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The risks and uncertainties described below are those that we believe are material at this time relating to our business. These risks and uncertainties, however, are not the only risks and uncertainties that we face. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial may also significantly impact us. Any of these risks and uncertainties may materially and adversely affect our business, financial condition or results of operations, liquidity, and cash flows. Summary of Risk Factors The following is a summary of the key risks and uncertainties described below that we believe are material to us at this time: • the loss of our right to exclusively list and trade certain index options and futures products; • economic, political and market conditions; • compliance with legal and regulatory obligations; • price competition and consolidation in our industry; • decreases in trading or clearing volumes, market data fees or a shift in the mix of products traded on our exchanges; • legislative or regulatory changes or changes in tax regimes; • our ability to protect our systems and communication networks from security vulnerabilities and breaches; • our ability to attract and retain skilled management and other personnel, including compensation inflation; • increasing competition by foreign and domestic entities; • our dependence on and exposure to risk from third parties; • global expansion of operations; • factors that impact the quality and integrity of our and other applicable indices; • our ability to manage our growth and strategic acquisitions or alliances effectively; • our ability to operate our business without violating the intellectual property rights of others and the costs associated with protecting our intellectual property rights; • our ability to minimize the risks, including our credit, counterparty, investment, and default risks, associated with operating a European clearinghouse; ● our ability to accommodate trading and clearing volume and transaction traffic, including significant increases, without failure or degradation of performance of our systems; • misconduct by those who use our markets or our products or for whom we clear transactions; • challenges to our use of open source software code; • our ability to meet our compliance obligations, including managing potential conflicts between our regulatory responsibilities and our for- profit status; • our ability to maintain BIDS Trading as an independently managed and operated trading venue, separate from and not integrated with our registered national securities exchanges; • damage to our reputation; • the ability of our compliance and risk management methods to effectively monitor and manage our risks; • restrictions imposed by our debt obligations and our ability to make payments on or refinance our debt obligations; • our ability to maintain an investment grade credit rating; • impairment of our goodwill, long-lived assets, investments or intangible assets; • the impacts of pandemics; • litigation risks and other liabilities; and • operating a digital asset business, and clearinghouse, including the expected benefits of our Cboe Digital acquisition, cybercrime, changes in digital asset regulation, losses due to digital asset custody, and fluctuations in digital asset prices. Risks Relating to Our Business Loss of our right to exclusively list and trade certain index options and futures could have a material adverse effect on our financial performance. We hold exclusive licenses to list securities index options on the S & P 500 Index, the Russell 2000 Index, and as well as others - other, indices granted to us by the owners of such indices, and additionally hold exclusive rights to our proprietary VIX Index methodology that provides the basis for VIX options and futures. In 2022-2023, approximately 60-69.7 2 % of our transaction and clearing fees less liquidity payments and routing and clearing costs (" net transaction and clearing fees " (defined below) were generated by futures and index options, the overwhelming majority of which were generated by our products based on exclusively -licensed products indices (e. g., SPX options) and products based on our proprietary VIX methodology (e. g., VIX options and futures). The bulk of this revenue is attributable to our SPX options and VIX options and futures. As a result, our revenues less cost of revenues are dependent in large part on the exclusive licenses we hold for these products indices and our ability to maintain our exclusive proprietary rights in the VIX Index methodology and related products and indices. There is a risk, with respect to each of our current exclusive licenses, that the owner of the index may not renew the license with us on an exclusive basis or at all. In the first event, we would be subject to multiple listing in the trading of what is now an index product traded by us on an exclusive basis, which could result in a loss of market share and negatively impact our profitability. In the second event, we could lose the right to list the index product entirely. The loss or limited use of any of our exclusive index licenses, especially for the S & P 500 Index, for any reason could have a material adverse effect on our business and profitability. In addition to the risks related to our exclusive licenses, if we are unable to retain exclusive proprietary rights in the VIX **Index** methodology and related products and indices, our volatility products could be subject to multiple listing which could have a material adverse effect on us. The EU has adopted legislation affecting providers and users of benchmark indices in the EU. MiFIR requires benchmarks used to value a financial instrument in the EU to be made available on a non-discriminatory basis to all EU trading venues and central counterparty clearinghouses for the purposes of trading and clearing. As a result, owners of such benchmarks must provide licenses on fair, reasonable and nondiscriminatory terms. While similar legislation to MiFIR has not been proposed in the U. S., if it were passed, it could cause us to lose our exclusive rights to list and trade proprietary and licensed index products. Further, in 2018, the EU implemented the EU Benchmark Regulation, which regulates users, data providers and calculators of benchmarks ("administrators") in the EU, and among other things (subsequent to the transitional period applicable to third country benchmark administrators) prohibits use of benchmarks provided by administrators outside the EU in connection with EU financial instruments unless the administrator is deemed to be subject to an EU equivalent regulatory regime or the benchmark is endorsed or recognized in the EU. These regulations and other emerging regulatory regimes around the world may impact international customers' interest in or ability to trade index- based products listed on our U. S. exchanges, as well as impact our expansion into foreign trading of our index- based products and our ability to license proprietary indices for use outside of the U. S. Furthermore, our competitors

may succeed in developing, offering and providing a market for the trading of index-based or volatility products, such as cash settled index options or options on ETFs, that are economically similar to those that we offer and they may become successful and take away volume from our products. It is also possible that a third party may offer trading in index- based products that are the same as those that are the subject of one of our exclusive licenses, but in a jurisdiction in which the index owner cannot require a license or in a manner otherwise not limited by our exclusive license. In addition, a diminished perceived attractiveness of or change in demand for any of the indices underlying our products and services, especially the S & P 500 Index, for any reason could have a material adverse effect on our business and profitability. The value of our licenses to exclusively list securities index options and futures also depends on the continued ability of index owners to require licenses for the trading of options and futures based on their indices. Although we and other index owners have prevailed in legal actions seeking to challenge our rights to exclusively license indices, we may be subject to changes in the law or other actions taken in the future that might impede our ability to exclusively offer trading in certain index options and futures. General economic conditions and other factors beyond our control could significantly reduce demand for our products and services and harm our business. The volume of trading and clearing transactions and the demand for our products and services are directly affected by economic, political and market conditions in the U. S., Europe and elsewhere in the world that are beyond our control, including: • economic, political and geopolitical market conditions; • broad trends in business and finance; • concerns over inflation levels and recessions; • wavering institutional or retail confidence levels; 36 • government or central bank actions, such as changes in government fiscal and monetary policy and foreign currency exchange rates; • other legislative and regulatory changes; 35. the availability of short-term and long-term funding and capital; the perceived attractiveness of the U. S., European, Canadian, Australian or Japanese capital markets; ● the availability or perceived attractiveness of alternative investment opportunities or indices; • changes in the level of trading activity in underlying instruments; • changes and volatility in the prices of securities; • changes in the volume of foreign currency transactions; • changes in supply and demand for currencies; • movements in currency exchange rates; • the level and volatility of interest rates; • changes in the financial strength of market participants; • consolidation among market participants and market data subscribers; • unforeseen market closures, suspensions of open outcry trading or other disruptions in trading and clearing; and • disruptions due to terrorism, war, extreme weather events, pandemics or other catastrophes. Any of these factors, individually or collectively, could have a material adverse effect on our business, financial condition and operating results by causing a substantial decline in the financial services markets and reducing trading and clearing volumes and demand for market data. Our business may be adversely affected by price competition. The securities industry is characterized by intense price competition, especially with respect to transaction fees. We may be required to adjust pricing to respond to actions by new or existing competitors, which could adversely impact our business, financial condition and operating results. We also compete with respect to the pricing of market data and value- added market data, such as historical market data. In our options segment, the pricing model for trade execution has changed in response to competitive market conditions, and our competitors have adjusted transaction fees and fee structures accordingly, including by opening new exchanges, which allow them to offer multiple pricing models that can appeal to different segments of market participants. These changes have resulted in significant pricing pressures on us, especially on transaction fees and incentives for multi- listed products. As a result of these pricing pressures, our average rate per multi- listed options contract may decrease. It is likely that this pressure will continue and even intensify as our competitors continue to seek to increase their share of trading by further reducing their transaction fees or by offering other financial incentives to order providers and liquidity providers to induce them to direct orders to their markets. In addition, one or more competitors may engage in aggressive pricing strategies and significantly decrease or completely eliminate their profit margin for a period of time in order to capture a greater share of trading volume. Some order-providing firms on our exchanges have taken ownership positions in options exchanges that compete with us and such exchanges have given those firms added economic incentives to direct orders to them. With respect to our proprietary products, we compete with futures exchanges and swap execution facilities that offer similar products and other financial market participants that offer over- the- counter derivatives. We also compete against certain multi- listed options products, such as SPY options, which offer some of the features of our proprietary products, such as SPX options. To attract market share, we may offer "inverted" pricing specials or no- transaction fee trading from time to time, per various fee schedules across our equities exchanges. These forms of promotions, along with other supplemental liquidity programs, may adversely affect our profitability. Further, regulatory and legal developments, including the new equity market structure proposals , and the new Volume Based Proposal could also adversely impact , as applicable, our ability to adjust pricing to respond to actions by new or existing competitors , or may adversely impact the amount of liquidity providers can provide <mark>, our ability to offer members volume- based pricing</mark> . In <mark>Additionally, in</mark> the U. S., we are generally required to file with the SEC any changes to the fees that we charge and in recent years the SEC has more heavily scrutinized pricing changes. H-371f we are unable to compete successfully with respect to the pricing of our services and products, our business, financial condition and operating results may be materially and adversely affected. We could lose a substantial percentage of our share of trading if we are unable to price transactions in a competitive manner. Also, our profits could decline if competitive pressures or regulatory changes force us to reduce fees. 36A A significant portion of our operating revenues is generated by our transaction and clearing- based business. If the amount of trading volume on our markets or clearing volume decreases, or the product mix shifts to lower revenue products, our revenues from transaction and clearing fees will most likely decrease. In 2022 2023, approximately 68-71. 1-2 % of our revenues less cost of revenues were generated by our transaction and clearing-based business. This business is dependent on our ability to attract and maintain order flow, both in absolute terms and relative to other market centers. If the amount of trading volume on our Exchanges, Cboe Digital Exchange, CFE, BIDS Trading, NEO, and MATCHNow Choe Canada Inc., notional value traded on Choe FX, Choe SEF, Choe Europe Equities and Derivatives, Cboe Australia, and Cboe Japan or clearing volumes at Cboe Clear Europe or Cboe Clear Digital decrease, we are likely to see a decrease in fees. Our total trading or clearing volumes could decline if our market participants

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reduce their trading or clearing activity for any reason, such as: • heightened capital requirements; • transaction tax; •
regulatory or legislative actions; • reduced need to trade due to changes in volatility and / or passive investment trends; •
reduced access to capital required to fund trading activities; • consolidation among market participants; • suspensions of open
outcry trading; or • significant market disruptions. Over the past few years, a number of legislative actions have been taken,
both domestically and internationally, that may cause market participants to be subject to increased capital requirements and
additional compliance burdens. These actions, including MiFID II, MiFIR, and the new equity market structure proposals, may
incentivize trading away from our markets or cause market participants to reduce trading activity on or routing to our markets. In
addition, the transaction fees generated are different based on type of product and other factors, including the type of customer
and certain volume discounts. If the amount of our trading volume decreases, including as a result of the Volume Based
Proposal proposed prohibition on volume- based agency tiers, or the mix traded shifts to our lower revenue per contract
products, our revenues from transaction fees will most likely decrease. We can offer no assurance that we would be able to
reduce our costs to match the amount of any such decrease. Revenues from our market data fees and access and capacity fees
may be reduced due to declines in our market share, trading volumes or regulatory changes. The occurrence of any event that
reduces the amount of market data fees that we receive, whether as a result of fee reductions, fewer members subscribing to the
U. S. tape plans or other market data offerings , lack of new products, declines in market share, trading volumes, or notional
volumes, or regulatory changes may have a direct negative impact on our business, financial condition, and operating results.
