First Quarter 2022 Earnings Presentation

April 29, 2022



### Agenda



♦ Strategic Review
 Edward Tilly
 Chairman, President and Chief Executive Officer
 ♦ Financial Review
 Brian Schell
 Executive Vice President, Chief Financial Officer and Treasurer
 ♦ Questions & Answers
 Edward Tilly
 Brian Schell
 Chris Isaacson
 Executive Vice President, Chief Operating Officer
 Dave Howson
 Executive Vice President, President Europe and Asia Pacific

Executive Vice President, Chief Strategy Officer

**John Deters** 

# **Cautionary Statements Regarding Forward-Looking Information**



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 about the future other than statements of historical fact are 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.

We operate in a very competitive and rapidly changing environment. New risks and uncertainties emerge from time to time, and it is not possible to predict all risks and uncertainties, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

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 risks, insider threats and unauthorized disclosure of confidential information; our ability to attract and retain skilled management and other personnel; increasing competition by foreign and domestic entities; our dependence on and exposure to risk from third parties; fluctuations to currency exchange rates; factors that impact the quality and integrity of our indices; the impact of the novel coronavirus ("COVID-19") pandemic; 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 and default risks, associated with operating a European clearinghouse; our ability to accommodate trading our learning 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 monito

We do not undertake, and we expressly disclaim, any duty to update any forward-looking statement whether as a result of new information, future events or otherwise, except as required by law. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof.

This presentation includes market share, financials and industry data that we obtained from industry publications and surveys, reports of governmental agencies, third-parties and internal company surveys. Industry publications and surveys generally state that the information they contain has been obtained from sources believed to be reliable, but we cannot assure you that this information is accurate or complete. We have not independently verified any of the data and financials from third-party sources nor have we ascertained the underlying economic assumptions relied upon therein. Statements as to our market position are based on the most currently available market data. While we are not aware of any misstatements regarding industry data and financials presented herein, our estimates involve risks and uncertainties and are subject to change based on various factors.

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# **Strategic Review and Outlook**

Edward Tilly Chairman, President and CEO

### 1Q22: A Quarter of Record Revenue and Earnings



Net revenues grew 14% YoY, backed by strong transaction and non-transaction growth

- 5% increase in Cash and Spot Markets net revenue, 2% organic net revenue growth 1
  - ❖ ADNV traded on Cboe European Equities up 71%
  - Includes associated transaction and clearing fees, the portion of market data fees relating to associated U.S. tape plan market data fees, associated regulatory fees, and associated other revenue from Cboe's North American Equities, Europe and Asia Pacific, and Global FX segments.
- 18% increase in Derivative Markets organic net revenue<sup>1</sup>
  - ❖ ADV up 27% in index options and 2% in multi-listed options
  - Includes associated transaction and clearing fees, the portion of market data fees relating to associated U.S. tape plan market data fees, associated regulatory fees, and associated other revenue from Cboe's Options, Futures, and Europe and Asia Pacific segments.
- 18% increase in Data and Access Solutions net revenue, 12% organic net revenue growth<sup>1</sup>
- Continued expansion in transaction capabilities driving increased access and capacity units
- Comprehensive suite of data solutions across markets and asset classes is translating to strong user growth
- Includes access and capacity fees, proprietary market data fees, and associated other revenue across Cboe's five segments.



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### **Top Strategic Growth Priorities**



