

## **Slide 2: Agenda- Ken**

Good morning and thank you for joining us for our second quarter earnings conference call. On the call today, Ed Tilly, our Chairman and CEO, will discuss our performance for the quarter and provide an update on our strategic initiatives. Then, Jill Griebenow, our Executive Vice President, Chief Financial Officer, Treasurer and Chief Accounting Officer, will provide an overview of our financial results for the quarter as well as discuss our 2023 financial outlook. Following their comments, we will open the call to Q&A. Also joining us for Q&A will be Chris Isaacson, our Chief Operating Officer, Dave Howson, our President, and our Chief Strategy Officer, John Deters.

I would like to point out that this presentation will include the use of slides. We will be showing the slides and providing commentary on each. A downloadable copy of the slide presentation is available on the Investor Relations portion of our website.

## **Slide 3: Forward-Looking Statements**

During our remarks, we will make some forward-looking statements, which represent our current judgment on what the future may hold, and while we believe these judgments are reasonable, these forward-looking statements are not guarantees of future performance and involve certain assumptions, risks and uncertainties. Actual outcomes and results may differ materially from what is expressed or implied in any forward-looking statements. Please refer to our filings with the SEC for a full discussion of the factors that may affect any forward-looking statements.

We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, after this conference call.

During the call this morning, we will be referring to non-GAAP measures as defined and reconciled in our earnings materials. Now, I'd like to turn the call over to Ed.

## **Slide 4: Edward Tilly, Chairman and CEO**

First off, I would like to welcome Jill Griebenow, our new Chief Financial Officer, to the call. During her 12-year tenure at Cboe, Jill has held many roles across our global organization and has an incredible understanding of our business, bringing the breadth and depth of expertise needed to serve in this role. Her leadership has helped drive our vision and strategy, enabling us to become the global market powerhouse we are today, and I am happy to have her at the helm as CFO.

## **Slide 5: 2Q23: Strong Net Revenue and Adjusted Earnings**

I am pleased to report on strong second quarter earnings for Cboe. During the quarter we grew net revenue 10% year-over-year to \$467 million and adjusted EPS by 7% to \$1.78. These results were driven by strong volumes across our derivatives franchise, specifically our proprietary index options products and the continued global expansion of our Data and Access Solutions business.

Our Derivatives business delivered another outstanding quarter as total organic net revenue increased 21%, driven by the strength of our index options and volatility products, and continued solid volumes in multi-list options trading.

During the quarter, total net revenue in our Data and Access Solutions business increased 9% and organic revenue growth increased over 7%. Total net revenue in our Cash and Spot Market business decreased 11% during the quarter.

### **Slide 6: Cboe's Commitment to ESG Initiatives**

Cboe's efforts to achieve its environmental, social and governance goals continue to gain momentum. Last month we published our 5<sup>th</sup> annual ESG report. In addition to disclosing our scope 1 and scope 2 emissions, this year for the first time we disclosed our relevant scope 3 emissions in our report. We plan to continue to make strides forward each year with our ESG program.

### **Slide 7: Top Strategic Growth Priorities**

In the second quarter, we advanced our top strategic growth priorities, which include Derivatives, Data and Access Solutions and Cboe Digital, recording wins across each of these priorities during the second quarter. I will turn to Derivatives and Data and Access Solutions in a moment, but first I want to provide an update on Cboe Digital.

During the quarter, Cboe Digital recorded solid volumes with ADV of more than \$50 million and \$4.6 billion total traded on our spot market. We were also pleased to receive regulatory approval to expand our product offering to include margined futures contracts, which we plan to launch later this year, making Cboe Digital the first U.S. regulated crypto native exchange and clearinghouse platform to offer leveraged derivatives products. The initial product rollout will include physically and financially settled Bitcoin and Ether contracts and will help enable customers to trade futures in a much less capital-intensive way. We are working with our customers and the CFTC in preparation for launch and look forward to bringing this unique product to market.

As the digital asset market continues to evolve, we remain highly active in discussions with regulators and policy makers. We continue to see engagement from market participants about the opportunities this asset class affords and will continue to leverage our trusted, transparent and regulated market structure to advance the industry forward.