For example, if our market share of U. S. listed equities and options or Cboe's European equities trading volume were to
decline, our share of market data fees could also decline. Moreover, market data fees could decline as a result of a reduction in
the number of market data users, for example because of consolidation among market data subscribers or due to a decline in
professional subscriptions as a result of staff reductions in the financial services industry or otherwise. Regulatory and legal
developments could also impact the fees we receive from market data and access and capacity, or our cost in providing such
services. In the U. S., we are generally required to file with the SEC any changes to the fees that we charge for our securities
market data products and access and capacity fees. In recent years, certain industry groups have objected to the ability of
exchanges to charge for certain market data products. In addition, the SEC and some media have scrutinized market data and
market access. As discussed above, the implementation of MDIR or the new equity market structure proposals could cause
Cboe's equities exchanges, BZX, BYX, EDGX, and EDGA, to require additional resources to comply with the new rules, and
may have a material impact on our business, financial condition, and 38and operating results, including if, for example, there
are lower SIP plan revenues or we must reduce the fees or access fee caps we charge. In addition, as discussed above, the SEC
approved a Consolidated Data Plan to replace the three equity data plans that govern the dissemination of real-time,
consolidated market data for NMS stocks. While the Consolidated Data Plan order must be resubmitted by SEC, the plan may
have a negative impact on the applicable market data revenues that we receive that are generated from such new plan. 37We We
believe Cboe Europe Equities and Derivatives currently offers market data to customers on a non-discriminatory basis at a
reasonable cost. As European regulators determine how market data should be disaggregated and what is a reasonable
commercial basis for providing market data, it could affect our ability to offer market data products in the same manner that we
do today thereby causing an adverse effect on our European market data revenues. While MiFID II and MiFIR aim to encourage
a commercial solution to a consolidated tape in Europe, should this fail to materialize, policy makers might be encouraged to
implement a mandatory solution that could impact our ability to develop our own commercial offering. As discussed above, the
E. C. published provisions for a consolidated tape for the EU, which is expected to be implemented in late 2023-2026 or early
2024. As proposed, these provisions may have a material impact on our business, financial condition and operating results if,
for example, we must reduce the fees we charge for market data. The technology upon which we rely, including that of our
service providers, may be <del>vulnerable <mark>susceptible</mark> t</del>o security <del>vulnerabililities</del> -- <mark>vulnerabilities</mark> or breaches that could harm our
business and our role in the global marketplace puts us at heightened risk relative to other public companies. The secure and
reliable operation of our technology, including our computer systems and communications networks, and those of our service
providers, market participants, investments, and other third -parties, is a critical element of our operations or our business,
financial condition or operating results. These systems and networks may be subject to various cybersecurity incidents -such
as improper or inadvertent access to or disclosure of confidential, commercially sensitive, or personally identifiable information,
data theft, corruption or destruction , eyber- attack, ransomware, supply chain attack, denial of service attack, malware and
other security problems, as well as acts of terrorism, attacks by threat actors including criminal groups, political activist groups
and nation- state actors, attacks in connection with geopolitical activity such as the war between Russia conflicts in Eastern
Europe and the Middle East Ukraine, natural disasters, human error, criminal insider activity, employee error, power loss,
service provider, market participant or third- party disruptions or security breaches and other events that are beyond our control.
Additionally, cyber threats and the techniques used in cyberattacks change, develop and evolve rapidly, including from
emerging technologies, such as advanced forms of artificial intelligence ("AI") and quantum computing. Our increased
adoption of remote working, usage of mobile and cloud- based technologies and amount of newly acquired companies and
related integrations may increase our risk for a cybersecurity incident. Moreover, given our position in the global financial
services industry and as critical infrastructure, we may be more likely than other companies to be a direct target, or an indirect
casualty, of such events. While we have experienced in the past, and we expect to continue to experience, cybersecurity threats
and events of varying degrees, we are not aware of any of these threats or events having a material impact on our business,
financial condition or operating results to date, however we cannot assure you that we will not experience future threats or
events that may be material. We eurrently maintain policies, procedures and controls designed to safeguard reasonably protect
the confidentiality, integrity, availability and reliability of our systems, networks and information more broadly, and to guard
against cybersecurity incidents and unauthorized access by protecting the confidentiality, integrity, availability and
reliability of our systems, networks and information. These policies, procedures and controls are subject to periodic
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monitoring, auditing, and evaluation practices, pursuant to our enterprise Enterprise risk Risk management Management
program, which is supported by a three lines of defense approach, and our other governance practices. Further, we developed
and maintain cybersecurity and data privacy training programs for our employees and our third- party consultants who have
access to our systems , which include. We also conduct simulations, tabletop exercises, and response readiness tests -and
engage Independent independent third - party parties on a routine basis to perform cybersecurity penetration assessments are
also routinely performed. Collectively, these safeguards and measures or those of our third- party providers, including any
cloud technologies, may prove inadequate to prevent the attendant risk posed by cybersecurity incidents, subjecting us to
contractual restrictions, liability and damages, loss of business, penalties, unfavorable publicity, and increased scrutiny by our
regulators, and materially impacting our business, financial condition and operating results. We may be required to expend
significant resources in the event of any real or threatened breaches in security or system failures, including to protect against
threatened breaches, to alleviate harm caused by an actual breach, and to address any reputational harm or litigation or
regulatory liability. Despite our cybersecurity measures, it is possible for security vulnerabilities or breaches to may remain
undetected for an extended period of time. As a result of our ongoing risk management and related assurance activities, we
have identified, addressed, and continue to address potential security vulnerabilities and / or internal control weaknesses.
We are not aware of any of these vulnerabilities having a material impact on our business, financial condition or
operating results to date. However, we cannot provide assurance that any future vulnerabilities, internal control
weaknesses, or events that 39may be experienced will not be material. Such harms also could cause us to lose market
participants, experience lower trading volume, and negatively impact our competitive advantage and business, financial
condition and operating results. Additionally, as threats continue to evolve and increase, as we continue to expand ongoing
risk management and related assurance activities, and as the domestic and international regulatory environment related to
information cyber security, and data protection collection and use, and privacy becomes increasingly rigorous, we may be
required to devote significant additional resources to modify and enhance our security controls and to identify and remediate any
security vulnerabilities , which , Those additional resources could have an adverse effect on our business, financial condition
and operating results. If we fail to attract or retain highly skilled management and other employees our business may be harmed.
Our success largely depends on the skills, experience and continued efforts of management and other key personnel. As a result,
to be successful, we must retain and motivate executives and other key employees. However, we have no assurances that these
employees will remain with us. The roles and responsibilities of departing executive 38officers -- officers and employees will
need to be filled either by existing or new officers and employees, which may require us to devote time and resources to
identifying, hiring and integrating replacements for the departed executives and employees that could otherwise be used to
pursue business opportunities, which could have a material adverse effect on our overall business, financial condition and
operating results. There is substantial competition for qualified and capable personnel, particularly in the technology space,
which may make it difficult for us to retain and recruit qualified employees in sufficient numbers. This competition has
continued due to employee resignations, tighter supply of available labor, and compensation inflation, as well as the growth of
new asset classes such as the digital asset space. We have previously faced and may in the future face increased challenges in
retaining and attracting qualified employees. If we fail to retain our current employees, it would be difficult and costly to
identify, recruit and train replacements needed to continue to conduct and expand our business. In particular, failure to retain and
attract qualified technology personnel could result in systems failures. Consequently, our reputation may be harmed, we may
incur additional costs and our profitability could decline. There can be no assurance that we will be able to retain and motivate
our employees in the same manner as we have historically done. Additionally, effective succession planning is also important to
our long- term success. For example, on September 18, 2023, Edward T. Tilly, former Chief Executive Officer of the
Company, resigned and voluntarily terminated his employment with the Company, Following Mr. Tilly's resignation,
Fredric J. Tomczyk, an existing director of the Company, was appointed as Chief Executive Officer of the Company,
effective as of September 18, 2023. Further, on July 6, 2023, Brian N. Schell, former Executive Vice President, Chief
Financial Officer and Treasurer, announced his departure from the Company to pursue a new professional opportunity
outside of the exchange industry. Jill M. Griebenow, Senior Vice President, Chief Accounting Officer, was appointed to
serve as Executive Vice President, Chief Financial Officer, Treasurer and Chief Accounting Officer effective July 10,
2023, and currently serves as Executive Vice President, Chief Financial Officer. Additionally, on October 12, 2023,
Catherine R. Clay was appointed to serve as Executive Vice President, Global Head of Derivatives and Adam Inzirillo
was appointed to serve as Executive Vice president, Global Head of Data and Access Solutions. Failure to ensure effective
transfer of knowledge and smooth transitions involving our management team and key employees, including the recent
leadership transitions, could hinder our strategic planning and execution. Intense competition could materially adversely affect
our market share and financial performance. The market for trade execution services, clearing and products is intensely
competitive in the asset classes and geographies in which we operate. Increased competition may result in a decline in our share
of trading activity and a decline in our revenues from transaction and clearing fees and market data fees, thereby materially
adversely affecting our operating results. We compete with a number of entities on several different fronts, including the cost,
quality and speed of our trade execution, functionality and ease of use of our trading and clearing platforms, range of our
products and services, our technological innovation and adaptation and our reputation. In particular, we have seen increased
competition from off- exchange venues, which have increased their share of trading activity. See "Business - Competition" for
more information. Some of our competitors and potential competitors have greater financial, marketing, technological, personnel
and other resources than we do. These factors may enable them to develop similar or more innovative products, to offer lower
transaction and clearing fees or better execution to their customers or to execute their business strategies more quickly or
efficiently than we can. In addition, our business, financial condition and operating results may be materially adversely affected
if we cannot successfully develop, introduce and / or market new services and products or if we need to adopt costly and
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customized technology for our services and products. Furthermore 40Furthermore, new or existing competitors may: • respond more quickly to competitive pressures; • develop products that compete with our products or are preferred by our customers; • offer products and services at prices below ours to gain market share and to promote other businesses; • develop and expand their technology and service offerings more efficiently; • provide better, more user-friendly and more reliable technology; • develop and incorporate more quickly new technologies, such as AI, machine learning, blockchain, distributed ledger technology, quantum computing, tokenization, the cloud, and other emerging technologies; • take greater advantage of acquisitions, alliances and other opportunities; • market, promote, bundle and sell their products and services more effectively; • leverage existing relationships with customers and alliance partners more effectively or exploit brand names to market and sell their services; and • exploit regulatory disparities between traditional, regulated exchanges and alternative markets, including over- the- counter markets, that benefit from a reduced regulatory burden and lower- cost business model. If our products, markets, services and technology are not competitive or we fail to anticipate or respond adequately to changes in technology, customer preferences and regulatory requirements or we encounter any significant delays in product development efforts our business, financial condition and operating results could be materially harmed. 39We We depend on third-party service providers for certain services that are important to our business. An interruption, significant increase in fees or cessation or impairment of such service by any third party could have a material adverse effect on our business, financial condition and operating results. We depend on a number of service providers, including clearing organizations such as OCC, NSCC, DTC, CDS, LCH, Cboe Clear Europe, and Cboe Clear Digital, our wholly- owned subsidiaries, JSCC, ASX Clear Pty Ltd, and SIX x-clear; securities information processors such as the CTA, UTP Securities Information Processor and OPRA; regulatory and other service providers such as FINRA and OCC; the hosts of our data and disaster recovery centers; and various vendors of communications and networking products and services. In addition, we also depend on third party routing and clearing firms that are involved in processing transactions on our behalf. More specifically: • If OCC, NSCC, DTC, CDS, LCH, Cboe Clear Europe, Cboe Clear Digital, JSCC, ASX Clear Pty Ltd, and SIX x- clear were unable to perform clearing services for existing or new products, or their clearing members were unable or unwilling to clear through them, transactions could likely not occur on our markets or there may be delays, including until clearing is moved to another clearing agency. In 2022 2023, approximately 60-69. 