timely or cost- effective basis, or at all. Even if regulatory approvals are obtained, they may limit or impose restrictions on our operations and activities, and we may not be able to continue to comply with the terms of such approvals. We incur significant costs, and will continue to devote significant financial and operational resources, to develop, implement and maintain policies, systems and processes to comply with our evolving legal and regulatory requirements. Future laws, rules and regulations, or adverse changes to, or more stringent enforcement of, existing laws, rules and regulations, could increase these costs and expose us to significant liabilities. Our regulators generally require strict compliance with their laws, rules and regulations, and may investigate and enforce compliance and punish non-compliance. Many of our regulators, as well as other governmental authorities, are empowered to bring enforcement actions and to conduct administrative proceedings, examinations, inspections and investigations, which may result in increased compliance costs, penalties, fines, enhanced oversight, increased financial and capital requirements, additional restrictions or limitations, censure, suspension or other sanction, such as disgorgement, restitution or the revocation of regulatory approvals. The risks associated with such actions are difficult to assess or quantify. In the normal course of our business, we have been, and continue to be from time to time, a party to various legal and regulatory proceedings related to compliance with applicable laws, rules and regulations, including audits, examinations and investigations of our operations and activities. Legal and regulatory actions, from subpoenas and other requests for information to potential criminal investigations, may divert management' s attention, cause us to incur significant expenses, including fees for legal representation and costs for remediation efforts, and result in fines, penalties or other sanctions. We may also be required to change or cease aspects of our operations or activities if a legal or regulatory authority determines that we have failed to comply with any laws, rules or regulations applicable to our business and / or otherwise determines to prohibit any of our operations or activities or revoke any of our approvals. In addition, regardless of the outcome, such actions may result in substantial costs and negative publicity, which may damage our reputation and impair our ability to attract and retain clients. Firms in the financial services industry have experienced increased scrutiny in recent years, and penalties, fines and other sanctions sought by governmental and regulatory authorities, including the SEC, the CFTC, the Department of Justice, state securities administrators and state attorneys general in the United States, the FCA in the UK and other foreign regulators, have increased accordingly. This trend toward a heightened regulatory oversight and enforcement environment is expected to continue for the foreseeable future, and may create uncertainty and may increase our exposure to scrutiny of our operations and activities, significant penalties and liability and negative publicity. Our business, and the businesses of many of our clients, could be materially adversely affected by new laws, rules or regulations or changes in existing laws, rules or regulations, including the interpretation and enforcement thereof. Our business, and the business of many of our clients, is subject to extensive regulation. Governmental and regulatory authorities periodically review legislative and regulatory policies and initiatives, and may promulgate new or revised, or adopt changes in the interpretation and enforcement of existing, laws, rules and regulations at any time. Any such changes in laws, rules or regulations or in governmental policies could create additional regulatory exposure for our business, cause us to incur significant additional costs, require us to change or cease aspects of our business or restrict or limit our ability to grow our business, any of which could have a material adverse effect on our business, financial condition or results of operations. There have been in the past, and could be in the future, significant technological, operational and compliance costs associated with the obligations that derive from compliance with evolving laws, rules and regulations. Changes in legislation and in the rules and regulations promulgated by domestic and foreign regulators, and how they are applied, often directly affect the method of operation and profitability of dealers and other financial services intermediaries, including our dealer clients, and could result in restrictions in the way we and our clients conduct business. For example, current financial regulations impose certain capital requirements on, and restrict certain trading activities by, our dealer clients, which could adversely affect such clients' ability to make markets across a variety of asset classes and products. If our existing dealer clients reduce their trading activity and that activity is not replaced by other market participants, the level of liquidity and pricing available on our trading platforms would be negatively impacted, which could materially adversely affect our business, financial condition and results of operations. Our business and that of our clients could also be affected by the monetary policies adopted by the Federal Reserve and foreign central banking authorities, which may affect the credit quality of our clients or increase the cost for our clients to trade certain instruments on our trading platforms. In addition, such changes in monetary policy, such as the Federal Reserve' s recent increases to the federal funds rate, may directly impact our cost of funds for financing and investment activities and may impact the value of any financial instruments we hold. Furthermore, many of the underlying markets in which we facilitate trading, and in which our clients trade, are subject to regulation. For example, trading in interest rate swaps has been subject to extensive regulation in the past, and any future regulation could lead to a decline in trading in these markets, which could have a negative impact on our trading volumes and, as a result, our revenues. In addition, regulatory bodies in Europe have developed and continue to develop rules and regulations targeted at the financial services industry. Additionally, most of the world' s major economies have introduced and continue to introduce regulations implementing Basel III, a global regulatory standard on bank capital adequacy, stress testing and market liquidity risk. The continued implementation of new rules and regulations concerning bank capital standards could restrict the ability of our large bank and dealer customers to raise additional capital or use existing capital for trading purposes, which might cause them to trade less on our trading platforms and diminish transaction velocity. In addition, as regulations are introduced which affect our prudential obligations, the regulatory capital requirements imposed on certain of our subsidiaries may change. It is difficult to know conclusively how future regulatory developments may directly affect our business. We cannot predict whether additional changes to the laws, rules and regulations that govern our business and operations, including changes to their interpretation, implementation or enforcement, will occur in the future or the extent to which any such changes will impact our business and operations. In addition, we cannot predict how current proposals that have not yet been finalized or that remain subject to ongoing debate will be implemented or in what form. We believe that uncertainty and potential delays around the final form of such new laws, rules and regulations may negatively impact our clients and trading volumes in certain markets in which we transact. Additionally, unintended consequences of such new laws, rules and regulations may adversely affect our industry, our clients and us in ways yet to be determined. Any such legal and regulatory changes could affect us in substantial and unpredictable ways, and could have a material adverse effect on our business, financial condition and results of operations. Certain types of information we collect, compile, store, use, transfer and / or publish are subject to numerous federal, state, local and foreign laws and regulations regarding privacy, data protection and information security. These laws, rules and regulations govern the storing, sharing, use, processing, transfer, disclosure and protection of personal information and other content. The scope of these laws, rules and regulations are changing, subject to differing interpretations, may be inconsistent among jurisdictions or conflict with other laws, rules or regulations. We are also subject to the terms of our privacy policies and obligations to third parties related to applicable privacy, data protection and information security. The regulatory framework for privacy, data protection and information security worldwide is uncertain, and is likely to remain uncertain for the foreseeable future, and we expect that there will continue to be new laws, rules regulations and industry standards concerning privacy, data protection and information security proposed and enacted in the various jurisdictions in which we operate. For example, in the ~~European Economic Area (the "~~ EEA ~~")~~ , the General Data Protection Regulation (" GDPR ") imposes more stringent EU data protection requirements for entities using, processing, and transferring personal data and provides for significant penalties for noncompliance. The GDPR prohibits the transfer of personal data to countries outside of the European Union / EEA (including the U. S.) that are not considered by the European Commission to provide an adequate level of data protection, except if the data controller meets very specific requirements, including **, for example,** use of standard contractual clauses (" SCCs "), issued by the European Commission **, or certification under the new EU- U. S. Data Privacy Framework administered by the U. S. Department of Commerce.