### **Slide 8: Expanding the Toolkit**

Our derivatives ecosystem continued to flourish in the second quarter as traders and investors utilized our flagship VIX and S&P 500 index options products across an ever-changing market environment. As we have evolved our suite of products in recent years, we have created flexible products that provide opportunities for customers of all dimensions to trade a contract that is right sized for them, on a timeframe that suits their unique needs. Together, our VIX and SPX products anchor a remarkable toolkit that is available for investors to help find opportunity and hedge their portfolios in changing market environments.

During the second quarter, volume in our proprietary index options products increased 38% year-over-year, while multi-listed options increased 2%. In June, we reached new record monthly ADV of 3.9 million total index options contracts traded.

SPX options ADV increased 33% to a record 2.8 million contracts during the quarter. We also continued to see strong momentum in our Mini-SPX options contract, known by its ticker symbol XSP, which increased 142% year-over-year. ADV for SPX options opened on the same day of expiration, otherwise called ODTE, comprised nearly 44% of overall SPX volumes in the second quarter. As we've noted before, we believe there has been a fundamental evolution in how customers are trading this product and we anticipate this volume to continue.

Given this strong customer interest, we continue to focus on the development of a short-term tradable product that is designed to allow customers to more effectively trade daily moves in the market. While interest in ODTE trading has gained a lot of attention, we continue to see strong volumes in our standard monthly SPX options contract that expires on the third Friday of every month, with average open interest up 12% in June 2023 compared to one year ago.

While the VIX Index remained at historically low levels during the second quarter, we saw a significant increase in trading activity in VIX Options with a 53% increase year-over-year to an ADV of 778,000 contracts, our fourth best quarter on record. Given the flexibility and utility that both VIX and SPX options provide in changing market environments, we see customers utilizing both products interchangeably to manage and hedge their risk.

And globally, demand for our products continued with SPX and VIX options ADV during Global Trading Hours increasing 81% and 16%, respectively, vs. the second quarter of 2022.

### **Slide 9: Derivatives Product Innovation Builds on Strong Foundation**

Through our strong foundation of proprietary index options products, we are able to further expand our diverse offerings with new products designed to help meet the evolving needs of our growing global customer base.

Last month we launched options on our corporate bond index futures, bringing a new “options on futures” functionality to Cboe Futures Exchange which we can leverage for additional products in the future. This quarter we also anticipate that FINRA will receive regulatory approval for new margin requirements recently adopted by Cboe related to cash-settled index options written against ETFs that track the same index underlying the option. Specifically, customers who are writing options against indices that are offset by an underlying ETF, for example XSP vs. long SPY stock, will receive margin relief enabling greater capital efficiencies in their trading.

And, in partnership with S&P Dow Jones Indices, we plan to launch a new Cboe S&P 500 Dispersion Index next month. Dispersion is recognized as one of the fundamental metrics of market risk. A strategy that is predominately traded in the over-the-counter market, this new index aims to standardize the measurement of S&P 500 dispersion.

Additionally, we are preparing for the launch of single stock options on our Cboe Europe Derivatives Exchange in the fourth quarter of this year, with active engagement from market participants and other members of the ecosystem who share our vision of growing the market and delivering a simpler and more efficient pan-European trading and post-trade experience.

We look forward to providing an update on these initiatives during our next earnings call.

### **Slide 10: Data and Access Solutions – Driving Durable Growth**

Turning to our Data and Access Solutions business, we continue to see solid growth with total net revenue increasing 9%, up 7% on an organic basis during the quarter. The second quarter results build on the strong demand we see globally from customers for our high-quality data and access to our markets.

As we look to the second half of the year, we anticipate new opportunities across our Data and Access Solutions ecosystem will help drive further growth, including demand for Australian equity market data now that Cboe Australia has migrated its exchange technology to Cboe’s uniform trading platform. As we continue to leverage our global footprint and expanded customer base, we also see opportunity to expand our reach of our proprietary data products, such as our Cboe One data feeds and Cboe Global Indices offering. We continue to focus on our Sales and Marketing efforts in new regions to introduce market participants to the unique value proposition of our unrivaled data offering.

### **Slide 11: Building an Unrivaled Global Derivatives & Securities Network**

During the second quarter we announced the launch of Cboe Global Listings, a first-of-its-kind global listings network which aims to facilitate worldwide access to capital and secondary liquidity for companies and ETFs. Our new listings offering draws on our deep markets expertise, regional experience in all the jurisdictions where we operate, and the combined strength of our global equities exchange network to

provide locally optimized and centrally coordinated listing services and support for issuers. The expansion of our listings business rounds out our global equities offering, helping to enable market participants around the globe to utilize Cboe markets for more uniform access to equities trading, market data and listings.