7-2 % of our net transaction and clearing fees were generated by options and futures that were cleared through OCC. • OPRA, UTP Securities Information Processor and the CTA consolidate options and equities market information, respectively, such as last sale reports and quotations. If any of them were unable to provide this information for a sustained period of time, we may be unable to offer trading on our options and equities markets. • We are heavily dependent on technology for our markets, including third- party operation of production and disaster recovery data centers, as well as certain communications and networking products and services. If this technology is unavailable, as a result of a number of potential causes, including technical failure, natural disasters, extreme weather events, fraud or security attacks that we cannot predict or prevent, and cannot be replaced in a sufficiently short time period, we may be unable to operate our markets. • We utilize a third- party cloud service provider to maintain secondary offsite backups of our and our customers' data and to distribute realtime data, and we may utilize third- party cloud service providers in the future for additional services. We do not control the operations of third- party cloud service providers or their facilities and may be vulnerable to disruptions in our access to the platform as a result of a number of potential causes, including technical failure, natural disasters, extreme weather events, fraud or security attacks that we cannot predict or prevent. Additionally, any vulnerability of third- party cloud service providers could expose our or our customers' confidential data, which could result in harm to our business reputation. • FINRA and OCC provide certain regulatory services and functions for our options, equities and futures exchanges, while we retain regulatory responsibilities for such services. If FINRA or OCC stopped providing services, or provided inadequate services, we may be subject to action by the SEC or CFTC, or may have limitations placed upon our markets. • We rely on FINRA CAT LLC, a subsidiary of FINRA, to provide services for the implementation of the CAT, If FINRA CAT LLC or its third-party service providers stop providing services or provide inadequate services, we and the other SROs may not be able to recover costs related to the implementation of CAT, incur penalties for delays of implementation, incur related litigation and other expenses, or incur regulatory liability including enforcement 41enforcement action by the SEC or limitations placed upon our markets. In addition, until the SEC approves a funding model that shares the cost of the CAT between the SROs and industry members is implemented, the SROs may continue to incur additional significant costs, or result in not being able to collect on the promissory notes related to the funding of the implementation and operation of the CAT. See Note 8 ("Credit Losses") and Note 9 ("Other Assets, Net") for further information. • We rely on third party routing and clearing firms to clear trades in U. S. listed equity securities routed by us to other markets, and to execute trades in options that we route to other markets. With respect to options, all contracts traded on our exchanges must be cleared through clearing members of OCC. At December 31, 2022-2023, there were 418-117 TPHs that are clearing members of OCC. Two Three clearing members accounted for approximately 61-79. 3-6 % of transaction and other fees collected through OCC in 2022-2023. The next largest clearing member accounted for approximately 18.2 % of transaction and other fees collected through OCC. Additionally, the three largest clearing members clear the majority of the market- maker sides of transactions at Cboe Options, C2, BZX, EDGX and at all of the options exchanges. Should one of these clearing members or liquidity providers exit the business or withdraw from our options exchanges, impose additional market- maker financial requirements or if market- makers were unable to transfer to another clearing member or other liquidity providers were unable to provide additional liquidity, this could create a significant disruption to the options markets, including ours. We cannot provide assurance that any of these providers will be able to continue to provide these services in an efficient manner or that they will be able to adequately expand their services to meet our needs. An interruption or 40malfunction -- malfunction in or the cessation or impairment of an important service by a third party or disruption of a third party's operations could cause us to halt trading in some or all of our products or our services, make us unable to conduct other aspects of our business, cause us to experience the loss of a significant number of market

participants or cause us to experience a significant reduction in trading activity on our options and futures markets, each of which could have a material adverse effect on our business, financial condition and operating results. In addition, our inability to make alternative arrangements, such as moving clearing to another clearing agency, in a timely manner, or at all, could have a material adverse impact on our business, financial condition and operating results. If an index provider from which we have a license or a service provider with respect to proprietary products fails to maintain the quality and integrity of their indices or fails to perform under our agreements with them, if we fail to maintain the quality and integrity of our proprietary indices or indices and other values that we calculate as an index provider, or if customer preferences change, the revenues that are generated from the trading of proprietary products or the calculation and dissemination of index values may suffer. We are a party to a number of license agreements that permit us to list tradeable products related to various indices that are among the most actively traded products on our exchanges. We also enter into agreements pursuant to which we act as an index provider and calculate and disseminate proprietary indices and other values. We believe that demand for our products is based in part on market perception of the quality and integrity of these indices. The quality and integrity of these indices are dependent on the ability of index providers, including us, to maintain the index. Maintenance includes ongoing index calculation, index rebalancing and dependance on index providers for a number of things, including the provision of index data. We also rely on index providers to enforce intellectual property rights against unlicensed uses of the indices and uses of the indices that infringe on our licenses. Some of our agreements concerning our proprietary products obligate the parties to those agreements to provide important services to us. If any of our index providers, including us, are unable to maintain the quality and integrity of indices, or if any of the index providers or service providers, including us, fail to perform their obligations under the agreements, trading in these products, and therefore transaction fees we receive, may be materially adversely affected or we may not receive the financial benefits of the agreements that we negotiated. Differences in the calculations from methodologies described in published materials or incorrect calculations of spot VIX Index values or our our other spot volatility indices, including those instances that we announced on July 30, 2021, or the failure to implement any planned remedial changes may result in the loss of perceived quality and integrity of our indices, loss of demand for our products, increased potential for investigations and enforcement proceedings, increased potential for failure to perform our obligations under agreements concerning our products or in our capacity as an index provider, and increased exposure to third party claims and related litigation expenses, which could have a material adverse effect on our business, financial condition and operating results. 42We may not effectively manage our growth, which could materially harm our business, financial condition and operating results. We expect that our business will continue to grow, which may place a significant strain on our management, personnel, systems and resources. We must continually improve our operational, billing, financial and regulatory systems and managerial controls and procedures, and may need to continue to expand, train and manage our workforce. We must also maintain close coordination among our technology, legal, accounting, finance, marketing, sales, regulatory and compliance functions. If we fail to manage our growth selectively effectively explore acquisition opportunities, our business, financial condition and operating results could be materially harmed. For example, from time to time we discover and remediate billing errors, however, we are not aware of any of these errors having a material impact on our business, financial condition or operating results to date, however we cannot assure you that we will not experience future errors or events that may be material or result in additional regulatory scrutiny. Furthermore, failure to successfully expand into new asset classes, such as the digital asset space or U. S. Treasuries, or new geographies may materially adversely affect our growth strategic strategy alliances relating and our future profitability. Our continued growth will require increased investment by us in technology, facilities, personnel, and financial and management systems and controls. It also will require expansion of our procedures for monitoring and assuring our compliance with applicable regulations, and we will need to other integrate, train and manage a growing employee base. The expansion of our existing businesses, products any expansion into new businesses and the resulting growth of or our technologies employee base will increase our need for internal audit and monitoring processes, which may be more extensive and broader in scope than those we have historically required. We may not be successful in integrating identifying or implementing all of other--- the businesses processes that are necessary. Further, products unless or our technologies growth results in an increase in our revenues that is proportionally greater than or equal to the increase in our costs associated with this growth, our business, financial condition and operating . Any such transaction also may not produce the results may be we anticipate, which could materially adversely affect affected our business, financial condition and operating...... Consummation of Cboe Digital Acquisition "below". Our global operations are complex and subject us to increased business and economic risks that could adversely affect our financial results. In addition to our operations in the U.S., we have operations in the UK, continental Europe, Canada, Hong Kong, Australia, Japan, Philippines, and Singapore. In connection with our expanded global operations, we face certain risks inherent in doing business globally. These risks include: • fluctuations in currency exchange rates; • complying with extensive and complex compliance requirements, regulations and oversight by regulators other than our primary functional regulators; ● difficulties in staffing and associated costs in managing multiple international locations; ● general economic, social, and political conditions, including the conflicts in Eastern Europe and the Middle East; • protectionist laws and business practices that favor local businesses in some countries; • reduced protection for intellectual property rights in some countries; • different technology platforms; • language and cultural differences; • potentially adverse tax consequence; and • natural disasters and extreme weather events that may impact global operations differently. If we are unable to manage the complexity of our global operations successfully, or if the risks above become substantial for us, our financial performance and operating results could suffer. Further, any measures we may implement to reduce risks of our global operations may not be effective, may increase our expenses and may require significant management time and effort. More specifically, we have exposure to exchange rate movements between the British pound, the Euro, the Canadian dollar, the Hong Kong dollar, the Australian dollar, the Japanese Yen, the Philippine Peso, and the Singapore dollar against the U. S. dollar. Significant inflation

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or changes in foreign exchange rates with respect to one or more of these currencies could occur as a result of general economic
or political conditions, acts of war or terrorism, changes in governmental monetary or tax policy, or changes in local interest
rates. These exchange rate differences would affect the translation of our non- U. S. results of operations and financial condition
into U. S. dollars as part of our consolidated financial statements. See Note 16 ("Segment Reporting") for additional
information about the Company's geographic exposure. We-43We and our licensors may not be able to protect our respective
intellectual property rights. We rely on patent, trade secret, copyright and trademark laws, the law of the doctrine of
misappropriation and contractual provisions to protect our proprietary technology, proprietary products, index methodologies
and other proprietary rights. In addition, we rely on the intellectual property rights of our licensors in connection with our listing
of exclusively-licensed index options and futures products. We and our licensors may not be able to prevent third parties from
copying, or otherwise obtaining and using, our intellectual property without authorization, listing our proprietary or exclusively-
licensed index products without licenses or otherwise infringing on our rights. We and our licensors may have to rely on
litigation to enforce our intellectual property rights, determine the validity and scope of the proprietary rights of others or defend
against claims of infringement or invalidity. We and our licensors may not be successful in this regard. 42Such -- Such
litigation, whether successful or unsuccessful, could result in substantial costs to us, diversion of our resources or a reduction in
our revenues, any of which could materially adversely affect our business. Our clearinghouse operations expose us to associated
risks, including credit, liquidity, market and other risks related to the defaults of clearing participants and other counterparties.
and risks related to investing of collateral. We are subject to risks related to operating our clearinghouse, Cboe Clear Europe,
including the risks of failing to meet strict business continuity requirements and regulatory oversight, risks of default by clearing
participants and counterparties, due to bankruptcy, lack of liquidity, operational failure or other reasons, and the risks associated
with the adequacy of participants' margin <del>and,</del> default and interoperable funds, and risks related to investing of such funds.
These risks could subject our business to substantial losses, reputational harm, regulatory consequences, including litigation,
fines and enforcement actions, and the inability to operate our business, including the continued development of the European
derivatives buildout. See below for additional risks related to our digital asset clearinghouse, Cboe Clear Digital. To mitigate the
credit risks related to defaults of clearing participants and other counterparties, including the market risk that we would only be
able to close out a defaulting participant's positions at a loss, there are minimum participation criteria to become a clearing
participant and clearing participants are required to provide collateral to cover the margin requirement and default fund
contributions. Furthermore, Choe Clear Europe interoperates with two central counterparties and requires its applicable
participants to make deposits to an interoperable fund, which are pledged to the interoperable central counterparties. No
guarantee can be given that the collateral provided will at all times be sufficient, maintain its value, or provide absolute
assurance against us experiencing financial losses from defaults by the participants or counterparties on their obligations. In
addition, although such collateral is preferably held in European central banks, Cboe Clear Europe also holds collateral in central
securities depositories and commercial banks, which can expose us to risk of default by those institutions. In addition, and
invests cash collateral in accordance with its investment policy, such as in securities issued by pre- approved sovereign
issuers and reverse repurchase agreements with overnight maturities, which expose us to risk of counterparty default
which may result in losses and cause its clearing participants to lose confidence in our clearinghouse. Cboe Clear Europe
entered into a € 1. 25 billion committed syndicated multicurrency revolving and swingline credit facility that is available to be
drawn by Cboe Clear Europe towards (a) financing unsettled amounts in connection with the settlement of transactions in
securities and other items processed through Cboe Clear Europe's clearing system and (b) financing any other liability or
liquidity requirement of Cboe Clear Europe incurred in the operation of its clearing system, however we can give no assurance
that this facility will be sufficient to meet all such obligations or sufficiently mitigate Cboe Clear Europe's liquidity risk to meet
its payment obligations when due. Substantial amounts of the collateral, and any amounts drawn under this facility, may be at
risk if a clearing participant defaults on its obligations to our clearinghouse and its margin and, default and interoperability
fund deposits are insufficient to meet its obligations. This facility is expected to terminate on June 29-28, 2023 2024 and we
may not be able to enter into a replacement facility on commercially reasonable terms, or at all. Additionally, investment losses
in excess of capital set aside by Cboe Clear Europe for counterparty risk are allocated back to clearing participants. We
cannot assure you that the mitigating measures, policies, safeguards and risk management procedures will be sufficient to detect
problems or to protect us from a default or that we will not be materially and adversely affected in the event of a significant
default. Computer and communications systems failures and capacity constraints could harm our reputation and our business.