** . The SCCs impose obligations on companies relating to cross- border personal data transfers, including, for example, depending on a party' s role in the transfer, implementation of additional security measures and to update internal privacy practices. We rely on a mixture of mechanisms to transfer personal data from our EU business to the U. S. and we evaluate what additional mechanisms may be required to establish adequate safeguards for personal information. As supervisory authorities issue further guidance on personal information export mechanisms, including circumstances where the SCCs cannot be used and / or ~~start taking~~ **broaden their** enforcement ~~action~~ **activities** , we could incur substantial costs and / or regulatory investigations or fines. We are also subject to the GDPR as incorporated into United Kingdom law (" UK GDPR "). Following Brexit, the European Commission adopted a UK adequacy decision in June 2021 which organizations can rely on for EEA to UK personal data transfers. This decision will automatically expire four years after its entry into force, but it might be renewed provided the UK maintains an adequate level of data protection. The relationship between the UK and the EU in relation to certain aspects of data protection law remains unclear, however, and it is unclear how UK data protection laws and regulations will develop in the medium to longer term, and how data transfers to and from the UK will be regulated in the long term. Outside of Europe and the UK, several other countries in which we operate, including China, Japan, Singapore and Hong Kong have established specific legal requirements for privacy, data protection and information security, including data localization and / or cross- border transfer restrictions. If we are otherwise unable to transfer personal information between and among countries and regions in which we operate, it could affect the manner in which we provide our services and could adversely affect our financial results. Moreover, any changes to these laws may require us to modify our data processing practices and policies and to incur substantial costs and expenses to comply. **We are also subject to evolving EU and UK privacy laws on cookies, tracking technologies and e- marketing. Recent European court and regulator decisions are driving increased attention to use of cookies and tracking technologies on websites and digital platforms. If the trend of increasing enforcement by regulators of the strict approach to opt- in consent for all but essential use cases, this could lead to substantial costs, require significant systems changes, limit the effectiveness of our marketing activities, divert the attention of our technology personnel, adversely affect our margins, and subject us to additional liabilities. In light of the complex and evolving nature of EU, EU Member State and UK privacy laws on cookies and tracking technologies, there can be no assurances that we will be successful in our efforts to comply with such laws.** There has also been increased regulation of data privacy and security in the U. S. at the state level. For example, the California Consumer Privacy Act (" CCPA "), which came into force in 2020, broadly defines personal information, gives California residents expanded data privacy rights and protections to access and delete their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal data is used. The CCPA provides for civil penalties for violations and a private right of action for data breaches. The CCPA contained certain exemptions for personal information of employees and job applicants, and personal information collected in a " business- to- business " context, each of which expired as of January 1, 2023, expanding compliance obligations under the CCPA. In addition, the California Privacy Rights Act (" CPRA "), which took effect on January 1, 2023, significantly expanded the CCPA. Among other changes, the CPRA introduced additional obligations such as data minimization and storage limitations; established a dedicated privacy regulator in California, the California Privacy Protection Agency, to implement and enforce the law; and granted additional rights to consumers, such as correction of personal information and additional opt- out rights with respect to a new category of " sensitive information. " The CCPA ~~has~~ marked the beginning of a trend toward more stringent state data privacy legislation in the U. S., which may result in significant costs to our business, damage our reputation, require us to amend our business practices, and could adversely affect our business, especially to the extent the specific requirements vary from those and other existing laws. For example, **comprehensive** ~~Virginia, Utah, Connecticut and Colorado have adopted new state data~~ privacy laws ~~that take~~ **in multiple U. S. states have gone, or will go, into** effect ~~in~~ **between** 2023 **and 2026, and a number of other states are considering similar laws related to the protection of consumer personal information. In addition, many jurisdictions have also enacted or are considering laws requiring companies to notify individuals and / or regulators of data security breaches involving their personal data. These mandatory notifications are costly to implement and often lead to widespread negative publicity, which may cause our clients to lose confidence in the effectiveness of our cybersecurity measures. Any inability, or perceived inability, by us or third parties on which we rely to comply with applicable laws, regulations, policies, industry standards and guidance, contractual obligations, or other legal obligations requiring notification could result in litigation; regulatory investigations, fines and penalties; enforcement actions; increased costs to us and significant legal and financial exposure and / or reputational harm** . Our efforts to comply with privacy, data protection and information security laws, rules and regulations could entail substantial expenses, may divert resources from other initiatives and could impact our ability to provide certain solutions. Additionally, if our third- party providers violate any of these laws or regulations, such violations may also put our operations at risk. Any failure or perceived failure by us to comply with any of our obligations relating to privacy, data protection or information security may result in governmental investigations or enforcement actions, litigation, claims or negative publicity and could result in significant liability, increased costs or cause our clients to lose trust in us, which could have an adverse effect on our reputation and business. New ~~U. S.~~ tax legislation **and regulation** may materially adversely affect our financial condition, results of operations and cash flows. At any time, the U. S. federal income tax laws or the administrative interpretations of those laws may be amended. We cannot predict when or if any new U. S. federal income tax law, regulation or administrative interpretation, or any amendment to any existing U. S. federal income tax law, regulation, or administrative interpretation, will be adopted, promulgated or become effective. Any such law, regulation or interpretation could take effect retroactively, and could adversely affect our business and financial condition, and the impact of any such law, regulation or interpretation on holders of our Class A common stock could be adverse. For example, the IRA enacted, among other changes, a 15 % corporate **alternative** minimum tax on certain United States corporations and a 1 % excise tax on certain stock redemptions by United States corporations. **On October 8, 2021, the Organization for Economic Cooperation and Development announced an accord endorsing and providing an implementation plan focused on global profit allocation, and implementing a global minimum tax rate of at least 15 % for large multinational corporations on a jurisdiction- by- jurisdiction basis, known as the " Two Pillar Plan. " On December 15, 2022, the European Council formally adopted a European Union directive on the implementation of the plan by January 1, 2024. We may be subject to the provisions of the Two Pillar Plan, and related tax impacts per local country adoption, as we are a consolidating subsidiary of LSEG.