Performance in our Cash and Spot Markets reflected the overall muted volumes we saw across all global equity markets in the second quarter.

In Europe, the Cboe Europe Equities business increased second quarter market share by one percentage point year-over-year to 23.8%. Additionally, Cboe BIDS Europe experienced another strong quarter with 35.8% market share and remained the largest European block trading venue. Cboe Clear Europe market share grew to 33.8% in the second quarter, up from 31.3% in the prior year quarter.

During the quarter, Cboe Clear Europe also announced plans to introduce securities financing transactions, or SFTs, in 2024 subject to regulatory approvals. Cboe aims to bring this new service to the market to help ease capital requirements for market participants through a centrally cleared service for stock lending. SFT is yet another example of Cboe taking market feedback, leveraging our expansive ecosystem, and building tangible solutions for our customers.

Turning to Asia Pacific, Cboe Australia market share grew to 18.2% in the second quarter, up from 17.0% in the previous year. In Japan, equities market share was 4.1% during the second quarter, up from 3.5% in the second quarter of 2022, and we remain on track for the Cboe Japan technology migration and expected launch of Cboe BIDS Japan in the fourth quarter of this year, subject to regulatory approval. With the launch of Cboe BIDS Japan, the BIDS network will now extend to 7 of the top 10 global equity markets, creating a one-of-a-kind global equity block trading network.

In our global FX business, net revenues were up 7% year-over-year in the second quarter as the business expanded spot market share to a record 19.5%, up from 17% a year ago. Our NDF offering, which trades on Cboe SEF, our swap execution facility, continued to see strong results with volumes increasing 23% during the second quarter with ADV of \$937 million. To meet this increased customer demand, we launched a new London matching engine for Cboe SEF during the second quarter. With Asia currency pairs accounting for a significant portion of Cboe SEF volumes, this new matching engine is expected to enhance our service to customers based in Asia and Europe, further diversify order flow on the platform and create greater matching opportunities for our clients.

#### **Slide 12: Harvesting Investments Across Seasons to Drive Consistent Growth**

In summary, Cboe delivered another solid quarter, building on our record first quarter results. With our strong foundation of derivatives, cash and spot markets, coupled with our data and access solutions, we have the ability to continue to harness the power of these markets to create new products and services that deliver innovative products to our customers. We will continue to plant the seeds of opportunity that will help allow us to harvest investments across all seasons to drive consistent growth and value for our shareholders.

With that, I will turn it over to Jill.

#### **Slide 14: 2Q23 Financial Summary**

Ed, thank you for that kind introduction. I couldn't be more excited to build on the strong momentum at Cboe today. As Ed highlighted, Cboe posted a strong second quarter with adjusted diluted earnings per share up 7% on a year-over-year basis to \$1.78. The performance was led by continued strength from our derivatives franchise, as well as a steady contribution from our data and access solutions business. As we have done in prior quarters, we looked to maximize long-term shareholder value through monetizing

today's opportunities while investing in future growth initiatives. I want to highlight some high-level takeaways from the strong second quarter performance before providing a more detailed assessment of our segments:

Our second quarter net revenue increased 10% to finish at \$467 million, driven by the strength in our Derivatives Markets category and the solid results from our Data and Access Solutions business.

Specifically:

- Derivatives Markets produced 21% year-over-year organic net revenue growth in the second quarter as the market continued to find increasing utility in our toolkit of proprietary products.
- Data and Access Solutions net revenues increased 9.4%, up 7.4% on an organic basis during the quarter. We are pleased with the sequential organic revenue improvement in the second quarter and remain excited by the catalysts we see in the second half of the year.
- Cash and Spot Markets net revenues decreased 11% during the quarter, or 12% on an organic basis, as the trading environment remained muted across the globe.
- Adjusted operating expenses increased 22% to \$192 million;
- And Adjusted EBITDA of \$293 million grew a solid 7% versus the second quarter of 2022.