	Key Trends	Market Opportunity	Sizing the Growth Potential	Cboe Progress
Data and Access Solutions	<ul> <li>Globalization</li> <li>Access to multi-asset trading capabilities</li> <li>Rise of retail</li> <li>Demand for data</li> <li>ESG</li> </ul>	<ul> <li>\$33bn annual spend on financial market data<sup>1</sup></li> <li>\$4bn annual spend in indices<sup>1</sup></li> </ul>	◆ Targeting organic net revenue growth of 7-10% annually over the medium term <sup>4</sup>	<ul> <li>Delivered 12% organic net revenue growth<sup>6</sup> in 1Q22</li> <li>Increased targeted DnA organic net revenue growth in 2022<sup>4</sup> to 8-11%</li> </ul>
Derivatives	<ul> <li>Globalization</li> <li>Access to multi-asset trading capabilities</li> <li>Rise of retail</li> <li>Demand for data</li> <li>ESG</li> </ul>	<ul> <li>Targeting &gt;150mn retail accounts for Nanos²</li> <li>Pan-European equity and index options market is ~1/8 the size of the U.S. market</li> </ul>	◆ Derivatives initiatives expected to contribute 2- 4% of total organic net revenue growth over the medium term <sup>4</sup>	<ul> <li>Nanos successfully launched 3/14</li> <li>24x5 trading extension on pace to double SPX global trading hour vol</li> <li>Mar22 Euro derivs volumes up 24% from Jan22 levels</li> <li>Tuesday weekly expirations went live on 4/18, Thursday expirations scheduled for 5/11 launch</li> </ul>
Cboe Digital <sup>3</sup>	<ul> <li>Globalization</li> <li>Access to multi-asset trading capabilities</li> <li>Rise of retail</li> <li>Demand for data</li> </ul>	<ul> <li>Demand for a trusted, transparent and regulated digital asset marketplace</li> </ul>	◆ Expecting >25% market CAGR over next 3-5 years <sup>5</sup>	<ul> <li>Expected to close in 2Q22</li> <li>Engaging customers and partners</li> <li>Active in crypto regulation discussion</li> </ul>
	Medium-Term O	rganic Total Net Reven	ue Growth Rate of 5-7%	<sup>4</sup> Annually

<sup>&</sup>lt;sup>1</sup>Based on Burton-Taylor research reports

<sup>&</sup>lt;sup>2</sup>Estimate based on 2021 analysis of top 4 retail brokers' platforms

<sup>&</sup>lt;sup>3</sup>The transaction is expected to close in 2Q22, subject to customary closing conditions

<sup>4</sup>See appendix for "Non-GAAP Information" for disclosures on growth targets; all medium-term guidance as of 2/4/22, all 2022 guidance as of 4/29/22 <sup>5</sup>Based on publicly available information and Cboe estimates

<sup>&</sup>lt;sup>6</sup> See appendix for "Non-GAAP Information."

### Global Derivatives: Positioned To Drive Growth



Increasing access for market participants and leveraging our core products

#### 24x5

#### Providing Attractive Return on Investment

- Expanded trading hours: Global Trading Hours were expanded on November 21<sup>st</sup> to nearly 24x5 for SPX and VIX options. Early adoption has been solid.
- **Early Returns:** Uptick in activity has provided an attractive early return on invested capital.

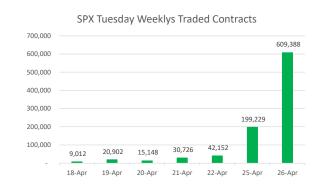
# Tuesday / Thursday Expiry Leveraging Choe's Core Strength

- Tuesday expirations: S&P 500 Index (SPX) Weeklys with Tuesday expirations began trading on April 18 with strong demand, leveraging success seen in M/W/F options contracts, a material driver of volume in the SPX complex in recent years.
- Thursday expirations: Cboe plans to launch Thursday expirations on Wednesday, May 11.

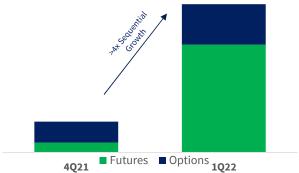
### **European Derivatives Gaining Traction, More Innovation Coming**

**New countries added:** This week added four single country benchmarks: Cboe Italy 40, Cboe Norway 25, Cboe Spain 35 and Cboe Sweden 30. CEDX currently has 20 products available for trading.

