Cboe Global Markets, Inc. Third Quarter 2022 Earnings Call November 4, 2022

Slide 2: Agenda- Ken Hill

Good morning and thank you for joining us for our third 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, Brian Schell, our Executive Vice President, CFO and Treasurer, will provide an overview of our financial results for the quarter as well as an update on our 2022 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: Ed Tilly, Chairman and CEO

Thank you, Ken.

Good morning and thanks for joining us today.

Slide 5: 3Q22: Record Levels of Revenue & Earnings Generation Continue

I am pleased to report on an outstanding third quarter at Cboe Global Markets. During the quarter, we achieved record-setting revenue results, growing net revenue 20% year-over-year to a record \$442 million, and growing adjusted diluted EPS by 20% to a record \$1.74. These record results were driven by strong volumes across our derivatives franchise, solid growth in our data and access solutions business, and increased trading activity in our cash equities businesses.

Our Derivatives business delivered another strong quarter, driven by robust performance in our index options franchise, specifically SPX options, as well as a solid increase in multi-listed options. Record activity across our SPX complex helped drive a 67% year-over-year increase in average daily volume in the SPX contract for the quarter, with third quarter ADV reaching 2.4 million contracts, up from 1.4 million contracts one year ago. ADV for VIX Options increased 2% year-over-year in the third quarter, and growth accelerated to start the fourth quarter with October ADV finishing 27% above third quarter levels. Multi-listed options trading on Cboe increased 8% year-over-year to an ADV of 10.6 million contracts.

Our Cash and Spot Markets business was solid during the third quarter with net revenue increasing 5%, including organic net revenue growth of 3% year-over-year.

Similar to last quarter, our Data and Access Solutions business posted strong results with the integration of our recent acquisitions continuing to fuel the durability of this business. Year-over-year net revenue increased 15%, with 12% organic net revenue growth.

Slide 6: Top Strategic Growth Priorities

We remain focused on the significant opportunities we see in three core areas of our business: Derivatives, Data and Access Solutions, and Cboe Digital.

We fuel these opportunities by executing against our ongoing strategy which remains consistent: leverage our superior technology, further strengthen our core proprietary products, increase recurring revenue, and expand our product line by geography and asset class.

I'll touch on Derivatives and Data and Access Solutions in a moment, but first I wanted to provide an update on Cboe Digital. During the quarter, we were pleased to announce the initial group of firms that

intend to become equity investors in the Cboe Digital business, which includes a diverse range of market participants. We have finalized the material investment terms and anticipate closing partner syndication very soon. We are actively onboarding partners to the Cboe Digital platform and we look forward to leveraging the combined expertise of these firms to help accelerate Cboe's vision of a transparent and well-regulated digital asset marketplace for participants across the globe.

Last week we signed a Memorandum of Understanding with SBI Holdings, a pioneer of internet financial services and the largest online brokerage in Japan, laying the foundation for potential collaboration in the areas of traditional and digital finance. The MoU creates the opportunity for Cboe and its Japanese equities market, Cboe Japan, to work together with SBI to leverage the expertise of our respective companies in mutually beneficial ways to extend the reach of our products, services and customer bases. Also, we see a wide range of potential opportunities to work with SBI on the development of an institutional digital asset infrastructure. SBI has established a global leadership position in this area through its affiliate SBI Digital Asset Holdings.

Slide 7: Global Derivatives: Extending the Market Potential

We saw positive momentum in our derivatives business as we continued to innovate and expand access to our core product suite. The enhancements we have recently made, including the addition of Tuesday and Thursday expirations for SPX and Mini SPX options, known by the ticker XSP and 1/10th the size of the standard SPX options contract, continued to reshape trading behavior and expand the overall market.

Two weeks ago we hosted our global Risk Management Conference where traders, investors, strategists and academics from around the world gathered to discuss the challenges and opportunities for managing risk in the current dynamic market environment. It was fantastic to hear from industry participants how they are navigating today's markets amid a backdrop of rising inflation, interest rates, and geopolitical tensions.