** Unanticipated changes in effective tax rates or adverse outcomes resulting from examination of our income or other tax returns could materially adversely affect our results of operations and financial condition. We are subject to taxation by U. S. federal, state, local and foreign tax authorities, and our tax liabilities will be affected by the allocation of expenses to differing jurisdictions. Our future effective tax rates could be subject to volatility or adversely affected by a number of factors, including: • changes in the valuation of our deferred tax assets and liabilities; • expected timing and amount of the release of any tax valuation allowances; • tax effects of stock- based compensation; • changes in tax laws, regulations or interpretations thereof; or • future earnings being lower than anticipated in countries where we have lower statutory tax rates and higher than anticipated in countries where we have higher statutory tax rates. In addition, we may be subject to audits of our income, sales and other transaction taxes by U. S. federal, state, local and foreign taxing authorities. Outcomes from these audits could have an adverse effect on our results of operations and financial condition. In certain circumstances, liability for adjustments to a partnership' s tax return may be imputed to the partnership itself absent an election to the contrary. TWM LLC may be subject to material liabilities if, for example, its calculations of taxable income are incorrect. Our compliance and risk management programs might not be effective and may result in outcomes that could adversely affect our reputation, business, financial condition and results of operations. Our ability to comply with all applicable laws, rules and regulations is largely dependent on our establishment and maintenance of compliance and risk management programs, including audit and reporting systems, that can quickly adapt and respond to changes in the legal and regulatory landscape, as well as our ability to attract and retain qualified compliance, audit, legal, cybersecurity and other compliance and risk management personnel. While we have policies and procedures to identify, monitor and manage our risks and regulatory obligations, we cannot assure you 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 risk- management programs may prove to be ineffective because of their design, their implementation and maintenance or the lack of adequate, accurate or timely information. If our risk- management programs and efforts are ineffective, we could suffer losses that could have a material adverse effect on our financial condition and results of operations. As part of our compliance and risk management programs, we must rely upon our analysis of laws, rules, regulations and information regarding our industry, markets, personnel, clients and other matters. That information may not in all cases be accurate, complete, up- to- date or properly analyzed. Furthermore, we rely on a combination of technical and human controls and supervision that are subject to error and potential failure. In case of non- compliance or alleged non- compliance with applicable laws, rules or regulations by us or third parties on which we may rely, we could be subject to regulatory investigations and proceedings that may be very expensive to defend against and may result in substantial fines and penalties or civil lawsuits, including by clients, for damages which can be significant. Any of these outcomes would adversely affect our reputation, financial condition and results of operations. Further, the implementation of new legislation or regulations, or changes in or unfavorable interpretations of existing legislation or regulations by courts or regulators, could require us to incur significant compliance costs and impede our ability to operate, expand and enhance our platforms and solutions as necessary to remain competitive and grow our business, which could materially adversely affect our business, financial condition and results of operations. We are from time to time involved in various litigation matters and claims, including lawsuits regarding employment matters, breach of contract matters and other business and commercial matters. See Part I, Item 3. – " Legal Proceedings. " Many aspects of our business, and the businesses of our clients, involve substantial risks of liability. These risks include, among others, disputes over the terms of a trade and claims that a system failure or delay caused monetary loss to a client or that an unauthorized trade occurred. Although we carry insurance that may limit our risk of damages in some matters, we may still sustain uncovered losses or losses in excess of available insurance, and we could incur significant legal expenses defending claims, even those without merit. Due to the uncertain nature of the litigation process, it is not possible to predict with certainty the outcome of any particular litigation matter or claim, and we could in the future incur judgments or enter into settlements that could have a material adverse effect on our business, financial condition and results of operations. The ultimate outcome of litigation matters and claims against us may require us to change or cease certain operations and may result in higher operating costs. An adverse resolution of any litigation matter or claim could cause damage to our reputation and could have a material adverse effect on our business, financial condition and results of operations. Our stock price may be volatile and, in the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Litigation of this type could result in substantial costs and diversion of management' s attention and resources, which could have a material adverse effect on our business, financial condition and results of operations. Any adverse determination in litigation could also subject us to significant liabilities. The credit agreement that governs the **2023** Revolving Credit Facility imposes ~~significant~~ **certain** operating and financial restrictions on us and our restricted subsidiaries, which may prevent us from capitalizing on business opportunities, and we may incur ~~additional~~ debt in the future that may include similar or additional restrictions. We are party to **the 2023 Revolving Credit Facility,** a $ 500. 0 million senior ~~secured~~ **unsecured** revolving credit facility ~~(the " Revolving Credit Facility "),~~ with a syndicate of banks. The credit agreement that governs the **2023** Revolving Credit Facility imposes ~~significant~~ **certain** operating and financial restrictions. These restrictions, which are subject to a number of qualifications and exceptions, could ~~limit our ability and the ability of our restricted subsidiaries to~~ , among other things ~~: •~~ **, limit the ability of (i) TWM LLC to merge or consolidate with other entities, (ii) the subsidiaries of TWM LLC to** incur **or** ~~additional indebtedness and~~ guarantee indebtedness ~~; •~~ **and (iii) TWM LLC and its subsidiaries to** create or incur liens ~~; • pay dividends and distributions or repurchase capital stock; • make investments, loans and advances; and • enter into certain transactions with affiliates~~ . In addition, the credit agreement that governs our **2023** Revolving Credit Facility requires us to maintain a maximum total net leverage ratio and a minimum cash interest coverage ratio. See Part II, Item 7. – " Management' s Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources. " These covenants could ~~materially adversely~~ affect our ability to finance our future operations or capital needs ~~. Furthermore, they may restrict our ability to expand and pursue our business strategies~~ and otherwise conduct our business. Our ability to comply with these covenants may be affected by circumstances and events beyond our control, such as prevailing economic conditions and changes in regulations, and we cannot assure you that we will be able to comply with such covenants ~~. These restrictions could also limit our ability to obtain future financings to withstand a future downturn in our business or the economy in general~~ . In addition, complying with these covenants may also cause us to take actions that make it more difficult for us to successfully execute our business strategies and compete against companies that are not subject to such restrictions. Our failure to comply with the covenants and other terms of the **2023** Revolving Credit Facility and / or the terms of any future indebtedness could result in an event of default. If any such event of default occurs and is not waived, the lenders under the **2023** Revolving Credit Facility could elect to declare all amounts outstanding and accrued and unpaid interest, if any, under the **2023** Revolving Credit Facility to be immediately due and payable ~~, and could foreclose on the assets securing the Revolving Credit Facility~~ . The lenders would also have the right in these circumstances to terminate any commitments they have to provide further credit extensions. If we are forced to refinance any borrowings under the **2023** Revolving Credit Facility on less favorable terms or if we cannot refinance these borrowings, our financial condition and results of operations could be materially adversely affected. In addition, although the credit agreement that governs the **2023** Revolving Credit Facility contains restrictions on the incurrence of ~~additional~~ **certain** indebtedness, these restrictions are subject to a number of qualifications and exceptions, and we and our subsidiaries may be able to incur substantial ~~additional~~ indebtedness ~~in compliance with these restrictions~~ in the future. The terms of any future indebtedness we may incur could include more restrictive covenants. Any borrowings under the **2023** Revolving Credit Facility will subject us to interest rate risk, which could cause our debt service obligations to increase significantly. Any borrowings under the **2023** Revolving Credit Facility will be at variable rates of interest and expose us to interest rate risk. If interest rates rise, as they did throughout **most of** ~~2022~~ **2023** , our debt service obligations on any borrowings under the **2023** Revolving Credit Facility will increase even though the amount borrowed may remain the same, and our net income and cash flows will correspondingly decrease. Assuming that the $ 500. 0 million **2023** Revolving Credit Facility was fully drawn, each 0. 125 % change in interest rates would result in an approximate change of $ 0. 6 million in annual interest expense on the borrowings under the **2023** Revolving Credit Facility. **Borrowings under** ~~The interest rates applicable to~~ the **2023** Revolving Credit Facility ~~are~~ **may bear interest at a rate per annum that, at our election,**