#### SPX GTH Volume and % of Total Volume 30,000 1.80% 1.60% 25,000 1.40% 20,000 1.20% 1.00% 15,000 0.80% 10,000 0.60% 0.40% 5,000 0.20% 0.00% 1Q21 2021 3Q21 4Q21 1Q22 SPX (LHS)



### Quarterly European Derivatives Volume



### Planned Acquisition of ErisX



Our planned acquisition of ErisX<sup>1</sup>, coupled with broad industry participation and support, will help us bring the regulatory framework, transparency, infrastructure and data solutions of traditional markets to the digital asset space



- ErisX operates a U.S. based digital asset spot market, a regulated futures exchange and a regulated clearing house
- As part of the acquisition, Cboe plans to create a new subsidiary, Cboe Digital, to operate the digital asset business

#### **Equity Partnerships**

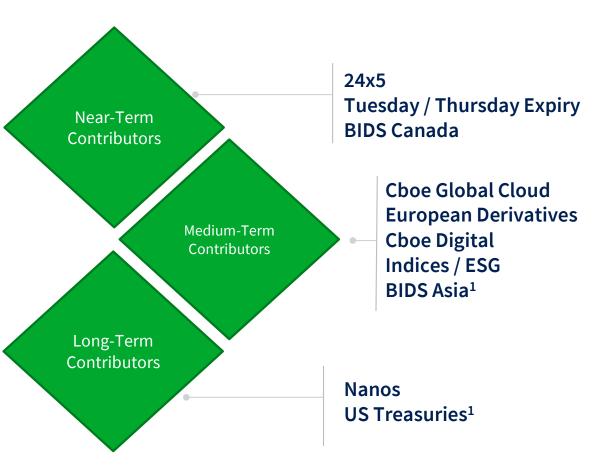
- Syndicating to industry partners committed to ongoing engagement and collaboration with Cboe Digital to help drive the growth of Cboe Digital and digital asset ecosystem
- Based on demand to participate on the platform

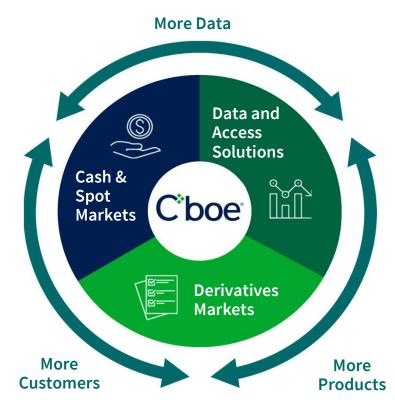
#### ErisX<sup>1</sup> is expected to provide Cboe access to the entire crypto ecosystem in one step:

Spot Trading	S	Data olutions	Derivatives Trading		Clearing	
Key Features						
Marketplace		Da	ta	Clearing & Settlement		
<ul> <li>Single platform for spot</li> </ul>		<ul> <li>Cloud based data</li> </ul>		◆ Cloud based, real-time		
and futures		<ul> <li>Transparent price discovery</li> </ul>		clearing		
<ul> <li>Proprietary matching</li> </ul>	engine	◆ Bid/ask info included		<ul> <li>Physical delivery for futures</li> </ul>		
◆ 24 x 7 capabilities		<ul> <li>Broad base of liquidity for</li> </ul>		<ul> <li>Hot and cold wallet storage</li> </ul>		
• Central limit order boo	ok	efficient price discovery		<ul> <li>Margin (application pending)</li> </ul>		
<ul> <li>Block Trading facility</li> </ul>		<ul> <li>Reliable and resilient</li> </ul>		<ul> <li>Sophisticated risk</li> </ul>		
◆ Accessible contract sizes				mana	agement	

### Harvesting Investments Across Seasons to Drive Consistent Growth







<sup>1</sup> Subject to regulatory approvals



# Financial Overview and Guidance

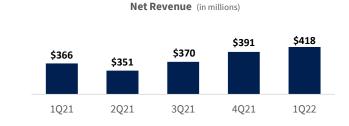
Brian Schell EVP, CFO and Treasurer

### **1Q22 Financial Summary**



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# \$281MM Adjusted EBITDA<sup>1</sup> +12% Y/Y (Adjusted EBITDA margin of 67.3%)