One of the key themes discussed at the conference was the increased usage of shorter-dated options. The strong volume in SPX options activity I noted earlier was driven by trading in our short-dated SPX Weeklys options as investors navigated rapidly changing market conditions. We've also seen volumes in Mini SPX increase by over 50 percent since adding Tuesday and Thursday expirations last month.

Additionally, we've seen a surge in users opening and trading positions on the same day as contract expiry. These zero days-to-expiration contracts have become the fastest-growing segment of the U.S. options business. Adding Tuesday and Thursday expirations for SPX and Mini SPX has enabled market participants to trade zero days-to-expiration contracts any day of the week. Volume in zero days-to-expiration options

in SPX has increased steadily month-over-month this year, reaching a record ADV of 1.2 million contracts in September, which represented over 44% of total SPX options volume.

With our diverse index options product suite, we are well positioned as investors of all shapes and sizes continue to embrace shorter-duration trading strategies as they navigate this volatile market environment.

Given our global footprint, we are continually looking for ways to increase access to our proprietary suite of products in every region. Our efforts to expand trading hours in SPX and VIX options to 24 hours a day, five days a week, have translated to greater client adoption and incremental volumes. In the third quarter, ADV in Global Trading Hours for SPX options increased 219% year-over-year and VIX options increased 71%. Those trends have further accelerated in October with Global Trading Hours ADV up 63% in SPX options and 36% in VIX options as compared to third quarter levels.

Next month, we plan to extend trading in Mini SPX options to encompass Global Trading Hours, enabling global market participants to have access to this unique product whose smaller contract size allows for greater accessibility and flexibility.

Slide 8: DnA – Driving Durable Growth

Our Data and Access Solutions business continued to perform exceptionally well and we have strong conviction in this business going forward as we plan to further unlock value and revenue opportunities created through the integration of our recent acquisitions.

To that point, in September we launched the Cboe One Canada Feed, a new real-time market data feed that combines NEO and MATCHNow data to provide a comprehensive view into the Canadian equities market, further expanding our portfolio of market data solutions globally.

Additionally, we are focused on uniquely packaging and delivering data to meet the needs of our diverse customer base. Last month we added pan-European Equities market data to Cboe Global Cloud, a real-time data streaming service that provides simple, efficient access to Cboe's robust suite of market data.

Through our bundled data offerings and cloud strategy we are able to package high-quality data from across our markets and deliver it to customers globally in a consistent and cost-effective manner, extending the reach of our content and the durability of our Data and Access Solutions business.

Slide 9: Building an Unrivaled Global Derivatives and Securities Network

In each region we operate, we continued to expand our footprint and unique product set, enabling us to meet the needs of an increasingly diverse set of customers around the world.

In Europe, Cboe Europe Equities delivered its highest quarterly market share in nearly seven years, reaching 24.6% for the third quarter, making it Europe's largest stock exchange for the quarter. Our analytics-driven campaign in the region continues to encourage additional order flow to our exchange and extend our leadership position, with overall October market share up nearly 200 basis points from third quarter levels to an all-time high of 26.5%. Additionally, Cboe BIDS Europe remained the largest block trading platform during the third quarter, reaching a record 35% market share of the European block-trading market.

Moving to Asia Pacific, Cboe Japan market share increased to 4.4%, up from 2.4% in the third quarter of 2021, driven by existing retail partners in Japan including Rakuten, as well as a new liquidity provider program introduced earlier this year. These efforts in Japan are an early demonstration of our commitment to bringing healthy competition to the vital Japanese market. In Australia, market share grew to 16.7%, up from 15.7% year-over-year and we are on track to migrate Cboe Australia to our proprietary technology in February 2023, as well as extend the BIDS network to the region with the launch of Cboe BIDS Australia, both subject to final regulatory review and approval.