### **Slide 15: 2Q23 Net Revenue by Segment and Key Drivers**

Turning to the key drivers by segment. Our press release and the appendix of our slide deck include information detailing the key metrics for each of our business segments, so I'll provide some summary thoughts:

- The performance of our options segment was again very robust, delivering the highest growth of any segment for the quarter, with net revenue increasing 20%. The results were driven by strong volumes in our index business and favorable revenue per contract – or RPC – trends given the mix shift to index options,
  - Total options ADV was up 10% as our higher-priced index options ADV increased 38% over 2Q22 levels,
  - RPC moved 16% higher given a continued positive contribution of higher-capture index products,
  - And market data and access and capacity fees were up 11% and 5%, respectively, as compared to 2Q22.
- North American equities net revenue was down 2% on a year-over-year basis. Results benefited from NEO, which was acquired in June of 2022, contributing \$3.6 million in inorganic net revenue during the quarter. In addition, access and capacity fees increased 6% as compared to 2Q22 and market data increased 1% as proprietary market data growth outpaced a decline in SIP revenues. Net transaction fees were down 13% given softer industry volumes and market share in our US businesses. And while our US on-exchange market share has trended lower on an absolute basis, our share has remained relatively constant when adjusting for the increase in off-exchange market volume and auction activity seen during the second quarter.
- The Europe and APAC segment reported a 5% year-over-year decline in net revenue, impacted largely by softer industry volumes in Europe. The lower activity levels were partially offset by a nearly one percentage point increase in market share on a year-over-year basis. And Cboe Clear Europe also grew market share during the quarter from 31% to 34%.
- Second quarter net revenue was down 1% in the Futures segment as a 3% decrease in net transaction fees was partially offset by an increase in access and capacity fees. Lower volumes were the primary driver of the decline in net transaction fees, falling 11% during the quarter. The decline

in activity was partially offset by a 9% increase in RPC, helped by pricing tweaks we made in the VIX complex in April of this year. On the non-transaction side, access and capacity fees continued to perform well, up 6% versus the second quarter of last year.

- And finally, net revenue in the FX segment was up a solid 7% as compared to last year, marking the ninth straight quarter of year-over-year net revenue gains. Net transaction fees revenue was up 6% as average daily notional value increased by 7% and market share hit another record at 19.5% for the quarter.

#### **Slide 16: Grew Data and Access Solutions Net Revenue 9% YoY**

Turning now to Cboe's Data and Access Solutions business, net revenues were up a solid 9.4% in the second quarter, up 7.4% on an organic basis. Net revenue growth continued to be driven by additional subscriptions and units, accounting for 77% of organic access fee growth and 63% of organic market data growth in the second quarter.

We are pleased with the sequential acceleration in organic net revenue growth and remain confident in our ability to hit our full year guidance range of 7-10%. Over the second half of the year we expect solid contributions from:

- Proprietary data sales, benefiting from the sustained growth across our derivatives complex. We also anticipate solid trends from Cboe Global Indices with good momentum around index licensing.
- In Australia, we saw a solid uptick in data sales and access since the migration, in line with what we have witnessed following past technology migrations. We expect that momentum to continue, adding to the enhanced distribution capabilities that Cboe Global Cloud presents, providing incremental sales potential for our suite of data products.
- We also expect to make modest pricing increases in areas where our pricing has been consistent for many years, but the utility being offered has increased dramatically. Following the selective enhancements, our products are expected to remain competitively priced relative to peers, and we remain focused on the value proposition for our customers.

#### **Slide 17: 2Q23 Adjusted Operating Expenses Up 22%, Driven by Acquisitions and Compensation and Benefits**

Turning to expenses, total adjusted operating expenses were approximately \$192 million for the quarter, up 22% compared to last year. Excluding the impact of acquisitions owned less than a year, adjusted operating expenses were up 19% or \$30 million for the quarter, largely reflecting:

- higher headcount as compared to the second quarter of last year,
- an increased travel and promotional spend given our 50<sup>th</sup> anniversary celebration and increased corporate brand marketing costs, and
- the second quarter also included a one-time \$5 million true-up in June to reclassify certain capitalized charges to operating expenses in the technology support services line. Note that we do not expect any further adjustments for previously capitalized charges to impact our expense or capitalized charges moving forward.

#### **Slide 18: Adjusted Operating Expense Bridge**

Moving to our expense guidance, we are lowering our full year 2023 expense guidance range to \$766 to \$774 million from \$769 to \$779 million. The three basic components of the year-over-year increase are outlined on slide 18 of our earnings presentation – expenses from 2022 acquisitions, growth investments, and core expense growth.