is based **upon SOFR. Since the initial publication of SOFR, daily changes in the rate have,** on **occasion** ~~a fluctuating rate of interest determined by reference to the London Interbank Offered Rate (“ LIBOR ”). In July 2017~~ , **been more volatile** ~~the UK’ s FCA, which regulates LIBOR, announced that~~ **than** ~~it intends to stop persuading~~ **daily changes in comparable benchmark** or **market** ~~compelling banks to submit~~ rates **, and SOFR over time may bear little** ~~for~~ - **or no relation** ~~the calculation of LIBOR after 2021. On November 30, 2020, ICE Benchmark Administration (“ IBA ”), the administrator of LIBOR tenors, with the support of the Federal Reserve and the FCA, announced plans to consult on ceasing publication of U. S. dollar LIBOR on December 31, 2021 for the one- week and two~~ - **to the historical actual** ~~- month U. S. dollar LIBOR, and on June 30, 2023 for~~ - **or historical indicative data** ~~all other U. S. dollar LIBOR tenors~~ . The **possible volatility** ~~Federal Reserve concurrently issued a statement advising banks to stop new U. S. dollar LIBOR issuances by the end~~ of ~~2021. On March 5, 2021, the IBA confirmed its intention to cease publication of (i) one- week~~ and **uncertainty around** ~~two- month U. S. dollar LIBOR tenors after December 31, 2021 and (ii) remaining USD U. S. dollar LIBOR tenors after June 30, 2023. In response to concerns regarding the future of LIBOR, the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York convened the Alternative Reference Rates Committee (the “ ARRC ”) to identify alternatives to LIBOR. The ARRC has recommended a benchmark replacement waterfall to assist issuers in continued financial market entry while safeguarding against LIBOR’ s discontinuation. The initial steps in the ARRC’ s recommended provision reference variations of the Secured Overnight Financing Rate (“~~ SOFR ~~”), calculated using short- term repurchase agreements backed by Treasury securities. At this time, it is not possible to predict the extent to which and how quickly SOFR will attain market traction~~ as a LIBOR replacement ~~. Additionally, it is uncertain whether and to what extent banks will continue to provide LIBOR submissions to the administrator of LIBOR and whether one- month, three- month, six- month, and twelve- month U. S. dollar LIBOR rates will continue to be published until June 2023, or whether additional reforms to LIBOR may be enacted, or whether alternative reference rates will gain market acceptance as a replacement for LIBOR. In anticipation of LIBOR’ s phase- out, the credit agreement governing the Revolving Credit Facility provides for alternative base rates as well as a transition mechanism for selecting a benchmark replacement~~ rate ~~for LIBOR, with such benchmark replacement rate to be mutually agreed with the administrative agent and subject to the majority lenders not objecting to such benchmark replacement. There can be no assurance that we will be able to reach any agreement on a replacement benchmark, and there can be no assurance that any agreement we reach will result in effective interest rates at least as favorable to us as our current effective interest rates. The failure to reach an agreement on a replacement benchmark, or the failure to reach an agreement that results in an effective interest rate at least as favorable to us as our current effective interest rates,~~ could result in **higher borrowing costs for us** ~~a significant increase in our debt service obligations~~ , which could adversely affect our **liquidity,** financial condition and results of operations ~~. In addition, the overall financing market may be disrupted as a result of the phase- out or replacement of LIBOR, which could have an adverse impact on our ability to refinance, reprice or amend the Revolving Credit Facility, or incur additional indebtedness, on favorable terms, or at all~~ . Refinitiv controls us and its interests may conflict with ours or yours in the future. Following the consummation of the LSEG Transaction, LSEG is the controlling shareholder of Refinitiv and Refinitiv continues to be the controlling shareholder of Tradeweb. As of December 31, ~~2022~~ **2023** , Refinitiv controls approximately ~~91~~ **89** . ~~2~~ **9** % of the combined voting power of our common stock as a result of its ownership of our Class B common stock and Class D common stock, each share of which is entitled to 10 votes **on all matters submitted to a vote of our stockholders and its ownership of our Class C common stock, each share of which is entitled to 1 vote** on all matters submitted to a vote of our stockholders. Moreover, under our amended and restated bylaws and the Stockholders Agreement, for so long as Refinitiv continues to beneficially own at least 10 % of the combined voting power of our common stock, we will agree to nominate to our board of directors a certain number of individuals designated by Refinitiv. Even when Refinitiv ceases to own shares of our common stock representing a majority of the combined voting power, for so long as Refinitiv continues to own a significant percentage of our common stock, Refinitiv will still be able to significantly influence the composition of our board of directors and the approval of actions requiring stockholder approval through its combined voting power. Accordingly, for such period of time, Refinitiv will continue to have significant influence with respect to our management, business plans and policies. In particular, Refinitiv is able to cause or prevent a change of control of our company or a change in the composition of our board of directors and could preclude any unsolicited acquisition of our company. The concentration of voting power could deprive you of an opportunity to receive a premium for your shares of Class A common stock as part of a sale of our company and ultimately might affect the market price of our Class A common stock. Refinitiv engages in a broad spectrum of activities. In the ordinary course of its business activities, Refinitiv may engage in activities where its interests conflict with our interests or those of our stockholders. Our amended and restated certificate of incorporation provides that none of Refinitiv, any of its affiliates (including LSEG) or any director who is not employed by us (including any non- employee director who serves as one of our officers in both his or her director and officer capacities) or his or her affiliates has any duty to refrain from engaging, directly or indirectly, in the same business activities or similar business activities or lines of business in which we operate. Refinitiv also may pursue acquisition opportunities that may be complementary to our business, and, as a result, those acquisition opportunities may not be available to us. In addition, Refinitiv may have an interest in our pursuing acquisitions, divestitures and other transactions that, in its judgment, could enhance its investment, even though such transactions might involve risks to you. We are a “ controlled company ” within the meaning of the corporate governance standards of Nasdaq and, as a result, qualify for, and rely on, exemptions from certain corporate governance requirements. Refinitiv owns a majority of the combined voting power in us. As a result, we are a “ controlled company ” within the meaning of the corporate governance standards of Nasdaq. A company of which more than 50 % of the voting power is held by an individual, a group or another company is a “ controlled company ” within the meaning of the corporate governance standards of Nasdaq and may elect not to comply with certain corporate governance requirements of Nasdaq, including: • the requirement that a majority of our board of directors consist of independent directors; • the requirement that director nominations be made, or recommended to the full board of directors, by its independent directors or by a nominations committee that is composed entirely of independent directors; and • the requirement that we have a compensation committee that is composed entirely of independent directors. We ~~intend to continue to~~ **may in the future** rely on **any or** all of the exemptions listed above. If we ~~continue to~~ utilize the exemptions, we will not have a majority of independent directors and our nominating and corporate governance and compensation committees will not consist entirely of independent directors. As a result, our board of directors and those committees may have more directors who do not meet Nasdaq independence standards than they would if those standards were to apply. The independence standards are intended to ensure that directors who meet those standards are free of any conflicting interest that could influence their actions as directors. Accordingly, **if we utilize the exemptions,** you ~~will~~ **would** not have the same protections afforded to stockholders of companies that are subject to all of the corporate governance requirements of Nasdaq. Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that may make the merger or acquisition of our company more difficult without the approval of our board of directors. Among other things, these provisions: • provide for a multi- class common stock structure with a 10 vote per share feature of our Class B common stock and Class D common stock; • allow us to authorize the issuance of undesignated preferred stock in connection with a stockholder rights plan or otherwise, the terms of which may be established and the shares of which may be issued without stockholder approval, and which may include super voting, special approval, dividend, or other rights or preferences superior to the rights of the holders of our common stock; • prohibit stockholder action by written consent from and after the date on which Refinitiv ceases to beneficially own at least 50 % of the total voting power of all then outstanding shares of our capital stock unless such action is recommended by all directors then in office; • provide that the board of directors is expressly authorized to make, alter or repeal our bylaws and that our stockholders may only amend our bylaws with the approval of 66 2 ⁄ 3 % or more in voting power of all outstanding shares of our capital stock, if Refinitiv beneficially owns less than 50 % in voting power of our stock entitled to vote generally in the election of directors; and • establish advance notice requirements for nominations for elections to our board or for proposing matters that can be acted upon by stockholders at stockholder meetings. In addition, while we have opted out of Section 203 of the Delaware General Corporation Law (“ DGCL ”), our amended and restated certificate of incorporation contains similar provisions providing that we may not engage in certain “ business combinations ” with any “ interested stockholder ” for a three- year period following the time that the stockholder became an interested stockholder, unless: • prior to such time, our board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder; • upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85 % of our voting stock outstanding at the time the transaction commenced, excluding certain shares; or • at or subsequent to that time, the business combination is approved by our board of directors and by the affirmative vote of holders of at least 66 2 ⁄ 3 % of our outstanding voting stock that is not owned by the interested stockholder. Our amended and restated certificate of incorporation provides that Refinitiv and its affiliates, and any of their respective direct or indirect transferees and any group as to which such persons are a party, do not constitute “ interested stockholders ” for purposes of this provision. Further, as a Delaware corporation, we are also subject to provisions of Delaware law, which may impair a takeover attempt that our stockholders may find beneficial. These anti- takeover provisions and other provisions under Delaware law could discourage, delay or prevent a transaction involving a change in control of our company, including actions that our stockholders may deem advantageous, or negatively affect the market price of our Class A common stock. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors of your choosing and to cause us to take other corporate actions you desire. See Exhibit 4. 2 to this Annual Report on Form 10- K for a description of our capital stock. Our amended and restated certificate of incorporation designates the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders’ ability to obtain what such stockholders believe to be a favorable judicial forum for disputes with us or our directors, officers or other employees. Our amended and restated certificate of incorporation provides that, unless we consent to the selection of an alternative forum, any (i) derivative action or proceeding brought on behalf of our company, (ii) action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of our company to our company or our stockholders, (iii) action asserting a claim against us or any director or officer arising pursuant to any provision of the DGCL or our amended and restated certificate of incorporation or our amended and restated bylaws or (iv) action asserting a claim against us or any director or officer of our company governed by the internal affairs doctrine, shall, to the fullest extent permitted by law, be exclusively brought in the Court of Chancery of the State of Delaware or, if such court does not have subject matter jurisdiction thereof, the federal district court of the State of Delaware. Notwithstanding the foregoing, the exclusive forum provision does not apply to suits brought to enforce any liability or duty created by the Exchange Act, the Securities Act or any other claim for which the federal courts have exclusive jurisdiction. Any person or entity purchasing or otherwise acquiring an interest in any shares of our capital stock shall be deemed to have notice of and to have consented to the forum provisions in our amended and restated certificate of incorporation. These choice- of- forum provisions may limit a stockholder’ s ability to bring a claim in a judicial forum that he, she or it believes to be favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits. Alternatively, if a court were to find these provisions of our amended and restated certificate of incorporation inapplicable or unenforceable with respect to one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could materially adversely affect our business, financial condition and results of operations and result in a diversion of the time and resources of our management and board of directors. We are a holding company and our principal asset is our equity interest in TWM LLC. We have no independent means of generating revenue or cash flow, and our ability to pay our taxes and operating expenses or declare and pay dividends, if any, in accordance with our dividend policy will be dependent upon the financial results and cash flows of TWM LLC and its subsidiaries and distributions we receive from TWM LLC. There can be no assurance that TWM LLC and its subsidiaries will generate sufficient cash flow to distribute funds to us or that applicable state law and contractual restrictions will permit such distributions. We also incur expenses related to our operations, including payments under the Tax Receivable Agreement, which we expect could be significant. See Note 10 – Tax Receivable Agreement to our audited consolidated financial statements included **elsewhere** in this Annual Report on Form 10-K. We intend, as its sole manager of TWM LLC, to cause TWM LLC to continue to make cash distributions to the owners of LLC Interests, including us, in an amount sufficient to (i) fund all or part of their tax obligations in respect of taxable income allocated to them and (ii) cover our operating expenses, including payments under the Tax Receivable Agreement. When TWM LLC makes distributions, Continuing LLC Owners will be entitled to receive proportionate distributions based on their economic interests in TWM LLC at the time of such distributions. TWM LLC' s ability to make such distributions may be subject to various limitations and restrictions, such as restrictions on distributions that would either violate any contract or agreement to which TWM LLC is then a party, or any applicable law, or that would have the effect of rendering TWM LLC insolvent. If we do not have sufficient funds to pay tax or other liabilities or to fund our operations, we may have to borrow funds, including under the **2023** Revolving Credit Facility, which could materially adversely affect our liquidity and financial condition and subject us to various restrictions imposed by any such indebtedness. To the extent that we are unable to make payments under the Tax Receivable Agreement for any reason, such payments generally will be deferred and will accrue interest until paid; provided, however, that nonpayment for a specified period may constitute a material breach of a material obligation under the Tax Receivable Agreement and therefore accelerate payments due under the Tax Receivable Agreement. See " — Risks Relating to Ownership of Our Class A Common Stock. " In certain circumstances, TWM LLC will be required to make distributions to us and the other holders of LLC Interests, and the distributions that TWM LLC will be required to make may be substantial and in excess of our tax liabilities and obligations under the Tax Receivable Agreement. To the extent we do not distribute such excess cash, the Continuing LLC Owners would benefit from any value attributable to such cash balances as a result of their ownership of Class A common stock or Class