Our business depends on the integrity and performance of our computer and communications systems. If our systems cannot
expand to cope with increased demand or otherwise fail to perform, as a result of a number of potential causes, including
technical failure, natural disasters, extreme weather events, flooding, fraud or security attacks that we cannot predict or prevent,
and cannot be replaced in a sufficiently short time period, we could experience unanticipated disruptions 44disruptions in
service, slower response times and delays in the introduction of new products and services. These consequences could result in
trading outages, lower trading and clearing volumes, financial losses, decreased customer service and satisfaction and regulatory
sanctions and could have a material adverse effect on our ability to conduct our business. Although we have a back- up plan
with respect to our significant trading and key corporate systems, the back- up systems or disaster recovery plans may prove to
be inadequate in the event of a systems failure or cyber-security breach. Despite having disaster recovery facilities, there can be
no guarantees that we will be able to open an efficient, transparent and liquid marketplace, if we can open at all, following a
systems failure. Moreover, with extended trading hours, we have to operate our systems longer and have fewer non-trading
hours to address any potential concerns with the systems on which we rely. Our markets and clearinghouses have experienced
occasional systems failures and delays in the past and in the future our systems may fail, in whole or in part, or may operate
slowly, causing one or more of the following: • unanticipated disruption in trading of our exclusively listed proprietary
products or in service to our participants; • failures or delays during peak trading times or times of unusual market volatility; •
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slower response times and delays in trade execution, clearing and processing; • incomplete or inaccurate accounting, recording, clearing or processing of trades; and • distribution of inaccurate or untimely market data to participants who rely on this data in their trading activity. 43Any -- Any of these events may cause: • a loss in transaction, clearing or other fees due to the inability to provide trading in our exclusively listed proprietary products or provide services for a time; • requests by market participants or others that we reimburse them for financial loss, either within the constraints of the limited liability provisions of our exchanges' rules or in excess of those amounts; • trading and clearing volumes to diminish on our markets and clearinghouse due to dissatisfaction with the platforms; and • one or more of our regulators to investigate or take enforcement action against us. As a consequence of any of these events, our business, financial condition and results of operations could suffer materially. In addition to other measures, we test our systems to confirm whether they will be able to handle anticipated present and future peak trading and clearing activity or times of unusual market volatility. However, we cannot assure you that our estimates of future trading or clearing volume will be accurate or that our systems will always be able to accommodate actual trading or clearing volume without failure or degradation of performance. We anticipate that we will need to continue to make significant investments in hardware, software and telecommunications infrastructure to accommodate the increases in traffic, technology migrations, and system updates. Additionally, disruptions to the supply chain may interfere with the ability of our employees, vendors, technology equipment suppliers, data and disaster recovery centers, and other service providers to provide the requested hardware, software, and telecommunications infrastructure. If we cannot migrate, update, or increase the capacity and capabilities of our systems to accommodate increased trading or clearing activity and to execute our business strategy, our ability to maintain or expand our businesses would be materially adversely affected. Our use of open source software code may subject our software to general release or require us to re-engineer our software, which could harm our business. Our technology platform uses open source software code. Companies that incorporate open source software into their products have, from time to time, faced claims challenging the ownership of open source software. As a result, we could be subject to suits by parties claiming ownership of what we believe to be open source software. In addition, some open source software licenses require users who distribute open source software as part of their software to publicly disclose all or part of the source code in their software and make any derivative works of the open source code available on unfavorable terms or at no cost. Open source license terms may be ambiguous, and many of the risks associated with usage of open source software cannot be eliminated. We believe that our use of open source software is in compliance with the relevant open source software licenses and does not require disclosure of any of our source code. However, if we were found to have inappropriately used open source software, we may be required to release our proprietary source code, re- engineer or discontinue use of our software or take other remedial action any or all of which could cause disruptions in, or impose significant costs on, our business. Damage 45Damage to our reputation could have a material adverse effect on our business, financial condition and operating results. We believe one of our competitive strengths is our strong industry reputation. Various issues may give rise to reputational risk, including issues relating to: • the representation of our business in the media; • the quality and benefits of using our proprietary products, including the reliability, integrity and functionality of our transaction- based business and index calculations and the accuracy of our market data; • the ability to execute our business plan, key initiatives or new business ventures and the ability to keep up with changing customer demands and regulatory initiatives; • our regulatory compliance and our enforcement of compliance on our customers; • the accuracy of our customer billing, financial statements, and other financial and statistical information; • the quality of our corporate governance structure; • the quality of our disclosure controls and internal controls over financial reporting, including any failures in supervision; • the integrity and performance of our computer and communications systems; • the ability to successfully complete technology migrations; 44 • the failure to successfully expand into new asset classes, such as the digital asset space or U. S. Treasuries, or new geographies; • security breaches, including any unauthorized delivery of proprietary data to third parties; • management of our outsourcing relationships, including our relationship with FINRA and NFA: • any misconduct or fraudulent activity by our employees, especially senior management, or other persons formerly or currently associated with us; ● our listings business and our enforcement of our listing rules; and ● any negative publicity surrounding the ETPs that we serve as the listing destination. Damage to our reputation could cause a reduction in the trading volume of our proprietary products or on our markets or cause us to lose customers. This, in turn, may have a material adverse effect on our business, financial condition and operating results. Financial or other problems experienced by third parties could have an adverse effect on our business. We are exposed to credit risk from third parties, including customers, clearing agents and counterparties. For example, we are exposed to credit risk for transaction fees we bill to customers on a monthly basis in arrears. Our customers and other third parties may default on their obligations to us due to a lack of liquidity, operational failure, bankruptcy or other reasons. For additional credit risks related to our clearinghouse operations, see the Risk Factor "Our clearinghouse operations expose us to associated risks, including credit, liquidity, market and other risks related to the defaults of clearing participants and other counterparties -and risks related to investing of collateral". In addition, with respect to orders Cboe Trading routes to other markets for execution on behalf of our customers, Cboe Trading is exposed to counterparty credit risk in the case of failure to perform on the part of our routing and clearing firms that are involved in processing equities and options transactions on our behalf, as well as failure on the part of such brokers to pass back any transactional rebates. Wedbush and Morgan Stanley guarantee equity trades until one day after the trade date, after which time NSCC provides a guarantee. Thus, Cboe Trading is potentially exposed to credit risk to the counterparty to an equity trade routed to another market center between the trade date and one day after the trade date in the event that Wedbush or Morgan Stanley fails to perform. Additionally, BIDS Trading has counterparty credit risk exposure to BOA related to clearing until the day following the trade date, after which time NSCC provides a guarantee. With respect to U. S. listed equity options and futures, we deliver matched trades of our customers to the OCC, which acts as a central counterparty on all transactions occurring on Cboe Options, C2, BZX, EDGX, and CFE and, as such, guarantees clearance and settlement of all of our matched options and futures trades. With respect to Canadian equities, we deliver reports of matched trades of our customers to CDS, which acts as a central

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counterparty on all transactions occurring on MATCHNow and NEO Choe Canada Inc. and, as such, guarantees clearance and
settlement of all of our matched Canadian equities trades . With respect to trades in options and futures occurring on Cboe
Europe Derivatives, Choe Clear Europe acts as a central counterparty that, for its clearing participants, becomes the
buyer to every seller and the seller to every buyer. As a result, Cboe Clear Europe guarantees the timely performance of
the settlement obligations of buyers and sellers and takes on the risk of the performance of the transactions that it clears
. With respect to Australian equities and derivatives, we deliver matched trades of our customers to ASX Clear Pty Ltd and ASX
Settlement Pty Ltd. ASX Clear Pty Ltd acts as a central counterparty on all transactions occurring on Cboe Australia and, as
such, guarantees clearance and <del>settlement 46settlement</del> on all of our matched trades in Australia. With respect to Japanese
equities, we deliver matched trades of our customers to the JSCC, which acts as a central counterparty on all transactions
occurring on Cboe Japan and, as such, guarantees clearance and settlement on all of our matched trades in Japan, With respect to
trades in digital assets occurring on Cboe Digital Exchange, we deliver matched trades of our customers to Cboe Clear
Digital, which acts as a central counterparty on all transactions occurring on Cboe Digital Exchange and, as such,
guarantees clearance and settlement of all of those matched spot and futures trades. With respect to routed U. S. equity
transactions, Cboe Trading has counterparty credit risk exposure to Wedbush and Morgan Stanley related to clearing until the
day following the trade date. Cboe Trading uses Wedbush to clear trades routed through affiliates of Bank of America
Corporation Credit Suisse Securities (USA) LLC as well as for trades routed directly to other exchanges and optionally dark
pools. Morgan Stanley clears trades routed through the Morgan Stanley routing brokers and also clears executions routed to
most dark pools. Choe Trading maintains counterparty credit risk exposure from routing brokers with respect to rebates earned
until completion of the routing brokers next invoice cycle following the execution. With respect to U. S. listed equity and
exchange traded product options, Cboe Trading is subject to counterparty credit risk exposure with respect to rebates earned
from routing brokers until completion of the routing brokers' next invoice cycle following the execution. Our exposure to credit
risk may be further impacted by volatile securities markets that may affect the ability of our customers, counterparties and other
third parties to satisfy their obligations to us. Moreover, we may not be successful in managing our credit risk through mitigating
measures, policies, safeguards and risk management procedures, reporting and control procedures or by maintaining credit
standards. Any losses arising from such defaults or other credit losses could materially adversely affect our financial condition
and operating results. 45While -- While neither Cboe FX nor Cboe SEF has direct counterparty risk, Cboe FX or Cboe SEF may
suffer a decrease in transaction volume if a bank or prime broker experiences an event that causes other prime brokers to
decrease or revoke the credit available to the prime broker experiencing the event. Therefore, Cboe FX and Cboe SEF may have
risk that is related to the credit of the banks and prime brokers that trade spot FX on the Cboe FX platform, or NDFs on Cboe
SEF. We may be required to assume ownership of a position in securities in connection with our order routing service, which
could subject us to trading losses when our broker-dealer disposes of that position. We offer a smart- order routing service
through our broker- dealer subsidiary, Cboe Trading, which provides its customers with access to other market centers when we
route their orders to those market centers for execution. In connection with this service, we may assume ownership of a position
in securities. This may occur, for example, when a market center to which we have routed a customer's order experiences
systemic issues and is unable to determine the status of that order. When this happens, we may make a business decision to
provide a cancellation notice to our customer, relieving our customer of any liability with respect to the order. We may be
informed later, however, that the order was executed at the market center to which we routed it, in which case Cboe Trading
would be required to take ownership of that securities position. Our third party clearing brokers maintain error accounts on
behalf of Cboe Trading into which such positions settle, and we require the respective clearing broker to trade out of those
positions as expeditiously as possible, which could result in our incurring trading losses. We selectively explore acquisition
opportunities and strategic alliances relating to other businesses, products or technologies. We may not effectively manage
be successful in integrating other businesses, products our or growth technologies with our business. Any such
transaction also may not produce the results we anticipate, which could materially harm adversely affect our business,
financial condition and operating results. We <del>expect that selectively explore and pursue acquisition and other opportunities</del>
to strengthen our business and will continue to grow our Company. We may enter into business combination transactions,
make acquisitions or enter into strategic partnerships, joint ventures or alliances, any of which may be place a significant
strain on our management, personnel, systems and resources. We must continually improve our operational, billing, financial
and regulatory systems and managerial material controls and procedures, and may need to continue to expand, train and
manage our workforce. The We must also maintain close coordination among our technology, legal, accounting, finance,
marketing--- market for acquisition targets, sales, regulatory and compliance functions strategic alliances is highly
competitive, which could make it more difficult to find appropriate merger or acquisition opportunities. If we fail are
required to highly competitive, which could make it more difficult to find appropriate merger or acquisition opportunities. If we
are required to-raise capital by incurring debt or issuing additional equity for any reason in connection with a strategic
acquisition or investment, financing may not be available or the terms of such financing may not be favorable to us and our
stockholders, whose interests may be diluted by the issuance of additional stock. For example, in 2022 we completed our
acquisitions of Cboe Digital, an operator of a U.S. based digital asset spot market, a regulated futures exchange and a regulated
clearinghouse, and NEO Acquitas Innovations Inc. and Neo Exchange Inc., a which at the time were recognized Canadian
securities exchange exchanges. In 2021 we purchased Cboe Asia Pacific, a holding 47holding company of alternative market
operators in Australia and Japan, and in 2020, we purchased Hanweck and the assets of FT Options, which are providers of risk
analytics market data, the assets of Trade Alert, a real-time alerts and order flow analysis service provider, Cboe Clear Europe, an
operator of a European clearinghouse, and MATCHNow TriAct Canada Marketplace LP, which at the time was an operator
of an equities ATS in Canada called MATCHNow. At the end of 2020, we also purchased BIDS Trading, a registered broker-
dealer and operator of the BIDS ATS in the U.S., which is not a registered national securities exchange or a facility thereof. Cboe
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maintains the BIDS ATS as an independently manage managed and operated trading venue, separate from and not
integrated with the Exchanges. The process of integration, including in new geographies and asset classes with new
regulatory regimes, may expose us to a number of unforeseen risks and operating difficulties, including risks relating to
information technology migrations, integrations and security, regulatory issues, and other issues, and may divert the