Turning to North America, the power of the BIDS network propelled Cboe BIDS Canada to a record quarter with 59 million shares traded. With the addition of NEO, our overall equities market share in Canada grew to 12.2%. We remain focused on our integration plan to help us maximize the outstanding potential we see for our global equities and listings businesses.

During the quarter, we conducted our first coordinated launch of ETFs on both sides of the border with the listing of the Emerge ETFs on our Canadian and U.S. stock exchanges. This dual listing was the first step towards realizing our vision to become an unparalleled global listings network that creates connections across borders and provides new capital formation and investment opportunities for capital-raisers and investors around the world. These listings added to the strength of our ETP listings business, where we remained the second-largest ETP listing venue in the U.S. as of quarter end.

Finally, our global FX business saw strong volumes as monetary policy divergence rattled markets with average daily notional volume topping \$40 billion during the quarter with record spot market share of 17.8%. We also saw our Full Amount offering, which provides clients with a solution for larger order risk transference with low market impact, increase 24% year-over-year to reach a new record of \$12.3 billion ADNV in the third quarter. Our NDF offering also saw record volumes, increasing 102 percent year-overyear to \$953 million ADV. With our diverse product set within FX, we are excited about the opportunities that lie ahead for the FX business.

These efforts to expand our footprint through an on-the-ground global presence also serve to feed the growth of our global flagship derivatives and DnA products, which are accessible around the world and around the clock.

Slide 10: Focus on Integration: Strategic M&A is a Core Competency of Cboe

Importantly, while achieving strong results we continued to successfully execute on key initiatives to advance our corporate strategy to innovate, integrate and grow our business globally.

Our strength lies in our ability to successfully combine strategic acquisitions with organic growth initiatives. We remain laser-focused on the seamless integration of our recent acquisitions and are making excellent progress around the globe.

As we've stated before, we approach the integration of technology and teams holistically, avoiding siloes while maximizing synergies, both revenue and cost. This approach creates workflow efficiencies for customers, harmonizing technology and access points, creating a better experience for them.

Slide 11: Harvesting Investments Across Seasons to Drive Consistent Growth

The last several years have been very exciting as we've evolved our business, broadened our geographic reach and extended access to our unique set of products and services around the globe. Our global presence gives us the unmatched ability to efficiently scale and expand our business in new ways.

We remain focused on creating a healthy ecosystem of products and services that create short, medium and long-term opportunities, helping to enable a cadence of consistent growth.

With that, I'll turn it over to Brian.

Slide 12: Brian Schell Title Slide

Thanks Ed, and good day to all of you. Let me remind everyone that unless specifically noted, my comments relate to 3Q22 as compared to 3Q21 and are based on our non-GAAP adjusted results.

Slide 13: 3Q Financial Summary

As Ed highlighted, Cboe posted an exceptionally strong third quarter. Adjusted diluted earnings per share was up 20% on a year-over-year basis to a record \$1.74. The quarter was characterized by the outsized

contribution from our derivatives franchise, but our data and access solutions results were strong, and cash and spot markets performed solidly for the quarter, each playing a notable role in our record net revenue results. The supportive macro environment also provided us the opportunity to advance many of our initiatives across geographies and asset classes, some having an immediate impact in the quarter, and others we expect to make measured progress against over the medium- and longer-term. I want to quickly touch on some of the high-level takeaways from the third quarter before delving into the segment performance:

- Our net revenue increase of 20% set another quarterly record at \$442 million, led by the strength in our Derivatives Markets category and steady performance in Data and Access Solutions and Cash and Spot Markets. Specifically:
 - Derivatives Markets produced 31% year-over-year organic net revenue growth in the third quarter given the continued strength of our index business
 - Data and Access Solutions net revenues were up 15%, up 12% on an organic basis, driven again by strong new subscription and unit growth, and
 - Cash and Spot Markets produced 5% net revenue growth for the quarter, up 3% on an organic basis, on the back of a strong macro backdrop and market share gains in many of our businesses.
- Adjusted operating expenses increased 23% to \$173 million;
- Adjusted EBITDA of \$287 million, also another quarterly high, was up 20%;
- And last, as noted previously, our adjusted diluted earnings per share was a record \$1.74, up 20% compared to last year's quarterly result.