B common stock following an exchange of their LLC Interests. TWM LLC is treated as a partnership for U. S. federal income tax purposes and, as such, is not subject to any entity- level U. S. federal income tax. Instead, taxable income is allocated to holders of LLC Interests, including us. Accordingly, we incur income taxes on our allocable share of any net taxable income of TWM LLC. Under the TWM LLC Agreement, TWM LLC is generally required from time to time to make pro rata distributions in cash to us and the other holders of LLC Interests in amounts that are intended to be sufficient to cover the taxes on our and the other LLC Interests holders' respective allocable shares of the taxable income of TWM LLC. As a result of (i) potential differences in the amount of net taxable income allocable to us and the other LLC Interest holders, (ii) the lower tax rate applicable to corporations as compared to individuals and (iii) the favorable tax benefits that we anticipate receiving from (a) acquisitions of LLC Interests in connection with future taxable redemptions or exchanges of LLC Interests for shares of our Class A common stock or Class B common stock, as applicable, and (b) payments under the Tax Receivable Agreement, we expect that these tax distributions will be in amounts that exceed our tax liabilities and obligations to make payments under the Tax Receivable Agreement. Our board of directors will determine the appropriate uses for any excess cash so accumulated, which may include, among other uses, any potential dividends, the payment of obligations under the Tax Receivable Agreement and the payment of other expenses. We have no obligation to distribute such cash (or other available cash other than any declared dividend) to our stockholders. No adjustments to the redemption or exchange ratio of LLC Interests for shares of Class A common stock or Class B common stock, as applicable, will be made as a result of either (i) any cash distribution by TWM LLC or (ii) any cash that we retain and do not distribute to our stockholders. To the extent that we do not distribute such excess cash as dividends on our Class A common stock and Class B common stock and instead, for example, hold such cash balances or lend them to TWM LLC, Continuing LLC Owners would benefit from any value attributable to such cash balances as a result of their ownership of Class A common stock or Class B common stock, as applicable, following a redemption or exchange of their LLC Interests. The Tax Receivable Agreement with the Continuing LLC Owners requires us to make cash payments to them in respect of certain tax benefits to which we may become entitled, and we expect that the payments we will be required to make will be substantial. We are a party to the Tax Receivable Agreement with TWM LLC and the Continuing LLC Owners. Under the Tax Receivable Agreement, we are required to make cash payments to a Continuing LLC Owner equal to 50 % of the U. S. federal, state and local income or franchise tax savings, if any, that we actually realize, or in certain circumstances are deemed to realize, as a result of (i) increases in the tax basis of TWM LLC' s assets resulting from (a) the purchase of LLC Interests from ~~such~~ **a** Continuing LLC Owner, including with the net proceeds from the IPO, the October 2019 and the April 2020 follow- on offerings and any future offerings or (b) redemptions or exchanges by ~~such~~ **a** Continuing LLC Owner of LLC Interests for shares of our Class A common stock or Class B Common Stock or for cash, as applicable, and (ii) certain other tax benefits related to our making payments under the Tax Receivable Agreement. We expect that the amount of the cash payments that we will be required to make under the Tax Receivable Agreement will be substantial. Any payments made by us to the Continuing LLC Owners under the Tax Receivable Agreement will generally reduce the amount of overall cash flow that might have otherwise been available to us. Furthermore, our obligation to make payments under the Tax Receivable Agreement could make us a less attractive target for an acquisition, particularly in the case of an acquirer that cannot use some or all of the tax benefits that are the subject of the Tax Receivable Agreement. The actual increase in tax basis, as well as the amount and timing of any payments under the Tax Receivable Agreement, will vary depending on a number of factors, including, but not limited to, the timing of any future redemptions, exchanges or purchases of the LLC Interests held by Continuing LLC Owners, the price of our Class A common stock at the time of the redemption, exchange or purchase, the extent to which redemptions or exchanges are taxable, the amount and timing of the taxable income that we generate in the future, the timing and amount of any earlier payments we make under the Tax Receivable Agreement itself, the tax rates then applicable and the portion of our payments under the Tax Receivable Agreement constituting imputed interest. We expect that, as a result of the increases in the tax basis of the tangible and intangible assets of TWM LLC attributable to the redeemed or exchanged LLC Interests, the payments that we may make to ~~the existing~~ Continuing

LLC Owners could be substantial. For example, as of December 31, ~~2022~~ **2023** , we recorded a liability of $ ~~425~~ **457** . ~~7~~ **5** million related to our projected obligations under the Tax Receivable Agreement with respect to LLC Interests that were purchased by Tradeweb Markets Inc. using the net proceeds from the IPO and the October 2019 and the April 2020 follow- on offerings and LLC Interests that were **subsequently** exchanged by Continuing LLC Owners ~~during the years ended December 31, 2022, 2021, 2020 and 2019~~ . Payments under the Tax Receivable Agreement are not conditioned on any Continuing LLC Owner' s continued ownership of LLC Interests or our Class A common stock or Class B common stock. There may be a material negative effect on our liquidity if, as described below, the payments under the Tax Receivable Agreement exceed the actual benefits we receive in respect of the tax attributes subject to the Tax Receivable Agreement and / or distributions to us by TWM LLC are not sufficient to permit us to make payments under the Tax Receivable Agreement. Our organizational structure, including the Tax Receivable Agreement, confers certain benefits upon the Continuing LLC Owners that will not benefit the holders of our Class A common stock or Class B common stock to the same extent as it will benefit the Continuing LLC Owners. The Tax Receivable Agreement with TWM LLC and the Continuing LLC Owners provides for the payment by us to ~~the~~ **a** Continuing LLC ~~Owners~~ **Owner** of 50 % of the tax benefits, if any, that we actually realize, or in certain circumstances are deemed to realize, as a result of (i) increases in the tax basis of TWM LLC' s assets resulting from (a) the purchase of LLC Interests from ~~such~~ **a** Continuing LLC Owner, including with the net proceeds from the IPO, the October 2019 and April 2020 follow- on offerings and any future offerings or (b) redemptions or exchanges by ~~the~~ **a** Continuing LLC ~~Owners~~ **Owner** of LLC Interests for shares of our Class A common stock or Class B Common Stock or for cash, as applicable, and (ii) certain other tax benefits related to our making payments under the Tax Receivable Agreement. Although we will retain 50 % of the amount of such tax benefits, this and other aspects of our organizational structure may adversely impact the future trading market for the Class A common stock. In certain cases, payments under the Tax Receivable Agreement to the Continuing LLC Owners may be accelerated or significantly exceed the actual benefits we realize in respect of the tax attributes subject to the Tax Receivable Agreement. The Tax Receivable Agreement provides that upon certain changes of control or if, at any time, we elect an early termination of the Tax Receivable Agreement, then our obligations, or our successor' s obligations, to make payments under the Tax Receivable Agreement would be accelerated and calculated based on certain assumptions, including an assumption that we would have sufficient taxable income to fully utilize all potential future tax benefits that are subject to the Tax Receivable Agreement. As a result of the foregoing, (i) we could be required to make payments under the Tax Receivable Agreement that are greater than the specified percentage of the actual benefits we ultimately realize in respect of the tax benefits that are subject to the Tax Receivable Agreement (for example, if we do not end up having any income in the relevant period) and (ii) we would be required to make an immediate cash payment equal to the present value of the anticipated future tax benefits that are the subject of the Tax Receivable Agreement, which payment may be made significantly in advance of the actual realization, if any, of such future tax benefits. In these situations, our obligations under the Tax Receivable Agreement could have a substantial negative impact on our liquidity and could have the effect of delaying, deferring or preventing certain change of control transactions. There can be no assurance that we will be able to fund or finance our obligations under the Tax Receivable Agreement. Payments under the Tax Receivable Agreement are based