attention of management from the ongoing operation of our business and harm our reputation. We may not successfully
achieve the integration objectives, and we may not realize the anticipated cost savings, revenue growth effectively and
synergies in full or at all, or it may take longer to realize them than expected, any of which could negatively impact our
business, financial condition and operating results. Further, the success of acquisitions, integrations, and future operations
may also depend in part on our ability to retain following acquisitions key employees of acquired companies or find
suitable candidates to replace such key employees who leave. If we are unable to retain such key employees, including
management, we could be materially harmed. Furthermore face disruptions in our operations, integrations failure to
successfully expand into new asset classes, such as the loss of customers, loss of key information, expertise or know-how,
and unanticipated additional recruitment costs. For additional risks related to our Cboe digital Digital acquisition asset
space or U. S. Treasuries, see the Risk Factors Section entitled "Risks Relating to or new geographics may materially
adversely affect our growth strategy and our future profitability. Our Cboe Digital continued growth will require increased
investment by us in technology, facilities, personnel, and financial and management systems and controls. It also will require
expansion of our procedures for monitoring and assuring our compliance with applicable regulations, and we will need to
integrate, train and manage a growing employee base. The expansion of our existing businesses, any expansion into new
businesses and the resulting growth of our employee base will increase our need for internal audit and monitoring processes,
which may be more extensive and broader in scope than those we have historically required. We may not be successful in
identifying or implementing all of the processes that are necessary. Further, unless our growth results in an increase in our
revenues that is proportionally greater than or equal to the increase in our costs associated with this growth, our business
Business" below, financial condition and operating results may be materially adversely affected. A pandemic, such as the
COVID- 19 pandemic, and its effects may have significant impacts on economies around the world. Impacts of a pandemic
could also have a material adverse effect on our business, financial condition, operating results and cash flows. A pandemic,
such as the COVID- 19 pandemic, may have significant impacts on economies around the world. Governments, public
institutions, and other organizations around the world may take or reimpose previous, emergency measures to combat a potential
pandemic, including vaccination requirements, implementation of travel bans, stay- at- home orders, border closures, and
closures of offices, factories, schools, public buildings and businesses. These measures may disrupt the supply chain and may
interfere with the ability of our employees, vendors, technology equipment suppliers, data and disaster recovery centers, and
other service providers to perform their respective responsibilities and obligations relative to the conduct of our business. In
addition to uncertain expenses and impacts to our business we may incur due to a pandemic as part of us providing a safe and
healthy work and trading environment, employees working remotely from different locations and in connection with our return
to our offices, we may also be subject to claims from employees or customers alleging failure to maintain safe premises and
restrictions with respect to protocols relating to such pandemic. Further, changes in trading behavior, impacts to trading behavior
due to market disruptions, temporary suspensions of open outcry trading, temporary regulatory measures and other future
developments caused by the effects of a pandemic, including a re- occurrence of cases and the emergence of variants, could
impact trading volumes and the demand for our products, market data and services, which could have a material 46adverse --
adverse effect on our business, financial condition, operating results and cash flows and could heighten many of the other risks
described herein. Risks Relating to Legal and Regulatory Matters We operate in a highly regulated industry and may be subject
to censures, fines and other legal proceedings if we fail to comply with legal and regulatory obligations. Cboe Options, C2,
BZX, BYX, EDGX, and EDGA are registered national securities exchanges and SROs, and, as such, are subject to
comprehensive regulation by the SEC. CFE is a DCM and Cboe SEF is a SEF, each registered with the CFTC and subject to
comprehensive regulation by the CFTC. In addition to its other SRO responsibilities, BZX, as a listing market, also is
responsible for evaluating applications submitted by issuers interested in listing their securities on BZX and monitoring each
issuer's compliance with BZX's continued listing standards. The Exchanges may be subject to additional responsibilities in
other international jurisdictions where the Exchanges may be authorized to act as foreign exchanges. Failure to comply with
these SRO and other responsibilities could result in potential sanctions or fines and a negative impact on Cboe's reputation and
or branding. Our 48Our European businesses are subject to regulatory oversight in the UK by the FCA and in the Netherlands
by the DNB and the AFM, which, through the "passporting" regime, provides authorization to carry on business in other
Member States of the EU and the EEA in accordance with the applicable EU legislation and regulation to which our European
business is subject. MATCHNow and NEO are Choe Canada Inc. is subject to regulatory oversight in Canada by their its
primary provincial securities authority, the OSC. In addition, Cboe Canada Inc. each of MATCHNow and NEO is a
Marketplace Member of, and subject to a regulation services agreement with, CIRO the Canadian SRO. Cboe Australia is
subject to regulatory oversight in Australia by the ASIC. Cboe Japan is subject to regulatory oversight in Japan by the JFSA and
the JSDA. BIDS Trading is a registered broker-dealer subject to regulatory oversight in the U. S. by the SEC and FINRA and is
intended to be maintained as an independently managed and operated trading venue, separate from and not integrated with the
SROs. The Chief Executive Officer of BIDS Trading is expected to lead-leads BIDS Trading as an independent business within
Cboe, reporting into an independent committee of the Board of Directors of Cboe Global Markets. If a regulatory authority
makes a finding of non-compliance, conditional fines could be imposed, and our licenses could be revoked. Any such fine or
revocation of a license could have a material adverse effect on our business, financial condition and operating results. The Choe
Digital futures exchange and clearinghouse are regulated by the CFTC and subject to comprehensive regulation by the
CFTC. For risks related to Choe Digital see also below "Risks Relating to Our Choe Digital Business." In addition to the
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requirements related to operating our U. S. markets imposed by the SEC and the CFTC, we also have certain responsibilities for
regulating the TPHs and members that trade on our Exchanges. While we have entered into agreements under which FINRA,
with respect to our options and equities exchanges provides certain regulatory services, and under which OCC, with respect to
CFE provides certain financial surveillance and regulatory services, we retain ultimate responsibility for the regulation of our
TPHs and members. We have begun to perform internally more of the regulatory services that FINRA used to handle and now
perform internally the regulatory functions that NFA previously handled on behalf of CFE. Our ability to comply with
applicable laws and rules is largely dependent on the establishment and maintenance of appropriate systems and procedures, our
ability to attract and retain qualified personnel, the ability of FINRA and OCC to perform under their respective RSAs, the
ability of FINRA and OCC to transition to us any other potential responsibilities under their respective RSAs, our ability to
complete the new additional responsibilities for regulating our TPHs and members and our oversight of the work done by
FINRA and OCC. The SEC and CFTC have broad powers to audit, investigate and enforce compliance and to punish
noncompliance by, as applicable, SROs, DCMs and SEFs pursuant to applicable laws, rules and regulations. If a regulatory
authority were to find one of our programs of enforcement or compliance to be deficient, our SROs, DCM, or SEF could be the
subject of investigations and enforcement proceedings that may result in substantial sanctions, including revocation of
registration as a national securities exchange, DCM, or SEF. Any such investigations or proceedings, whether successful or
unsuccessful, could result in substantial costs, the diversion of resources, including management time, and potential harm to our
reputation, which could have a material adverse effect on our business, financial condition and operating results. In addition, our
SROs, DCM, or SEF may be required to modify or restructure their regulatory functions in response to any changes in the
regulatory environment, or they may be required to rely on third parties to perform regulatory and oversight functions, each of
which may require us to incur substantial expenses and may harm our reputation if our regulatory services are deemed
inadequate. In addition, SROs are required by federal law to perform a variety of regulatory functions. In light of these
responsibilities, some courts have held that SROs are immune to certain private causes of action relating to the 47performance-
performance of these regulatory functions. There is a risk that some courts may not apply this immunity doctrine to all claims.
There is also a risk that legislative or regulatory developments may change the application of this immunity doctrine.
Limitations on the application of the immunity doctrine could result in an increased exposure to litigation, and increase liability
and / or other legal expenses. Further under the CEA, CFE, Cboe SEF and Cboe Digital Exchange may be subject to litigation
alleging that they have acted in bad faith. We also could be exposed to liability to regulators or other governmental authorities
even in situations where immunity would bar a civil claim. Legislative or regulatory changes affecting our markets could have a
material adverse effect on our business, financial condition and operating results, Changes in regulation by the SEC, CFTC,
FCA, Central Bank of the Netherlands ("DNB"), AFM, CIRO HROC, Canadian SRO, OSC, ASIC, JFSA, JSDA, other
<mark>domestic and</mark> foreign regulators or other government action, including <del>SEC</del> approval <mark>by these regulators</mark> of rule filings <mark>or</mark>
initiatives by other SROs or entities, including OCC, could materially affect our markets, products and clearinghouse. In recent
years, the securities and derivatives industries have been subject to regulatory changes as a result of increasing government and
public scrutiny of the securities and derivatives industries. We have also experienced, and we may also experience due to
changes in administrations in the U. S. jurisdictions that we operate and expansion 49expansion into other asset classes, such
as the digital asset space or U. S. Treasuries and geographies, an increase in rulemaking and legislation that could affect our
business. In particular, in December 2022, the SEC released four proposals that could impact equity market structure: (1)
Disclosure of Order Execution Information (Rule 605); (2) Regulation NMS Amendments: Tick Size, Access Fees, and
Transparency; (3) Regulation Best Execution; and (4) Proposed Rule to Enhance Order Competition. These proposals have been
noticed for public comment. If adopted as- is or additional proposals or changes to the existing equity market structure
proposals emerge, we could experience market technology changes, incur additional compliance costs, experience negative
impacts on our volumes, liquidity, and fees, all of which could have a material adverse effect on our business, financial
condition and operating results. Further, on October 18, 2023, the SEC released the Volume Based Proposal and, although
the new rules do not appear likely to have a near term material impact, the new rules may have a long term material
impact on our business, financial condition and operating results if, for example, there is a reduction of overall volumes,
liquidity, or market share on Cboe's equities exchanges, BZX, BYX, EDGX, and EDGA. Under EU and UK regulations,
European and UK banks and other European and UK financial institutions become subject to punitive capital charges if they
transact options or futures through a third country central counterparty (" CCP") that is not recognized in the applicable
jurisdiction. OCC, our clearinghouse for U. S. options and futures, is recognized as a third country CCP by the EU and is
currently operating under the UK's temporary recognition regime. Although the UK has not issued any equivalency
determination with respect to U. S. CCPs, OCC has submitted its application for permanent recognition in the UK. The current
deadline for recognition in the UK is December 31, 2024 2025, and may be extended by His Majesty's Treasury in the future
in increments of 12 months each. As a prerequisite to ultimately achieving recognition in the UK, it is possible that OCC could
be required by the UK to contribute capital to its default waterfall applicable in the event of clearing member default. This
capital could be required to be drawn before the default fund contributions of non- defaulting clearing members in the event that
a defaulting clearing member's margin and other contributions were to be exhausted. OCC's stockholders, including Cboe
Options, could effectively be required to fund this capital. If the UK does not recognize OCC as a third country CCP, then UK
market participants that clear through OCC would become subject to punitive capital charges. As a result, we could experience
the loss of a significant number of UK market participants and a significant reduction in trading activity on our options and
futures markets, which could have a material adverse effect on our business, financial condition and operating results. The
implementation of MiFID II and MiFIR in Europe at the beginning of 2018 has encouraged competition among market centers
in Europe, MiFID II and MiFIR have introduced a number of new rules, including enhanced internal organizational and
compliance monitoring requirements, which apply directly to European trading venues such as our MTF and RM. The impact of
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MiFID II and MiFIR is significant, and the increased competition among market centers could reduce trading volumes and trading fees, while increasing our costs of operating in Europe. Additionally, European authorities are currently undertaking a review of MiFID as a result of which new rules may come into effect that could have a material impact on our business. In 2021 the E. C. published proposals for the review of EU market structure, including provisions for a consolidated tape for the EU and changes to the transparency regime for equities. These proposals are expected to be implemented during late 2023-2026 or early 2024. As proposed, these new rules may have a material adverse effect on our business, financial condition and operating results. The legislative and regulatory environment in which the spot FX market operates is evolving and has undergone significant changes in the recent past, and there may be future regulatory changes in the spot FX industry. The FX Global Code was published in 2017 and sets forth standards of conduct agreed by market participants and central banks on a global basis to apply to the wholesale FX market, and the effect of its publication on conduct and future regulation 48continues -- continues to evolve. Cboe FX issued a Statement of Commitment declaring its commitment to conduct its FX market activities in a manner consistent with the principles of the FX Global Code. Amendments to the FX Global Code, changes in the interpretation or enforcement of existing laws and regulations by applicable governmental bodies and regulatory organizations, or the adoption of new legal or regulatory requirements, may also adversely affect our spot FX business. Further, our FX NDF business may also be adversely affected by proposed regulatory changes to the rules governing swap execution facilities. It is also possible that there will be additional legislative and, regulatory, and enforcement changes, priorities or efforts in the environment in which we operate, or plan to operate, our businesses. Actions on any of the specific regulatory issues currently under review in the U. S. or internationally and other proposals could have a material impact on our business. In 501n addition, U. S. and foreign legislatures and regulators could impose legislative or regulatory changes that could materially adversely impact the ability of our market participants to use our markets or participate in the securities industry at all. Any such changes could result in the loss of a significant number of market participants or a reduction in trading activity on our markets, either of which could have a material adverse effect on our business, financial condition and operating results. Changes or proposed changes in regulation may also result in additional costs of compliance and modification of market participants' trading activity on our Exchanges and markets. Any infringement by us on intellectual property rights of others could result in litigation and could have a material adverse effect on our operations. Our competitors, as well as others, have obtained, or may obtain, patents or may otherwise