Looking at the details of our three expense categories:

- We expect the two 2022 acquisitions to add approximately \$30-31 million in incremental expenses for 2023, below our previously expected range of \$33-35 million - as hiring slowed in our digital business in part due to ongoing regulatory uncertainty. While we are still incredibly committed to the digital business, we continue to watch the regulatory landscape closely and adjust our spending to match the revenue environment.
- Moving on to growth-generating investments, we anticipate that the investments we are making in the business to help drive incremental revenue to our bottom line will be in the range of \$25-27 million. Our new range is roughly \$3 million lower than our prior range, but we remain committed to investing in high return areas like DnA expansion, a more aggressive marketing campaign and targeted product and services R&D efforts across our ecosystem.
- The last component, is our core expense growth, totaling approximately \$59-64 million. As a reminder, this includes our expectations for CAT project costs in 2023, investments in infrastructure and inflationary factors on our business. Our updated estimates factor in an incremental \$5 million for CAT expenses as well as the one-time reclassification of certain capitalized charges to operating expenses of \$5 million. These higher charges were partially offset by lower expected depreciation and amortization expenses.

Moving forward, we will continue to put capital to work in value-enhancing ways across our ecosystem, while striving to strike the right balance between the revenue opportunity available and the expense outlay required to enhance value for shareholders.

### **Slide 19: Updated 2023 Guidance**

Looking at our full-year guidance more broadly on the next slide, we are making some positive revisions to reflect our solid YTD performance and our constructive forward outlook across our businesses.

At a high level, we are reaffirming our organic total net revenue growth range of 7 to 9 percent for 2023, but we now expect to finish at the higher end of the range for the year. This remains above our medium-term guidance of 5 to 7 percent introduced at our investor day a year and a half ago, a function of the meaningful engagement we have seen across the toolkit of products at Cboe.

As mentioned earlier, we are reaffirming our DnA organic net revenue growth rate of 7 to 10 percent for 2023, in line with our medium-term expectations.

Given the company's positive marks on its investment in the 7Ridge Fund (which owns Trading Technologies), we now expect the other income benefit from minority investments to be in the range of \$34-40 million, up from our prior guidance calling for \$27-33 million.

We are lowering our full year guidance on depreciation and amortization to \$40-\$44 million from \$48-52 million, and we expect the effective tax rate on adjusted earnings (under the current tax laws) to come in at 28.5 to 30.5% in 2023, unchanged from our previous guidance.

Outside of our annual guidance, net interest expense for the second quarter of 2023 was \$13.9 million. For 3Q, we expect net interest expense to be in the range of \$12 to \$13 million.

### **Slide 20: Efficient Allocation of Capital to Create Long-Term Shareholder Value**

On the capital front, our focus has been, and remains, maximizing long-term shareholder value through the effective use of our capital. In the second quarter, we returned a total of \$61 million to shareholders in the form of a \$0.50 per share quarterly dividend and \$8 million in the form of share repurchases.

Our leverage ratio declined slightly to 1.4x from 1.5x in the prior quarter as we paid down \$140 million on our term loan facility that matures in December of this year. We remain comfortable with our debt profile, having locked in low medium to longer term fixed rates, averaging below 3% on nearly 90% of our total debt.

### **Slide 21: Positioned to Innovate, Integrate and Grow to Create Value**

In summary, the second quarter of 2023 was another solid quarter at Cboe. I could not be more excited about the outlook for the company, and I look forward to delivering solid returns for shareholders in the quarters ahead.

Now I'd like to turn it back over to Ed for some closing comments before we open it up to Q&A.

### **Closing Remarks**

Thanks, Jill.

As you can see, it has been a busy first half of the year and I want to thank the entire Cboe team for their hard work in consistently delivering outstanding results. We head into the final half of the year on stronger footing than ever, and we look forward to continuing to execute on our growth opportunities ahead.

### Cautionary Statements Regarding Forward-Looking Information and Trademarks:

*This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that involve a number of risks and uncertainties. You can identify these statements by forward-looking words such as "may," "might," "should," "expect," "plan," "anticipate," "believe," "estimate," "predict," "potential" or "continue," and the negative of these terms and other comparable terminology. All statements that reflect our expectations, assumptions or projections about the future other than statements of historical fact are forward-looking statements. These forward-looking statements, which are subject to known and unknown risks, uncertainties and assumptions about us, may include projections of our future financial performance based on our growth strategies and anticipated trends in our business. These statements are only predictions based on our current expectations and projections about future events. There are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from those expressed or implied by the forward-looking statements.*

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*Some factors that could cause actual results to differ include: 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 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*

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