Slide 14: 3Q22 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 just provide summary thoughts:

- As mentioned earlier, we saw impressive year-over-year growth in many of our segments during the quarter.
- Options again delivered the strongest growth with net revenue increasing 33%. The results were
 driven by robust volumes, increased market share, and higher revenue per contract or RPC given
 the favorable mix shift trends:
 - Total options ADV was up 15% as our higher-priced index options ADV increased 49% over
 3Q21 levels,
 - RPC moved 21% higher given a continued positive mix shift to index products, and a stronger mix of higher-priced SPX options in our index business,
 - And lastly, we continued to benefit from another quarter of double-digit growth in market
 data and access and capacity fees, up 26% and 25%, respectively, as compared to 3Q21.
- North American equities net revenue increased by 13% year-over-year. Solid industry volumes -- up 12% as compared to 3Q21-- helped drive the segment uptick. NEO, which was acquired in June of this year, contributed \$5.4 million in net revenue during the quarter. On the non-transaction side, access and capacity fees increased 10% as compared to 3Q21 and market data was up 7%.
- The Europe and APAC segment reported a year-over-year decline in net revenue for the third quarter of 8%. However, adjusting for a \$7.1 million FX impact given the stronger dollar during the quarter, net revenue grew by nearly 6% on a constant-currency basis, helped by a 6.4 percentage point increase in market share on a year-over-year basis, making Cboe Europe the largest stock exchange in Europe for the quarter.
- Third quarter net revenue decreased 2% in the Futures segment as transaction fees declined on a year-over-year basis. Volumes fell 8% during the quarter, partially offset by a 5% improvement in

RPC metrics. Non-transaction revenues continued to tick higher with access and capacity fees up 2% and market data up 12% as compared to 3Q21.

 And finally, net revenues in the FX segment were up a robust 21% as compared to 3Q21. Net transaction and clearing fees benefited from a 27% increase in average daily notional value and higher levels of market share, hitting a record 17.8% for the quarter.

Slide 15: Grew Data and Access Solutions Net Revenue 15% YoY

Cboe's Data and Access Solutions net revenue growth has continued its strong momentum in 3Q, posting a 15% year-over-year increase, and an attractive 12% growth rate on an organic basis. As we have seen in past quarters, net revenue growth was overwhelmingly driven by additional subscriptions and units, accounting for over 60% of the market data growth and 95% of the access fee growth for the quarter, as opposed to pricing changes. More specifically we saw:

- Robust physical and logical port usage in our options and equities businesses driven by increased demand for trading capacity.
- And on the market data side, the equities top-of-book and options depth of book products continued to perform well.

We anticipate trends will remain healthy in the Data and Access Solutions business into yearend as we lap more meaningful comps from the fourth quarter of last year. We are reiterating our targeted 2022 DnA, organic, net revenue growth rate range of 10 to 13 percent, and remain confident in our 7 to 10 percent medium-term guidance range outlined at our November 2021 investor day.

Slide 16: 3Q22 Adjusted Operating Expenses Up 23%, Driven by Acquisitions and Compensation and Benefits

Turning to expenses, total adjusted operating expenses were approximately \$173 million for the quarter, up 23% compared to last year. Excluding the impact of acquisitions owned less than a year, adjusted operating expenses were up 18% or \$25 million for the quarter, largely reflecting higher headcount as compared to the third quarter of last year, as well as some inflationary comp adjustments and additional incentive compensation accrual in 3Q22.