hold intellectual property rights that are related to our technology or the types of products and services we offer or plan to offer. We may not be aware of all intellectual property that may pose a risk of infringement by our products, services or technologies. In addition, some potential patent applications in the U. S. are confidential until a patent is issued, and therefore we cannot evaluate the extent to which our products, services or technologies may be covered or asserted to be covered in pending patent applications. Thus, we cannot be sure that our products, services or technologies do not infringe on the rights of others or that others will not make claims of infringement against us. Claims of infringement are not uncommon in our industry, and even if we believe that such claims are without merit, they can be time- consuming and costly to defend and divert management resources and attention. If one or more of our products, services or technologies were determined to infringe a patent or other intellectual property right held by another party, we may be required to pay damages, stop using, developing or marketing those products, services or technologies, obtain a license from the intellectual property rights holders, or redesign those products, services or technologies to avoid infringement. If we were required to stop using, developing or marketing certain products, services or technologies, our business, financial condition and operating results could be materially harmed. Moreover, if we were unable to obtain required licenses, we may not be able to redesign our products, services or technologies to avoid infringement, which could materially adversely affect our business, financial condition and operating results. Misconduct by our TPHs, members, participants or others could harm us. We run the risk that our TPHs, members, participants, other persons who use our markets or our products, other persons for whom we clear transactions, our employees or those with which we have business relationships may engage in fraud, market or product manipulation, or other misconduct, which could result in regulatory and legal sanctions and penalties and serious harm to our reputation, especially because we are the parent company of SROs. It is not always possible to deter misconduct, or market or product manipulation, and the precautions we take to prevent and detect this activity may not be effective in all cases. In addition, misconduct, or market or product manipulation by, or failures of, participants on our or other exchanges may discourage trading on our Exchanges or of our products, which could reduce revenues. Potential conflicts of interest between our for- profit status and our regulatory responsibilities may adversely affect our business. As a for- profit business with regulatory responsibilities, we are responsible for disciplining TPHs and members for violating our rules, including by imposing fines and sanctions. This may create a conflict of interest between our business interests and our regulatory responsibilities. Any failure by us to fulfill our regulatory obligations could significantly harm our reputation, increase regulatory scrutiny or cause the SEC or CFTC to take action against us, all of which could materially adversely affect our business, results of operations or financial condition. 49BIDS—- BIDS Trading's ability to operate under its current regulatory framework is dependent upon the sufficiency of a novel operational and governance framework we have developed to govern our relationship with BIDS Trading and our ability to comply with such framework and if we fail to adhere to such framework or the BIDS Trading ATS is otherwise deemed a "facility" of our registered national securities exchanges, our business, financial condition and operating results may be adversely affected. The U. S. equities ATS operated by BIDS Trading is regulated as a broker- dealer sponsored alternative trading system and not a registered national securities exchange. Because we acquired BIDS Trading, it is now under common ownership with our registered national securities exchanges that, in some cases, offer trading in the same securities as those traded on the BIDS Trading ATS. Absent sufficient separation, this common ownership of an ATS and registered national securities exchanges offering trading in the same securities presents the potential for the BIDS Trading ATS to be deemed a "facility" of our registered national securities exchanges. If the BIDS Trading ATS were to be deemed to be a 51a "facility" of our registered national securities exchanges, certain exchange regulations could be extended to the BIDS Trading ATS, which could have a material adverse impact on BIDS

Trading's business model. This could reduce the BIDS Trading ATS' competitiveness and volumes and could result in a reduction of the value of the BIDS Trading ATS to us. This could also potentially result in fines or other penalties being assessed against us for our failure to operate the BIDS Trading ATS as a "facility," which could have a material adverse effect on our business, financial condition and operating results. To mitigate the risk that the BIDS Trading ATS is deemed a "facility " of our registered national securities exchanges, we have developed and implemented an operational and governance framework for our ownership of BIDS Trading that is intended to preserve the strategic, technological, business, and operational independence of the BIDS Trading ATS from our registered national securities exchange businesses, such that the BIDS Trading ATS and our registered national securities exchanges would not be deemed to be integrated or otherwise linked for " facility" purposes. This framework is supported by highly detailed policies, procedures and controls. However, because of the lack of precedent for common ownership of an ATS and registered national security exchanges offering trading in the same securities, there is risk that our framework and supporting policies, procedures and controls could be deemed to be insufficient to prevent the BIDS Trading ATS from being deemed to be a "facility" of our registered national securities exchanges. In addition, because of the comprehensive and highly detailed nature of our framework and supporting policies, procedures and controls, there is risk that we could inadvertently fail to fully adhere to our operational and governance framework and related policies, procedures and controls. There is also risk that new legislation or regulation, or changes in existing regulation or other government action, relating to "facilities" of registered national securities exchanges and / or the common ownership of an ATS and registered national securities exchanges offering trading in the same securities could materially affect our ability to own and operate the BIDS Trading ATS under the current operational and governance framework, including without the BIDS Trading ATS being deemed a "facility" of our registered national securities exchanges. Occurrence of any of the risks described in this paragraph could result in the BIDS Trading ATS being deemed to be a "facility" of our registered national securities exchanges, which could reduce the BIDS Trading ATS' competitiveness and volumes and could result in a reduction of the value of the BIDS Trading ATS to us, and could also potentially result in fines or other penalties being assessed against us for our failure to operate the BIDS Trading ATS as a "facility," which could have a material adverse effect on our business, financial condition and operating results. If our risk management and compliance methods are not effective, we may suffer adverse consequences, such as investigations and enforcement actions from regulators, our business, financial condition and operating results may be adversely affected. Our ability We maintain risk management, compliance and monitoring policies, procedures and programs that are reasonably designed to comply help with our compliance with applicable laws and rules is largely dependent on our establishment and maintenance of to prevent, detect, deter, monitor and manage our risks, including enterprise risk, compliance, risk-regulatory, and internal audit programs, and reporting systems and but such policies, procedures, as well as our ability to attract and programs retain qualified compliance, risk and audit management personnel. These systems and procedures may not be fully effective in their operation. We Further, we face the risk of intervention by regulatory authorities, including extensive examination and surveillance activity. In the case of actual or alleged non-compliance with applicable laws or regulations, we could be subject to investigations and judicial or administrative proceedings that may result in penalties, settlements or civil lawsuits, including by customers, or third parties, for damages, which may be substantial. For example, the SEC has previously brought actions against exchange operators, including us, for failing to fulfill their obligations to have an effective regulatory system. Any failure to comply with applicable laws and rules could materially adversely affect our business, reputation, financial condition and operating results and, in extreme cases, our ability to conduct our business or portions thereof. As the parent company for SROs, other markets, and a clearinghouse, we are responsible for maintaining markets that comply with securities and futures laws, SEC, FCA, AFM, DNB, CIRO Canadian SRO, OSC, ASIC, JFSA, JSDA, ESMA, and CFTC regulations and the rules of the respective exchanges, markets and clearinghouse, 50We We have methods to identify, monitor and manage our risks. Management of legal, compliance, and regulatory risk, among other risks, requires policies and procedures to properly monitor and manage risk. Additionally, as we continue to integrate the technology, associates, and processes of recent acquisitions, we may not be able to identify additional risks. Further, the practices we utilize to integrate these acquisitions may not be effective at identifying or monitoring and managing risks related to ongoing integration activities. If our policies, procedures, and compliance systems are not effective or we are not successful in monitoring or evaluating the risks to which we are or may be exposed, our business, reputation, financial condition and operating results could be materially adversely affected. We cannot provide assurance that our policies and procedures will always be effective, or that our management, compliance department, risk department, regulatory department and related enterprise risk management program-framework, including the three lines of defense approach, and internal audit department would be able to identify any such ineffectiveness. If these departments or the enterprise risk program management framework, and related policies and procedures are not effective, we may be subject to monetary or other penalties by our regulators, and our insurance policies may not provide adequate coverage. Our ability to implement or amend rules could be limited or delayed because of regulation, which could negatively affect our ability to implement needed changes. Our Exchanges registered with the SEC must submit proposed rule changes to the SEC for its review and, in many cases, its approval. Even where a proposed rule change may be effective upon filing with the SEC, the SEC retains the right to suspend and disapprove such a rule change. Also, the CFTC may stay or disapprove rules that we file with it for **Cboe Digital** futures exchange and clearinghouse, CFE, or Cboe SEF. The rule review process can be lengthy and can significantly delay the implementation of proposed rule changes that we believe are necessary to the operation of our markets. If the SEC or CFTC delays, including because of a government shutdown, or does not allow one of our Exchanges to implement a rule change, this could negatively affect our ability to make needed changes or implement business activities. Similarly, the SEC must approve amendments to our exchange subsidiaries' certificates of incorporation and bylaws as well as certain amendments to the certificate of incorporation and bylaws of Cboe Global Markets. The SEC may decide not to approve a proposed amendment or may delay such approval in a manner that could negatively affect our ability to make a desired change, which could prevent or

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delay us from improving the operations of our markets or recognize income from new products. Changes in the tax laws and
regulations affecting us, our products and our market participants could have a material adverse effect on our business.
Legislation may be proposed, both domestically and internationally, that could add a transaction tax on our products or change
the way that our market participants are taxed on the products they trade on our markets. A number of federal, state and local
jurisdictions in the U. S. and EU Member States have considered a financial transaction tax, but many details remain to be
discussed and agreed, including how to assess the tax. Additionally, legislation has been proposed from time to time on a federal
level that would introduce in the U. S. mark- to- market tax treatment for all derivatives contracts and require gains and losses
be taxed at ordinary income tax rates. Implementation of such taxes could result in a reduction in volumes and liquidity, which
would have a negative impact on our operations. In addition to proposed tax changes that could affect our market participants,
like other corporations, we are subject to taxes at federal, state and local levels, as well as in non-U. S. jurisdictions, More
specifically, some jurisdictions where we operate are implementing Pillar 2 laws to effectuate a 15 % minimum tax as of
January 1, 2024. Currently, we do not expect a material tax cost to arise from the implementation of such legislation, as
drafted. Changes in tax laws, including Pillar 2 laws, regulations or policies or successful claims by tax authorities could
result in our having to pay higher taxes, which would in turn reduce our net income. If this occurs, we may experience a higher
effective tax rate. We are subject to litigation risks and other liabilities. Many aspects of our business involve substantial risks of
litigation and other liabilities. Although under current law we expect to be immune from private suits arising from conduct
within our regulatory authority and from acts and forbearances incident to the exercise of our regulatory authority, we expect
this immunity will only cover certain of our activities in the U.S., and we could be exposed to liability under foreign, national
and local laws, court decisions and rules and regulations promulgated by regulatory agencies. Some of our other liability risks
arise under the laws and regulations relating to the tax, employment, intellectual property, anti-money laundering, technology
export, cybersecurity, foreign asset controls, foreign corrupt practices, employee labor and employment areas, including anti-
discrimination and fair- pay laws and regulations, and the businesses of companies listed on any of our exchanges. Liability
could also result from disputes over the terms of a trade executed on one of our markets, claims that a system failure or delay
cost a 51customer --- customer money, claims we entered into an unauthorized transaction or claims that we provided materially
false or misleading statements in connection with a transaction. For example, we are subject to on- going legal disputes that
could result in the payment of fines, penalties or damages and could expose us to additional liability in the future. See Item 3 "
Legal Proceedings" in this Annual Report for a general description of our legal proceedings and claims and Note 23 ("
Commitments, Contingencies, and Guarantees – Legal Proceedings ") to the consolidated financial statements and related notes,
which are included elsewhere in this Annual Report, for a summary of specific legal proceedings. Further 53Further, we could
incur significant expenses vigorously defending the claims mentioned above (including those found to be barred due to
immunity) and any future claims, even those without merit, which could adversely affect our business, financial condition and
operating results. The outcomes of existing claims and any future claims cannot be determined and an adverse resolution of any
lawsuit or claim against us may require us to pay substantial damages or impose restrictions on how we conduct business, either
of which could adversely affect our business, financial condition and operating results. In addition, we may have to establish
accruals for those matters in circumstances when a loss contingency is considered probable and the related amount is reasonably
estimable. Any such accruals may be adjusted as circumstances change. Risks Related to Our Common Stock and Indebtedness
We have outstanding indebtedness and commitments, which may decrease our business flexibility and adversely affect our
business, financial condition and operating results. As of December 31, 2022-2023, we had $ 304.7 million outstanding under
our term loan facility, which matures in December 2023, $-647, 3-9 million of senior unsecured notes due 2027, $ 494, 9-8
million of senior unsecured notes due 2030, $ 296. <del>0.4</del> million of senior unsecured notes due 2032, no funds outstanding under
our revolving credit facility and no funds outstanding under the Cboe Clear Europe credit facility. In 2023, we terminated and
paid off outstanding amounts under our term loan facility. The financial and other covenants to which we have agreed and
our indebtedness may have the effect of reducing our flexibility to respond to changing business and economic conditions,
thereby placing us at a competitive disadvantage compared to competitors that have less indebtedness and making us more
vulnerable to general adverse economic and industry conditions. Further, we may default on our obligations or violate the