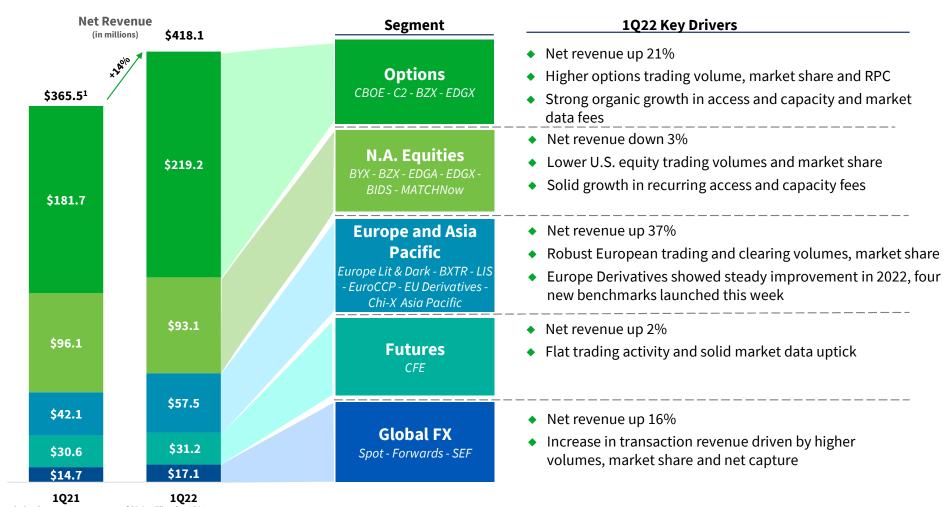




<sup>1</sup>See appendix for "Non-GAAP Information."

### 1Q22 Net Revenue by Segment and Key Drivers





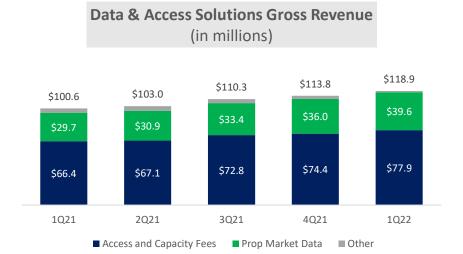
<sup>&</sup>lt;sup>1</sup> Chart excludes Corporate net revenue of \$0.3 million for 1Q21.

# Grew Data and Access Solutions Revenue 18% YoY, Organic Growth of 12%<sup>1</sup>, Exceeded Targeted Growth Rate



Increased targeted 2022 organic growth rate for Data and Access Solutions business to 8-11% from 7-10%, ahead of our medium-term guidance<sup>2</sup>

- ❖ 1Q22 Data and Access Solutions net revenue of \$116.5 million up 18%; organic growth of 12% YoY²
  - Excludes \$6 million of revenue from acquisitions<sup>1</sup>
  - ◆ 14% organic growth in access and capacity fees¹
  - ◆ 12% organic growth in proprietary market data fees¹
- 1Q22 growth of Data and Access Solutions revenue exceeded target
  - ◆ Increasing target for 2022 annual organic net revenue growth to 8-11% from 7-10%
  - Additional units or subscribers expected to remain a key driver of organic DnA revenue growth
- Over 90% of organic market data revenue growth and organic access and capacity fee revenue growth in 1Q22 driven by additional subscriptions or incremental units



<sup>&</sup>lt;sup>1</sup> See appendix for "Non-GAAP Information."

<sup>&</sup>lt;sup>2</sup> 2022 Guidance is as of April 29, 2022, medium-term guidance as of Feb 4, 2022

### 1Q22 Adjusted Operating Expenses Up 17%, Primarily Driven by Acquisitions



- ❖ 1Q22 expense increase primarily driven by addition of Chi-X Asia Pacific
  - ❖ \$9 million increase in compensation-related expenses
  - \$4 million increase in professional fees and outside services primarily due to higher legal fees
- Excluding acquisitions, adjusted operating expenses were up \$15 million or 12%