Slide 17: Adjusted Operating Expense Bridge

Expense Guidance

Moving to our expense guidance, we are reducing our full year 2022 expense guidance range to \$651 to \$659 million, down from our prior guidance of \$659 to \$667 million. The decrease in expense guidance is a product of diligent expense management as well as some delayed hiring for open positions as a result of a competitive labor market. The favorable expense trends are more than offsetting some incremental build in our employee incentive compensation given our strong year-to-date financial performance and 4Q expectations. And while our operating expense guidance is moving lower for the year, we are not wavering in our commitment to invest in our business over the longer term. As reflected in our guidance, we expect to see incremental growth in our expense base in the fourth quarter as we work to fill open positions and invest behind the revenue generating and infrastructure initiatives we outlined to start the year. While we're taking the current inflationary environment into our planning, we will continue to manage our cost base judiciously but remain committed to investing aggressively behind high-return, high-conviction, high-growth investments. This includes the completion of our integration activities as well as the <u>organic</u> expansion of our derivatives, Data and Access Solutions, and digital networks. We look forward to sharing more about our 2023 guidance at our fourth quarter earnings call.

Slide 18: Updated 2022

Now turning to a summary of full-year guidance on the next slide, I want to call out some updates given the year-to-date strength and confidence we have in the current operating environment. As noted

previously, we continue to anticipate DnA organic net revenue growth in 2022 will be in the 10 to 13 percent range and remain confident in our medium-term guidance of 7 to 10 percent.

We continue to expect acquisitions held less than a year to contribute between 2 and 3 percentage points to total net revenue growth in 2022.

Most importantly, we are increasing our overall organic net revenue growth target by five percentage points at the midpoint to 14 to 16 percent, up from our prior guidance of 9 to 11 percent for 2022.

Lastly, I want to note that our full year guidance on depreciation and amortization and the effective tax rate on adjusted earnings (under the current tax laws) remain unchanged, but we are lowering our cap-ex guidance range to \$43 to \$48 million from our prior guidance of \$47 to \$52 million.

Interest Expense

Outside of our annual guidance, our interest expense for the third quarter of 2022 was \$15.3 million. Moving forward, we expect interest expense to be in the range of \$16 - \$17 million for 4Q22.

The last thing I will note as you think about your financial models moving forward is that during the third quarter we recognized an \$8.3 million unrealized gain on the Company's investment in 7RIDGE Fund on our "net other income" line. This was an investment we announced in the fourth quarter of last year, with Cboe becoming a limited partner investing in the acquisition of Trading Technologies. Moving forward, we expect that this investment will be re-valued on a more regular basis in 2023. We do not expect to see any material impact in 4Q22 and will look to provide some updated guidance on 2023 when we roll out FY2023 guidance with 4Q22 results.

Slide 19: Efficient Allocation of Capital to Create Long-Term Shareholder Value

On the capital front, our focus has been, and remains, maximizing shareholder value through the effective use of our capital. In the third quarter, we returned a total of \$53 million to shareholders in the form of a

\$0.50 per share quarterly dividend. We remain well positioned to invest in the business, support our dividend, and opportunistically repurchase shares - with \$233 million in remaining capacity on our share repurchase authorization.

Our leverage ratio decreased to 1.7x at the end of the third quarter, down from 1.9x at June 30, as we repaid \$100 million of our term loan facility. Overall, we remain committed to maintaining a flexible balance sheet and striving to put capital to work in the most value enhancing way possible for shareholders.

Slide 20: Positioned to Innovate, Integrate and Grow to Create Value

In summary, the momentum in our business is evident in the strong third quarter results. We could not be happier with the progress we have made year-to-date and look forward to continuing to invest behind the many attractive opportunities we have to enhance shareholder value in the quarters to come.

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

In closing, I would like to thank our team for the incredible progress made throughout the third quarter. We have much to be proud of as we expand our business and continue to deliver on our goals to create a more sustainable future. As an operator of markets around the globe, we continue to be focused on our carbon footprint, as well as making a positive impact in the communities around the world in which we live and work.

We have a lot of momentum going into the final quarter of the year and we are well-positioned for a strong finish to 2022.