covenants, in which case, we may be required to seek a waiver of such default or the debt obligations may be accelerated. A
default under any of our indebtedness with cross default provisions could result in a default on our other indebtedness. Our
indebtedness may also increase future borrowing costs, and the covenants pertaining thereto may also limit our ability to
repurchase shares of our common stock, increase dividends or obtain additional financing to fund working capital, capital
expenditures, acquisitions or general corporate requirements. We are also required to dedicate a larger portion of our cash flow
from operations to payments on our indebtedness, thereby reducing the availability of our cash flow for other purposes,
including working capital, capital expenditures, regulatory capital requirements, and general corporate purposes. Further, a
portion of our borrowings are at variable rates of interest, which exposes us to the risk of increased interest rates unless we enter
into offsetting hedging transactions. Also, our ability to fund capital expenditures and return capital to stockholders may depend
on the amount of capital held due to regulatory capital requirements and the amount of capital committed related to lines of
credit granted by the Company to our subsidiaries in connection with their regulatory capital requirements. Our ability to make
payments on and to refinance our debt obligations and to fund planned capital expenditures depend on our ability to generate
cash from our operations. This, to a certain extent, is subject to general economic, financial, competitive, legislative, regulatory
and other factors that are beyond our control. We may not be able to refinance any of our indebtedness on commercially
reasonable terms, or at all. If we cannot service our indebtedness, we may have to take actions such as selling assets, seeking
additional equity or reducing or delaying capital expenditures, strategic acquisitions, investments and alliances, any of which
could impede the implementation of our business strategy or prevent us from entering into transactions that would otherwise
benefit our business. Additionally, we may not be able to affect such actions, if necessary, on commercially reasonable terms, or
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at all. Any of the foregoing consequences could materially adversely affect our business, financial condition and operating
results. Deterioration in our credit profile may increase our costs of borrowing money. As of December 31, 2022 2023, we have
investment grade credit ratings from S & P Global Ratings (A-) and Moody's Investor Service (A3). Ratings from credit
agencies are not recommendations to buy, sell or hold our securities, and each rating should be evaluated independently of any
other rating. There is no assurance that we will maintain such credit 52 ratings. - ratings, since credit ratings may be lowered or
withdrawn entirely by a rating agency if, in its judgment, the circumstances warrant. If a rating agency were to downgrade our
rating below investment grade, our borrowing costs could increase. If our goodwill, long-lived assets, investments in non-
consolidated subsidiaries and intangible assets become impaired, the resulting charge to earnings may be significant. We are
required to assess investments in non-consolidated subsidiaries and intangible assets for impairment at least annually. Goodwill
impairment testing is performed annually in the fiscal fourth quarter or more frequently if conditions exist that indicate that the
asset may be impaired. In the future, we may take charges against earnings resulting from impairment. For example, in 2022,
the Company previously recorded goodwill impairment charges of $ 460. 9 million 54related to Cboe Digital, resulting in
decreases in the carrying value of Cboe Digital. Any determination requiring the write- off of a significant portion of our
goodwill, long-lived assets, intangible assets or investments in non-consolidated subsidiaries could materially adversely affect
our results of operations and financial condition. Following the acquisition Cboc Digital, in the quarter ended June 30, 2022,
negative events and trends in the broader digital asset environment emerged, such as deleveraging and bankrupteies, and certain
negative trends in the broader digital asset environment that started in late 2021 intensified, such as the decline in digital asset
prices, overall market activity, and market capitalization. Additionally, following the acquisition of Cboe Digital, the efforts to
syndicate minority ownership interests in Cboe Digital to potential investors during the quarter ended June 30, 2022 became
more challenging, and the outlook for the Digital segment's future market growth was negatively impacted. The Company
eonsidered these developments, in particular the syndication efforts during the quarter ended June 30, 2022, to be potential
indications of impairment and performed an interim impairment test for the goodwill recognized in the Digital reporting unit
during the quarter ended June 30, 2022. The Company concluded that the carrying value of the reporting unit exceeded its
estimated fair value, which considered both market and income approaches, and recorded a goodwill impairment charge of $
460. 1 million in the consolidated statements of income during the quarter ended June 30, 2022, and also recognized a deferred
tax asset of $ 116. 2 million. This deferred tax asset, resulting from the excess of tax- deductible goodwill over book goodwill,
relates to future tax deductions the Company expects to realize to reduce potential tax payments on future income. As a result,
the carrying value of Cboe Digital decreased by $ 343. 9 million, to $ 220. 0 million as of June 30, 2022. The Company also
performed testing over the intangible assets recognized as a result of the Cboe Digital acquisition during the quarter ended June
30, 2022, and based on the results of the assessments, determined there was no impairment required as the fair value
approximated the carrying value. No other long lived assets were recognized as a result of the acquisition and subject to further
assessment. As a result of the finalization of the net working capital calculation associated with the acquisition of Cboe Digital
during the quarter ended September 30, 2022, the Company recorded additional goodwill of $ 0. 8 million. Subsequently, the
Company concluded that the indicators of impairment outlined in the previous paragraph continued to be relevant and recorded
an additional goodwill impairment charge of $ 0. 8 million in the consolidated statements of income for the three months ended
September 30, 2022, resulting in the write-down of the carrying value of the goodwill associated with the acquisition of Cboe
Digital to zero. As a result of the Company's annual impairment analysis, completed in the fourth quarter of 2022-2023, in
which all reporting units estimated fair value exceeded their carrying value, we do not consider our goodwill and indefinite-
lived intangibles to have a significant risk of additional-impairment. Any decision to pay dividends on our common stock is at
the discretion of our Board of Directors and depends upon the earnings and cash flow of our operating subsidiaries. Accordingly,
there can be no guarantee that we will pay dividends to our stockholders. Any decision to pay dividends on our common stock in
the future will be at the discretion of our Board of Directors, which may determine not to declare dividends at all or at a reduced
amount. The board's determination to declare dividends will depend upon our profitability and financial condition, contractual
restrictions, restrictions imposed by applicable law and the SEC and other factors that the board deems relevant. As a holding
company with no significant business operations of its own, Cboe Global Markets depends entirely on distributions, if any, it
may receive from its subsidiaries to meet its obligations and pay dividends to its stockholders. If these subsidiaries are not
profitable, or even if they are and they determine to retain their profits for use in their businesses, we will be unable to pay
dividends to our stockholders. 53Certain -- Certain provisions in our organizational documents and governing law could prevent
or delay a change of control. Our organizational documents contain provisions that could block actions that stockholders might
find favorable, including discouraging, delaying or preventing a change of control or any unsolicited acquisition proposals for
us. These include provisions: ● prohibiting stockholders from acting by written consent; ● requiring advance notice of director
nominations and of business to be brought before a meeting of stockholders; and • limiting the persons who may call special
stockholders' meetings. In addition, our organizational documents include provisions that: • restrict any person from voting or
causing the voting of shares of stock representing more than 20 % of our outstanding voting capital stock; and • restrict any
person from beneficially owning shares of stock representing more than 20 % of the outstanding shares of our capital stock.
Furthermore, our Board of Directors has the authority to issue shares of preferred stock in one or more series and to fix the rights
and preferences of these shares without stockholder approval. Any series of our preferred stock is likely to be senior to our
common stock with respect to dividends, liquidation rights and, possibly, voting rights. The ability of the Board of Directors to
issue preferred stock also could have the effect of discouraging unsolicited acquisition proposals, thus materially adversely
affecting the market price of our common stock. Delaware law makes it difficult for stockholders that have recently acquired a
large interest in a corporation to cause the merger or acquisition of the corporation against the board's wishes. Under Section
203 of the Delaware General Corporation Law, a Delaware corporation may not engage in any merger or other business
combination with an interested stockholder for a period of three years following the date that the stockholder became an
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interested stockholder except in limited circumstances, including by approval of the corporation's Board of Directors. Furthermore, the European countries where we operate regulated entities, such as the UK and Netherlands, may require prior governmental approval before an investor acquires 10 % or more of the outstanding shares of our common stock. Risks <mark>55Risks</mark> Relating to Our Business Following Consummation of Cboe Digital AcquisitionWe BusinessWe may not realize the expected benefits of our acquisition of Cboe Digital (formerly known as ErisX) and the acquisition introduces additional risks to our business due to its evolving business model. On May 2, 2022, the Company completed its acquisition of ErisX, which was subsequently rebranded as Cboe Digital. Cboe Digital operates a U. S.- based digital asset spot market, a regulated futures exchange and a regulated clearinghouse. Leveraging digital asset data from Cboe Digital's and our existing index calculation capabilities, we intend to develop and distribute digital asset indices for potential use in exchange traded products and other derivative product opportunities. We also plan to develop a robust market data offering based on actionable bid and offer prices from the Cboe Digital spot crypto market, and ultimately intend to develop a benchmark to help Cboe Digital's industry partners and other market participants evaluate the appropriateness of crypto execution prices and offer digital asset trading to their clients. We are subject to increased financial and reputational risks if there is a failure to develop and launch one or more of the anticipated products resulting from this acquisition, or if the development or launch of a new product is unsuccessful. Also, there can be no assurance that we will be able to maintain the necessary regulatory approvals or receive support from market participants, industry partners and users to develop and launch products as planned, that Cboe Digital will continue to operate as anticipated, or that we will realize the expected return on our investment. Furthermore, our investment in Cboe Digital entails numerous risks, including risks relating to our ability to: • manage the complexity of its business model to stay current with the industry; • successfully enter categories and markets in which it may have limited or no prior experience; • successfully develop and integrate products, systems or personnel into its business operations; and • maintain required licenses and regulatory approvals for its business. 54In In addition, certain market participants acquired minority ownership interests in Cboe Digital and intend to serve as partners in the growth of the business. If these market participants do not serve as partners in the growth of the business, then we may not be able to realize the expected return on our investment. Insufficient participation from market participants in ownership and partnership may adversely affect the ability of Cboe Digital to operate as anticipated or grow, which may have a material adverse effect on the Cboe Digital business. As digital assets technologies evolve, Cboe Digital may add, modify or discontinue certain aspects of its business model relating to the product mix and service offerings. Future additions and modifications to Cboe Digital's business will increase the complexity of its business and may place significant strain on our management, personnel, operations, systems, technical performance, financial resources and internal financial control and reporting functions. We cannot offer any assurance that these or any other additions or modifications will be successful or will not result in harm to our business. Additionally, sources of Cboe Digital revenue are dependent on digital assets and the broader blockchain ecosystem. Due to the highly volatile nature of the blockchain ecosystem and the prices of digital assets, Cboe Digital's operating results have fluctuated, and may continue to fluctuate, significantly from period to period in accordance with market sentiments and movements in the broader blockchain ecosystem. Additionally, the blockchain ecosystem is highly innovative, rapidly evolving and characterized by intense competition, experimentation and frequent introductions of new products and services, and is subject to uncertain and evolving industry and regulatory requirements. We expect competition to increase in the future as existing and new competitors introduce new products or enhance existing products that may compete with Cboe Digital. We have limited experience applying Cboe Digital's technology platform to a global exchange and clearing infrastructure for digital assets. The creation and operation of a global digital assets spot and derivatives trading market is subject to potential technical, legal and regulatory constraints. Any problems that we encounter with the operation of the Cboe Digital systems, including technical, legal and regulatory problems, could negatively impact our business and plan of operations. The characteristics of digital assets and digital asset platforms have been, and may in the future continue to be, exploited to facilitate illegal activity such as fraud, money laundering, tax evasion, ransomware scams and other types of cybercrime, as well as other technical issues, which could adversely affect the Cboe Digital business. Additionally, illegal activity conducted by other digital asset platforms in the digital asset space may erode trust in the digital asset industry which could have a broad-based negative reputational effect on the Cboe Digital business. Digital assets and the digital asset industry are relatively new and, in many cases, lightly regulated or largely unregulated. Digital asset platforms on which digital assets trade pose special risks, as these platforms are generally relatively new and the rules governing their activities are unsettled and their activities may could be largely unregulated, and may therefore be more exposed to theft, fraud, and failure than established, regulated exchanges for other products. Some types of digital assets, particularly cryptocurrencies, have characteristics, such as the speed with which transactions can be conducted, the ability to conduct transactions without the involvement of regulated intermediaries, the ability to engage in transactions across multiple jurisdictions, the irreversible nature of certain transactions and encryption technology that anonymizes these transactions, that make those assets potentially susceptible to use in illegal activity such as fraud, money laundering, tax evasion, ransomware scams and other types of cybercrime. Digital asset platforms have been shut down or experienced losses of assets placed on the platform as a result of cybercrime, and any such event is likely to result in the complete loss of assets placed on such a platform. Any governmental or regulatory action against such a digital asset trading platform may cause assets on such platform to become frozen for a substantial period of time or forfeited, and could result in material opportunity costs or even in the total loss of such assets. In addition, banks may refuse to process or support wire transfers to or from digital asset trading platforms. While we believe that our risk management and compliance framework is reasonably designed to detect any such illicit activities, we cannot ensure that we will be able to detect such illegal activity in all instances. Because the speed, irreversibility and anonymity of certain digital asset transactions potentially makes them difficult to track, fraudulent transactions may be more likely to occur. Cboe Digital may be specifically targeted by individuals seeking to conduct transfers for fraudulent purposes, and it may be difficult or impossible for us to detect and avoid such transactions in certain circumstances. Various other technical issues with