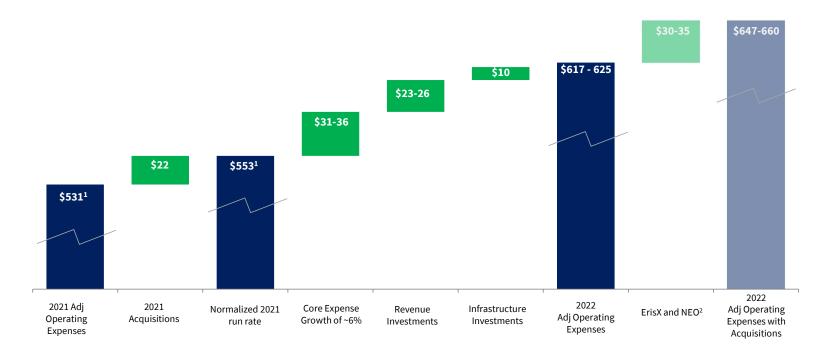
Adjusted Operating Expenses <sup>1</sup> (in millions)	1Q22	1Q21	\$ Chg	% Chg
Compensation and benefits	\$81.2	\$72.3	\$8.9	12%
Depreciation and amortization <sup>1</sup>	10.3	9.1	1.2	13%
Technology support services	19.2	17.2	2.0	12%
Professional fees and outside services	19.7	15.6	4.1	26%
Travel and promotional	2.9	1.6	1.3	81%
Facilities costs	6.5	5.3	1.2	23%
Other expenses	6.0	3.5	2.5	71%
Total <sup>1</sup>	\$145.8	\$124.6	\$21.2	17%

<sup>&</sup>lt;sup>1</sup>Adjusted to reflect the impact of certain items. See Appendix for "Non-GAAP Information."

### Adjusted Operating Expenses with ErisX<sup>2</sup> and NEO<sup>2</sup>



(\$ in millions)



<sup>&</sup>lt;sup>1</sup>Adjusted to reflect impact of certain items. See Appendix for "Non-GAAP information"

<sup>&</sup>lt;sup>2</sup>ErisX is expected to close in the second quarter of this year, subject to customary closing conditions, and NEO is expected to close in the second or third quarter of the year, subject to regulatory review and other customary closing conditions. Guidance as of April 29, 2022

### **Updated Guidance Reaffirms Confidence in Medium-Term Targets**



2022 Full-Year Guidance <sup>1, 2</sup>	2022 Guidance as of	2022 Guidance as of	2021 Actual³
(\$ in millions)	Apr. 29, 2022	Feb. 4, 2022	
Data and Access Solutions <sup>4</sup> organic revenue growth rate	8 to 11%	7 to 10%	15%
Net revenue growth from acquisitions held <12 months	2 to 3%	1 to 3%	7%
Total organic net revenue growth rate	5 to 7%	5 to 7%	11%
Adjusted operating expenses <sup>5</sup>	\$617 to \$625	\$617 to \$625	\$531
<b>Depreciation and amortization</b> (excluding amortization of acquired intangible assets)	\$40 to \$44	\$40 to \$44	\$41
Effective tax rate on adjusted earnings	27.5 to 29.5%	27.5 to 29.5%	27.7%
Capital expenditures	\$47 to \$52	\$47 to \$52	\$51

<sup>1</sup>Specific quantifications of the amounts that would be required to reconcile the company's organic and inorganic growth guidance, adjusted operating expenses guidance and the effective tax rate on adjusted earnings guidance are not available. The company believes that there is uncertainty and unpredictability with respect to certain of its GAAP measures, primarily related to acquisition-related revenues and expenses that would be required to reconcile to GAAP revenues less costs of revenues, GAAP operating expenses and GAAP effective tax rate, which preclude the company from providing accurate guidance on certain forward-looking GAAP to non-GAAP reconciliations. The company believes that providing estimates of the amounts that would be required to reconcile the range of the company's organic growth, adjusted operating expenses and the effective tax rate on adjusted earnings would imply a degree of precision that would be confusing or misleading to investors for the reasons identified above.

<sup>&</sup>lt;sup>2</sup>Guidance includes acquisitions completed through April 29, 2022, and investment in launching pan-European trading and clearing.

<sup>&</sup>lt;sup>3</sup>See "Non-GAAP Information" in the appendix for reconciliations of 2021 actual.

<sup>&</sup>lt;sup>4</sup>Represents Access and Capacity Fees, Proprietary Market Data and revenue generated from licensing and indices related revenue reported in "Other Revenue."