on the tax reporting positions that we determine, and the Internal Revenue Service or another tax authority may challenge all or part of the tax basis increases, as well as other related tax positions we take, and a court could sustain such challenge. We will not be reimbursed for any cash payments previously made to the Continuing LLC Owners under the Tax Receivable Agreement in the event that any tax benefits initially claimed by us and for which payment has been made to a Continuing LLC Owner are subsequently challenged by a taxing authority and are ultimately disallowed. Instead, any excess cash payments made by us to a Continuing LLC Owner will be netted against any future cash payments that we might otherwise be required to make to such Continuing LLC Owner under the terms of the Tax Receivable Agreement. However, we might not determine that we have effectively made an excess cash payment to a Continuing LLC Owner for a number of years following the initial time of such payment and, if any of our tax reporting positions are challenged by a taxing authority, we will not be permitted to reduce any future cash payments under the Tax Receivable Agreement until any such challenge is finally settled or determined. As a result, payments could be made under the Tax Receivable Agreement in excess of the tax savings that we realize in respect of the tax attributes with respect to a Continuing LLC Owner that are the subject of the Tax Receivable Agreement. If we are deemed to be an investment company under the Investment Company Act of 1940, as amended (the " 1940 Act "), as a result of our ownership of TWM LLC, applicable restrictions could make it impractical for us to continue our business as contemplated and could have a material adverse effect on our business. Under Sections 3 (a) (1) (A) and (C) of the 1940 Act, a company generally will be deemed to be an " investment company " for purposes of the 1940 Act if (i) it is, or holds itself out as being, engaged primarily, or proposes to engage primarily, in the business of investing, reinvesting or trading in securities or (ii) it engages, or proposes to engage, in the business of investing, reinvesting, owning, holding or trading in securities and it owns or proposes to acquire investment securities having a value exceeding 40 % of the value of its total assets (exclusive of U. S. government securities and cash items) on an unconsolidated basis. We do not believe that we are an " investment company, " as such term is defined in either of those sections of the 1940 Act. As the sole manager of TWM LLC, we control and operate TWM LLC. On that basis, we believe that our interest in TWM LLC is not an " investment security " as that term is used in the 1940 Act. However, if we were to cease participation in the management of TWM LLC, our interest in TWM LLC could be deemed an " investment security " for purposes of the 1940 Act. We and TWM LLC intend to continue to conduct our operations so that we will not be deemed an investment company. However, if we are deemed to be an investment company, restrictions imposed by the 1940 Act, including limitations on our capital structure and our ability to transact with affiliates, could make it impractical for us to continue our business as contemplated and could have a material adverse effect on our business. As of February ~~17~~ **2** , ~~2023~~ **2024** , we have an aggregate of ~~888~~ **884** , ~~774~~ **261** , ~~111~~ **056** shares of Class A common stock authorized but unissued, including approximately ~~123~~ **120** , ~~275~~ **011** , ~~273~~ **165** shares of Class A common stock issuable upon the redemption or exchange of LLC Interests that are held by the Continuing LLC Owners or the exchange of shares of Class B common stock that are held by Refinitiv and any other future holders of Class B common stock. Subject to certain restrictions set forth in the TWM LLC Agreement, Continuing LLC Owners are entitled to have their LLC Interests redeemed for newly issued shares of our Class A common stock or Class B common stock, as applicable, in each case, on a one- for- one basis (in which case such holders' shares of Class C common stock or Class D common stock, as the case may be, will be cancelled on a one- for- one basis upon any such issuance). Shares of our Class B common stock may also be exchanged at any time, at the option of the holder, for newly issued shares of Class A common stock (in which case such holders' shares of Class B common stock will be cancelled on a one- for- one basis upon any such issuance). We cannot predict the size of future issuances of our Class A common stock or the effect, if any, that future issuances and sales of shares of our Class A common stock may have on the market price of our Class A common stock. Sales or distributions of substantial amounts of our Class A common stock, including shares issued in connection with an acquisition, or the perception that such sales or distributions could occur, may cause the market price of our Class A common stock to decline. The market price and trading volumes of our Class A common stock could be volatile, and you could lose all or part of your investment. Stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies in our industry. The following factors, in addition to other factors described in this " Risk Factors " section, may have a significant impact on the market price and trading volume of our Class A common stock: • negative trends in global economic conditions or activity levels in our industry, including any potential recession in the U. S. or global economies; • changes in our relationship with our clients or in client needs or expectations or trends in the markets in which we operate; • announcements concerning or by our competitors or concerning our industry or the markets in which we operate in general; • announcements of investigations or regulatory scrutiny of our operations or lawsuits filed against us; • our ability to implement our business strategy; • our ability to complete and integrate acquisitions; • actual or anticipated fluctuations in our quarterly or annual operating results or failure to meet guidance given by us or any change in guidance given by us or in our guidance practices; • trading volume of our Class A common stock; • the failure of securities analysts to cover the Company or changes in financial estimates by the analysts who cover us, our competitors or our industry in general; • economic, political, social, legal and regulatory factors unrelated to our performance; • changes in accounting principles; • the loss of any of our management or key personnel; • sales of our Class A common stock by us, our executive officers, directors or our stockholders in the future; • investor perception of us, our competitors and our industry; • any adverse consequences related to our multi- class capital structure, such as stock index providers excluding companies with multi- class capital structures from certain indices; and • overall fluctuations in the U. S. equity markets generally. In addition, broad market and industry factors may negatively affect the market price of our Class A common stock, regardless of our actual operating performance, and factors beyond our control may cause our stock price to decline rapidly and unexpectedly. Sales of a substantial number of shares of our Class A common stock in the public market or the perception that these sales might occur, could depress the market price of our Class A common stock, impair our ability to raise capital through the sale of additional equity securities or make it more difficult for you to sell your Class A common stock at a time and price that you deem appropriate. As of February ~~17~~ **2** , ~~2023~~ **2024** we have ~~111~~ **115** , ~~225~~ **738** , ~~889~~ **944** outstanding shares of Class A common stock and ~~123~~ **120** , ~~275~~ **011** , ~~273~~ **165** shares of Class A common stock that are authorized but unissued that would be issuable upon redemption or exchange of LLC Interests or exchange of shares of our Class B common stock. In addition, shares of Class A common stock issued or issuable upon exercise of options that have currently vested and vesting of ~~the PRSUs and RSUs~~ **outstanding equity awards (as described more fully in Note 13- Stock- Based Compensation Plains to our audited consolidated financial statements included elsewhere in this Annual Report on Form 10- K)** are eligible for sale. We have filed registration statements on Form S- 8 under the Securities Act covering approximately 32 million shares of Class A common stock issued or issuable under our equity incentive plans. Accordingly, shares registered under such registration statements are available for sale in the open market following the vesting of awards, as applicable, the expiration or waiver of any applicable lockup period and subject to Rule 144 limitations applicable to affiliates. In addition, pursuant to the Registration Rights Agreement, Refinitiv, its affiliates and certain of its transferees have the right, under certain circumstances and subject to certain restrictions, to require us to register under the Securities Act shares of Class A common stock. Registration of these shares under the Securities Act, would result in the shares becoming freely tradable without restriction under the Securities Act, except for shares held by our affiliates as defined in