blockchain networks have also been uncovered from time to time that resulted in disabled functionality, exposure of certain users' personal data, theft of users' assets, and other negative consequences, and which required resolution with the attention and efforts of their global miner, user and development communities. If 55any -- any such risks or other risks materialize, the development and growth of digital assets may be significantly affected and, as a result, our Cboe Digital business, operating results and financial condition could be adversely affected. Recent illegal activity by other institutions in the digital asset space may have a negative impact on our customer's and regulators' view of the digital asset industry as a whole and result in broadly applied reputational harm. Though we cannot control the actions of other entities in the digital asset space, Cboe Digital subscribes to strict risk management processes that are reviewed and updated to help prevent illegal activity from occurring within Cboe Digital. Digital assets, digital asset trading platforms and blockchains are currently subject to many different, and potentially overlapping, regulatory regimes, and may in the future be subject to different regulatory regimes than those that are currently in effect. The current and future operation of Cboe Digital may increase our regulatory costs and risks, and there can be no assurance that our employees or agents will not violate applicable laws and regulations. Various aspects of the business that we are engaging in, or planning to engage in, through Cboe Digital are heavily regulated. The Cboe Digital futures exchange and clearinghouse are regulated by the CFTC . The , and the Cboe Digital clearinghouse is registered with the Financial Crimes Enforcement Network and is as a money services business; licensed as a money transmitter in many U. S. states and territories ; and holds a BitLicense from the New York Department of Financial Services. Further, the regulatory and legislative framework is unsettled with respect to many forms of digital assets, which means that federal or state regulators or legislators may in the future curtail or prohibit the acquisition, use or redemption of certain digital assets. Ownership of, holding or trading in certain digital assets may become subject to sanction-litigation. In light of recent events in the digital asset environment, including the FTX bankruptey volatility of digital asset markets in 2022, ongoing litigation between digital asset market participants and federal regulators, and large- scale enforcement activity such as the Binance guilty plea, Federal or regulators, state regulators or and legislators are increasingly looking to take regulatory or legislative actions, such as the potential digital asset legislation discussed above , that , Such action may require additional resources for us-Cboe Digital to comply with any new regulations and laws and increase the cost and / or subject us and other companies to additional regulations and laws regarding custody or facilitating the trading of digital assets, which may have a material adverse effect on the Cboe Digital business. We As a money service business, we are also subject to federal and state anti- money laundering and counterterrorism financing laws and regulations. In addition, as we expand the Cboe Digital business to new products and services, we will-may come under the jurisdiction of additional regulators- both with respect to jurisdiction and subject matter. Certain jurisdictions may impose restrictions on the individual's ability to trade specific certain digital assets or at all. Any failure or perceived failure to comply with existing or new laws, regulations, or orders of any governmental authority (including changes to or expansion of the interpretation of those laws, regulations, or orders), including those discussed in this risk factor, may subject us to significant fines, penalties, criminal and civil lawsuits, forfeiture of significant assets, and enforcement, result in additional compliance and licensure requirements, increase regulatory scrutiny of its business, restrict Cboe Digital's operations, and force Cboe Digital to change its business practices, make product or operational changes, or delay planned product launches or improvements. We 57We currently maintain policies and procedures designed to reasonably help ensure compliance with applicable laws and regulations, but there can be no assurance that we or our employees or agents will be able to comply with all of the regulatory regimes that currently apply, or may in the future be applied, to the Cboe Digital platform or the digital assets supported by the Cboe Digital platform. Cboe Digital follows best practices designed to restrict unauthorized access by individuals or entities in jurisdictions where it is impermissible to trade digital assets. We do not have exposure to any regulators outside of the United States and routinely seek out and receive legal analyses on which jurisdictions we can offer our services to and which customers may avail themselves of our products and services. Additionally, we evaluate which digital assets to include on our platform pursuant to a digital asset listing policy, which includes review by operational, legal and compliance functions. The SEC and its staff have taken the position that certain digital assets fall within the definition of a " security" under the federal securities laws, and it is possible the SEC may take this position with respect to assets that may be transacted on the Cboe Digital platform. The legal test for determining whether any given asset is a security is a highly complex, fact- driven analysis that evolves over time, and the outcome is difficult to predict. The SEC generally has not provided advance guidance or confirmation on the status of any particular digital asset as a security. Furthermore, the SEC's views in this area have evolved over time, and it is difficult to predict the direction or timing of any continuing evolution. In addition, a platform trading a digital asset determined to be a security may be required to register and be regulated by the SEC. A failure by us, including our employees or agents, to comply with applicable laws and regulations and subsequent judgment or settlement against us under these laws could subject us to monetary penalties, damages, expenses, and / or have a significant reputational impact. 56Digital -- Digital asset custodial solutions and related technology, including our systems and custodial arrangements, are subject to risks related to a loss of funds due to theft of digital assets, employee or vendor sabotage, security and cybersecurity risks, system failures and other operational issues which could cause damage to our reputation and brand. There is also legal uncertainty regarding digital asset custodian arrangements. The secure storage and transmission of digital assets and data over networks is a critical element of our digital asset operations . Cboe Digital holds customer's digital assets eustodially through self- eustody, and it's accounts with eustodians. The exchanges, brokers, dealers, banks or such other cryptocurrency custodial institutions selected by us to act as custodians may become insolvent or suffer from any of the custody risks described herein, causing us to lose all or a portion of the digital assets held by those custodians. Threats to the storage and transmission of digital assets and data may come from external factors such as governments, organized crime, hackers and other third parties such as outsourced or infrastructure-support providers and application developers, or may originate internally from an employee or service provider to whom we or our custodians have granted access to our systems. Digital asset transactions may be irrevocable, and stolen or incorrectly transferred digital assets may be irretrievable. Once a transaction has been verified

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and recorded in a block that is added to the blockchain, an incorrect transfer of a digital asset generally will not be reversible,
and we or our custodians may not be capable of seeking compensation for any such transfer or theft. It is possible that, through
computer or human error, or through theft or criminal action, the digital asset could be transferred in incorrect amounts or to
unauthorized third parties, or to uncontrolled accounts. Such events could have a material adverse effect on the ability of Cboe
Digital to continue as a going concern, which may have an adverse effect on our business. While we and our digital asset
custodians maintain cybersecurity procedures and policies, those procedures and policies may not be adequate to avoid the
potential losses caused by security breaches, and we or our custodians may lose digital assets without any recourse. Unlike bank
accounts or accounts at some other financial institutions, in the event of loss or loss of utility value, there is no public insurer,
such as the Securities Investor Protection Corporation or the Federal Deposit Insurance Corporation, to offer recourse to us or to
any investor and the misappropriated digital assets may not easily be traced to the bad actor. Cboe Digital takes several steps to
isolate the digital assets held for customers from its own assets and to structure customer accounts in a way that reinforces
customer ownership of digital assets. Primarily, Cboe Digital holds customer digital assets separate from its own assets in
customer accounts, referred to as wallets, either through with long-term storage by a third -party eustodian custody, a
provider and licensed trust company . When , or in separate and distinct wallets managed by Cboe Digital -holds digital asset
for customers to enable the inbound receipt and outbound transmittal of virtual currencies, Customer customer digital
assets are held in omnibus wallets titled for the benefit of customers of Cboe Digital. Digital assets of customers (but not Cboe
Digital) are commingled held together in the omnibus wallets, and Cboe Digital maintains the records of the amount and type
of digital asset owned by each of its customers in the omnibus wallets. Cboe Digital does not commingle hold its own corporate
assets together with the customer digital assets in the omnibus wallets, other than corporate assets that are held in omnibus
wallets to facilitate customer transactions relating to the digital assets contained in the omnibus wallet, including in order to pay
customary transaction fees and expenses. Because Cboe Digital does not have a trading entity for proprietary or liquidity trading
purposes, Cboe Digital maintains its own digital assets only to facilitate customer trading. Cboe Digital does not currently
pledge, rehypothecate, or invest customer digital assets although its customer agreements and rulebook permit it to do so in the
future 58future. Additionally, Cboe Digital does not otherwise use customer digital assets for its own corporate or business
purposes. A failure of Cboe Digital's policies and procedures regarding the separation of customer assets could subject Cboe
Digital to regulatory scrutiny and could adversely affect Cboe Digital's digital asset business. The obligations associated with
these custodial and other arrangements to safeguard digital assets involve unique risks and uncertainties not present in
arrangements to safeguard assets that are not digital assets. While other types of assets held in a similarly-segregated manner
have been deemed not to be part of the custodian's bankruptcy estate under various regulatory regimes, bankruptcy courts have
not yet fully considered the appropriate treatment of custodial holdings of digital assets, and any such determination may be
highly fact-specific. Despite Cboe Digital's efforts, through contractual terms and account set up, to structure customer
accounts and wallets in a manner that reinforces customer ownership of the assets, there can be no assurance that courts will not
consider such assets as part of Cboe Digital's or an-a Cboe Digital custodian's bankruptcy estate. In that event, digital assets
that Cboe Digital or its custodian holds on behalf of Cboe Digital customers may become subject to the bankruptcy proceedings,
and such customers could be treated as general unsecured creditors. Moreover, even if digital assets ultimately are not treated as
part of Cboe Digital's or and Cboe Digital custodian's bankruptcy estate, the lack of precedent and the fact-dependent nature
of the determination could delay the return of such digital assets to customers or result in the return of all or a portion of the cash
value of the digital assets rather than the digital assets themselves. As a result of these and other risks, customers may find
digital assets to be more risky and less attractive than other assets, which could reduce demand for Cboe Digital's digital asset
services and could adversely impact Cboe Digital's digital asset business. 57Further -- Further, when cryptocurrency custodial
solutions (whether involving Cboe Digital systems or others) experience system failures or other operational issues, such events
could result in a reduction in digital asset prices or confidence and impact the success of Cboe Digital, and may ultimately have
a material adverse effect on the ability of Cboe Digital to continue as a going concern. While Cboe Digital and its vendors have
experienced in the past cybersecurity threats and events of varying degrees, we are not aware of any of these threats or events
having a material impact on Cboe Digital's business, financial condition or operating results to date. However, there can be no
assurance that we or our vendors and custodians will not experience future threats or events that may be material. If any such
threats or events materialize, we may be subject to contractual restrictions, liability and damages, loss of business, penalties,
unfavorable publicity, and increased scrutiny by regulators, which may have an adverse effect on our business. Digital assets are
subject to volatile price fluctuations which can impact the Cboe Digital business. The digital asset market has been characterized
by significant volatility and unexpected price movements. Certain crypto assets may become more volatile and less liquid in a
very short period of time, resulting in market prices being subject to erratic and abrupt market movement, which could harm the
Cboe Digital business and the carrying value of the Digital reporting unit. The As discussed above, the Company previously
recorded goodwill impairment charges related to Cboe Digital, resulting in decreases in the carrying value of Cboe Digital.
Prices of digital assets have fluctuated widely for a variety of reasons and may continue to experience significant price
fluctuations. Such volatility could have a significant impact on the fair market value of digital assets and there can be no
assurance that ongoing volatility will positively impact the value of digital assets. Factors that may affect the price of digital
assets include: • Total-total digital assets in existence; • Global global digital assets supply and demand; • Investors investors
'expectations with respect to the rate of inflation of fiat currencies; • Digital digital asset market fragmentation and
consolidation; • Fiat flat currency withdrawal and deposit policies of digital asset trading platforms and liquidity of such
markets; • Interruptions in terruptions in service from, bankruptcy of, or failure of major digital asset trading platforms; •
Cyber cyber theft of digital assets from online digital asset wallet providers, or news of such theft from such providers, or theft
from individual digital asset wallets; • Investment investment and trading activities of hedge funds and other large digital asset
investors; • Monetary monetary policies of governments, sanctions, trade restrictions, currency devaluations and revaluations;
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 Regulatory-regulatory measures, if any, that restrict or facilitate the ability to buy, sell or hold digital assets or use digital assets as a form of payment; • Availability availability and popularity of businesses that provide digital asset- related services; Maintenance-maintenance and development of the open-source software protocol of the digital asset network;
 Global global or regional political, economic or financial events and uncertainty; ● Manipulative manipulative trading activity on digital asset trading platforms, which are largely unregulated; 59 • The adoption of digital assets as a medium of exchange, store- of- value or other consumptive asset and the maintenance and development of the open- source software protocol of the applicable digital asset; ◆ Forks in the applicable digital asset network; ◆ Consumer preferences and perceptions; ◆ An active derivative market for digital assets; and • Fees associated with processing a transaction of digital assets and the speed at which such transactions are settled. Volatility and unexpected price movements may be a factor in whether customers maintain their deposits on Cboe Digital Exchange. Excessive redemptions or withdrawals by customers may have an adverse impact on the profitability of the Cboe Digital business. Cboe Digital's clearinghouse operations are exposed to risks, including credit, liquidity, market and other risks related to the potential defaults of clearing members and other counterparties. Cboe Digital is subject to risks related to operating its clearinghouse, Cboe Clear Digital, which is a derivatives clearing organization ("DCO") registered with the CFTC. Risks associated with the operation of Cboe Clear Digital include failing to meet strict business continuity requirements and regulatory oversight, risks of default by clearing members and counterparties due to bankruptey, lack of liquidity, operational failure or other reasons. There is no guarantee the collateral deposited will continue to maintain its value, and the use of digital assets as collateral may introduce additional 58