<sup>&</sup>lt;sup>5</sup>Adjusted operating expenses exclude acquisition-related expenses and amortization of acquired intangible assets. The amortization of acquired intangible assets was \$127 million for 2021 and is now expected to be \$116 million for 2022. Adjustments included in the non-GAAP reconciliation.

### Efficient Allocation of Capital to Create Long-Term Shareholder Value



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#### Preserving balance sheet flexibility remains a priority

- Capital allocation priorities include:
  - Investing in the growth of our business
  - Inorganic opportunities to facilitate growth strategy
  - Consistent dividend payments and growth
  - Opportunistic share repurchases
- Returned \$51 million in capital through dividends and \$70 million in share repurchases in 1Q22; \$249mn of availability remaining under share repurchase authorizations

Debt Outstanding (\$ in millions)	Dec. 31, 2020	Mar. 31, 2021	June 30, 2021	Sept. 30, 2021	Dec. 31, 2021	Mar. 31, 2022
3.650% Senior Notes (10Y; Due 2027)	\$650	\$650	\$650	\$650	\$650	\$650
3.000% Senior Notes (10Y; Due 2032)	-	-	-	-	-	300
1.625% Senior Notes (10Y; Due 2030)	500	500	500	500	500	500
Revolving Credit Agreement	-	-	-	-	-	-
Term Loan Facility	70	50	160	160	160	160
EuroCCP Credit Facility	-	-	-	-	-	-
Total Debt (Gross)	\$1,220	\$1,200	\$1,310	\$1,310	\$1,310	\$1,610
Debt to EBITDA TTM¹	1.4x	1.4x	1.5x	1.4x	1.3x	1.6x
Adjusted Cash & Financial Investments <sup>1</sup>	\$210	\$264	\$443	\$393	\$325	\$660
Share Repurchases	\$88.0	\$47.6	\$33.7	\$0.0	\$0.0	\$70.0
Dividends Paid	45.4	45.3	45.0	51.5	51.5	51.4
Total Capital Returned to Shareholders	\$133.4	\$92.9	\$78.7	\$51.5	\$51.5	\$121.4

<sup>1</sup>See Appendix for "Non-GAAP Information."

### Positioned to Innovate, Integrate and Grow to Create Value







# Integrate across ecosystem to increase efficiency and better serve customers

- Industry-leading technology
- Non-siloed integrations expand ecosystem & fuels flywheel
- Strong cash flow generation and operating efficiency

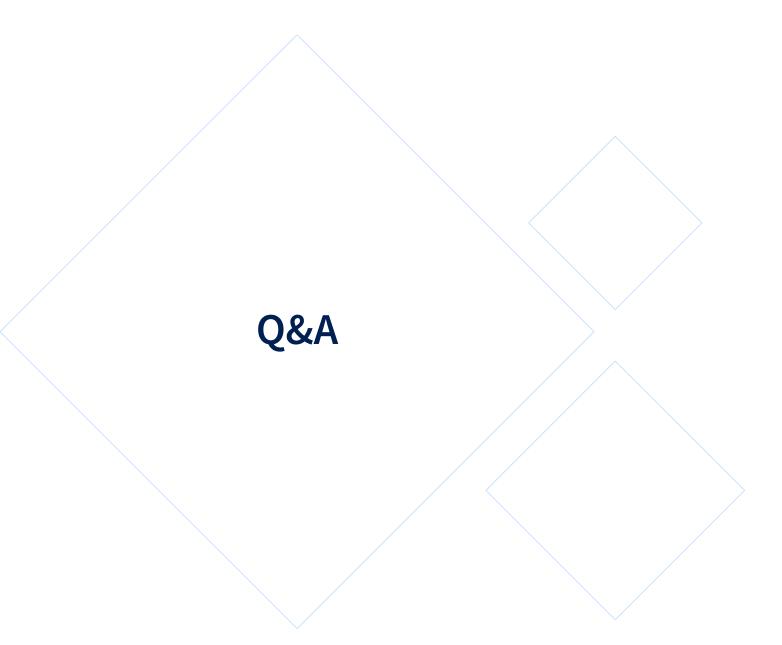
# **Grow** by accessing untapped addressable markets

- Proven organic investment and M&A track record
- Expands and diversifies revenue opportunity set