Rule 144 under the Securities Act. If securities or industry analysts cease publishing research or reports about us, our business, our industry or markets or our competitors, or if they adversely change their recommendations or publish negative reports regarding our business or our Class A common stock, our stock price and trading volume could materially decline. The trading market for our Class A common stock will be influenced by the research and reports that industry or securities analysts may publish about us, our business, our industry or markets or our competitors. We do not have any control over these analysts and we cannot provide any assurance that analysts will continue to cover us or provide favorable coverage. If any of the analysts who cover us adversely change their recommendation regarding our Class A common stock, or provide more favorable relative recommendations about our competitors, our stock price could materially decline. If any analyst who covers us were to cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our stock price or stock trading volumes to materially decline. We intend to continue to pay regular dividends on our Class A common stock and Class B common stock, but our ability to do so may be limited. We intend to continue to pay cash dividends on our Class A common stock and Class B common stock on a quarterly basis, subject to the discretion of our board of directors and our compliance with applicable law, and depending on our and our subsidiaries' results of operations, capital requirements, financial condition, business prospects, contractual restrictions, restrictions imposed by applicable laws and other factors that our board of directors deems relevant. Because we are a holding company and all of our business is conducted through our subsidiaries, we expect to pay dividends, if any, only from funds we receive from our subsidiaries. Accordingly, our ability to pay dividends to our stockholders is dependent on the earnings and distributions of funds from our subsidiaries. As the sole manager of TWM LLC, we intend to cause, and will rely on, TWM LLC to make distributions in respect of LLC Interests to fund our dividends. When TWM LLC makes such distributions, Continuing LLC Owners will be entitled to receive equivalent distributions pro rata based on their economic interests in TWM LLC at the time of such distributions. In order for TWM LLC to make distributions, it may need to receive distributions from its subsidiaries. Certain of these subsidiaries are or may in the future be subject to regulatory capital requirements that limit the size or frequency of distributions. If TWM LLC is unable to cause these subsidiaries to make distributions, it may have inadequate funds to distribute to us and we may be unable to fund our dividends. Our ability to pay dividends may also be restricted by the terms of ~~the Revolving Credit Facility,~~ any future credit agreement or any future debt or preferred equity securities of Tradeweb or its subsidiaries. Our dividend policy entails certain risks and limitations, particularly with respect to our liquidity. By paying cash dividends rather than investing that cash in our business or repaying any outstanding debt, we risk, among other things, slowing the expansion of our business, having insufficient cash to fund our operations or make capital expenditures or limiting our ability to incur borrowings. Our board of directors will periodically review the cash generated from our business and the capital expenditures required to finance our growth plans and determine whether to modify the amount of regular dividends and / or declare any periodic special dividends. There can be no assurance that our board of directors will not reduce the amount of regular cash dividends or cause us to cease paying dividends altogether. On December 5, 2022, our board of directors approved a share repurchase program with an indefinite term under which the Company may purchase up to $ 300 million of its Class A common stock (the " Share Repurchase Program "). Pursuant to the Share Repurchase Program, the Company may repurchase its Class A common stock from time to time, in amounts, at prices and at such times as it deems appropriate, subject to market conditions and other considerations. The Company may make repurchases in the open market, through privately negotiated transactions, through accelerated repurchase programs, or pursuant to Rule 10b5- 1 plans. The Share Repurchase Program will be conducted in compliance with applicable legal requirements and shall be subject to market conditions and other factors. The Share Repurchase Program has no termination date, may be suspended or discontinued at any time and does not obligate the company to acquire any amount of Class A common stock, and our board of directors may not authorize any increases to or extensions of the Share Repurchase Program or any new repurchase program in the future. The manner, timing and amount of any purchase will be based on an evaluation of market conditions, stock price and other factors. For example, the IRA imposes a 1 % excise tax on the repurchase ~~after December 31, 2022~~ of stock by publicly traded U. S. corporations. The imposition of the excise tax on repurchases of our shares will increase the cost to us of making repurchases and may cause management to reduce the number of shares repurchased pursuant to the program. Additional considerations that could cause management to limit, suspend or delay future stock repurchases include unfavorable market conditions, the trading price of our Class A common stock, the nature and magnitude of other investment opportunities available to us from time to time and the allocation of available cash. In addition, repurchases of shares of our Class A common stock pursuant to the Share Repurchase Program could affect our stock price and increase its volatility. For example, the existence of the Share Repurchase Program could cause our stock price to be higher than it would be in the absence of such a program and could potentially reduce the market liquidity for our Class A common stock. Our repurchases may also not enhance stockholder value because the stock price of our Class A common stock may decline below the prices at which we repurchased shares and short- term stock price fluctuations could reduce the program' s effectiveness. Additionally, our share repurchase program could diminish our cash reserves, which may impact our ability to finance or pursue our business strategies. The requirements of being a public company, including compliance with the reporting requirements of the Exchange Act and the requirements of the Sarbanes- Oxley Act and Nasdaq, may strain our resources, increase our costs and divert management' s attention, and we may be unable to comply with these requirements in a timely or cost- effective manner. As a public company, we are subject to the reporting requirements of the Exchange Act, and the corporate governance standards of the Sarbanes- Oxley Act and Nasdaq. These requirements may place a strain on our management, systems and resources. In addition, we have incurred, and expect to continue to incur significant legal, accounting, insurance and other expenses in connection with being a public company. The Exchange Act requires us to file annual, quarterly and current reports with respect to our business and financial condition within specified time periods and to prepare a proxy statement with respect to our annual meeting of stockholders. The Sarbanes- Oxley Act requires that we maintain effective disclosure controls and procedures and internal control over financial reporting. Nasdaq requires that we comply with various corporate governance requirements. To maintain and improve the effectiveness of our disclosure controls and procedures and internal control over financial reporting and comply with the Exchange Act and Nasdaq requirements, significant resources and management oversight are required. This may divert management' s attention from other business concerns and lead to significant costs associated with compliance, which could have a material adverse effect on us and the market price of our Class A common stock. The expenses incurred by public companies generally for reporting and corporate governance purposes have been increasing. We expect these rules and regulations to continue to increase our legal and financial compliance costs and to make some activities more time- consuming and costly. For example, we expect to incur additional costs in connection with compliance with **any** ~~the SEC' s~~ new climate- related disclosure rules. These laws and regulations could also make it more difficult or costly for us to obtain certain types of insurance, including director and officer liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. These laws and regulations could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors or its committees or as our executive officers. Advocacy efforts by stockholders and third parties may also prompt even more changes in governance and reporting requirements. We cannot predict or estimate the amount of additional costs we may incur or the timing of these costs. Furthermore, if we are unable to satisfy our obligations as a public company, we could be subject to delisting of our Class A common stock, fines, sanctions and other regulatory action and potentially civil litigation.