# for trading products and data services, globally

Innovate to capture growing demand

- Increase access to data products and trading solutions
- Unrivaled transaction capabilities
- Global presence in highest value markets
- Develop indices and products to meet growing ESG needs



# C\*boe\*



# Options 1Q22 Net Revenue Up 21%, Reflecting Y/Y Increase in ADV and Recurring Non-transaction Revenue



- Higher transaction fees from index and multi-listed options given stronger volumes, market share and RPC
- Access and capacity fees plus proprietary market data were up a combined 25%

Options Selected Revenue Data			
(\$ in millions)	1Q22	1Q21	Chg
Net Revenue	\$219.2	\$181.7	21%
Net transaction and clearing fees <sup>1</sup>	\$174.0	\$137.2	27%
Index options	128.2	93.2	38%
Multi-listed options	45.8	44.0	4%
Access and capacity	\$35.8	\$29.4	22%
Market data	\$25.9	\$20.5	26%
Market data – proprietary	17.7	13.3	33%
Market data – industry	8.2	7.2	14%
Options Key Operating Stats	1Q22	1Q21	Chg
Options Key Operating Stats Total market share	1Q22 31.5%	1Q21 30.2%	Chg 1.3pts
			j
Total market share	31.5%	30.2%	1.3pts
Total market share Index options	<b>31.5%</b> 99.1%	<b>30.2%</b> 99.0%	1.3pts 0.1pts
Total market share Index options Multi-listed options	<b>31.5%</b> 99.1% 27.4%	<b>30.2%</b> 99.0% 26.9%	1.3pts 0.1pts 0.5pts
Total market share Index options Multi-listed options Total ADV (in thousands)	31.5% 99.1% 27.4% 13,392	<b>30.2%</b> 99.0% 26.9% <b>12,681</b>	1.3pts 0.1pts 0.5pts <b>6%</b>
Total market share Index options Multi-listed options Total ADV (in thousands) Index options	31.5% 99.1% 27.4% 13,392 2,414	30.2% 99.0% 26.9% 12,681 1,902	1.3pts 0.1pts 0.5pts <b>6%</b> 27%
Total market share Index options Multi-listed options Total ADV (in thousands) Index options Multi-listed options	31.5% 99.1% 27.4% 13,392 2,414 10,978	30.2% 99.0% 26.9% 12,681 1,902 10,779	1.3pts 0.1pts 0.5pts <b>6%</b> 27% 2%

<sup>&</sup>lt;sup>1</sup>See appendix for "Non-GAAP Information."

# North American (N.A.) Equities 1Q22 Net Revenue Down 3%, Driven by Softer Industry Volumes



- U.S. equities transaction and clearing fees were impacted by lower year-over-year industry volumes given difficult 1Q21 comparisons
- Access and capacity fee growth remains strong, up 11% as compared to 1Q21

N.A. Equities Selected Revenue Data (\$ in millions)	1Q22	1Q21	Chg
Net Revenue	\$93.1	\$96.1	-3%
Net transaction and clearing fees <sup>1</sup>	\$32.0	\$34.0	-6%
Market data	\$34.2	\$37.5	-9%
Market data - SIP <sup>2</sup>	22.9	26.9	-15%
Market data - proprietary	11.3	10.6	7%
Access and capacity fees	\$26.0	\$23.4	11%
N.A. Equities Key Operating Stats	1Q22	1Q21	Chg
U.S. Equities Exchange (shares in billions)			
Total Market Share	14.3%	15.0%	-0.7pts
Market ADV	12.9	14.7	-12%
ADV (matched shares)	1.8	2.2	-16%
Net capture (per 100 touched shares)	\$0.017	\$0.015	8%
U.S. Equities Off-Exchange (shares in millions)			
Off-Exchange ATS Block Market Share %3	23.9%	21.9%	2.0pts
ADV (matched shares)	108.5	99.5	9%
Net capture (per 100 touched shares)	\$0.117	\$0.121	-4%
Canadian Equities (shares in millions)			
Market Share Percent - TSX Listed	4.3%	4.6%	-0.3pts
ADV (matched shares, in millions)	41.1	71.4	-42%
Net capture (per 10,000 touched shares, in CAD)	CAD 9.131	CAD 7.184	27%

<sup>&</sup>lt;sup>1</sup>See appendix for "Non-GAAP Information."

<sup>&</sup>lt;sup>2</sup>Includes SIP audit recoveries of \$3.3 million in 1Q22 and \$3.2 million in 1Q21.

<sup>&</sup>lt;sup>3</sup>Represents market share for 1Q22 through Feb 2022.

# Europe and APAC Net Revenue Up 37% for 1Q22, Helped by Higher Volumes and Inclusion of Cboe Asia Pacific



- Net revenue increase reflects \$8.4 million contribution from Cboe Asia Pacific and higher activity levels
- Increase in net transaction fees, driven by strong increases in European equities trading volumes
- Cboe Europe's overall equities market share was 21.8% in 1Q22 versus 16.8% in 1Q21, the highest since 1Q19
- Cboe saw significant improvements in all segments of the market lit, Cboe BIDS Europe and Cboe Europe Periodic Auctions

Europe and APAC Selected Revenue Data (\$ in millions)	1Q22	1Q21	Chg
Net Revenue	\$57.5	\$42.1	37%
Net transaction and clearing fees <sup>1</sup>	\$33.6	\$25.1	34%
Net transaction fees	23.7	16.1	47%
Net clearing fees	9.9	9.0	10%
Market data	\$8.3	\$4.0	108%
Access and capacity fees	\$9.3	\$7.1	31%
Other <sup>2</sup>	\$6.3	\$5.9	7%
Europe Key Operating Stats	1Q22	1Q21	Chg
European Equities:			
Total market share	21.8%	16.8%	5.0pts
Market ADNV (in billions)	€ 58.7	€ 44.8	31%
Net capture (per matched notional value, in bps)	0.233	0.284	-18%
EuroCCP:			
Trades cleared (in millions)	454.4	298.2	52%
Fee per trade cleared	€ 0.009	€ 0.011	-14%
Net settlement volume (in millions)	2.8	2.4	16%
Net fee per settlement	€ 0.924	€ 0.865	7%
APAC Key Operating Stats	1Q22	1Q21	Chg
Australian Equities:			
Total market share	15.8%		
Market ADNV (AUD in billions)	\$0.9		
Net capture (per matched notional value, in bps)	\$0.173		
Japanese Equities:			
Total market share	3.8%		
Market ADNV (JYP in billions)	¥164.6		
Net capture (per matched notional value, in bps)	¥0.228		

 $<sup>^{1}</sup> See \ appendix for "Non-GAAP Information." \ ^{2} Primarily includes trade reporting and EuroCCP \ net interest income, NM = not meaningful \ ^{2} Primarily includes trade reporting and EuroCCP \ net interest income, NM = not meaningful \ ^{2} Primarily includes trade reporting and EuroCCP \ net interest income, NM = not meaningful \ ^{2} Primarily includes trade reporting and EuroCCP \ net interest income, NM = not meaningful \ ^{2} Primarily includes trade reporting and EuroCCP \ net interest income, NM = not meaningful \ ^{2} Primarily includes trade reporting and EuroCCP \ net interest income, NM = not meaningful \ ^{2} Primarily includes trade reporting and EuroPCP \ net interest income, NM = not meaningful \ ^{2} Primarily includes trade reporting and EuroPCP \ net interest income, NM = not meaningful \ ^{2} Primarily includes trade reporting and EuroPCP \ net interest income, NM = not meaningful \ ^{2} Primarily includes trade reporting and EuroPCP \ net interest income, NM = not meaningful \ ^{2} Primarily includes trade reporting and EuroPCP \ net interest income, NM = not meaningful \ ^{2} Primarily includes \ ^{2} Primarily in$ 

### Futures 1Q22 Net Revenue Up 2%, Reflecting Steady Volumes and RPC



- Revenue increase driven by minor contributions from both transaction and non-transaction revenues
- Activity levels and RPC were relatively flat to 1Q21 levels

Futures Selected Revenue Data (\$ in millions)	1Q22	1Q21	Chg
Net Revenue	\$31.2	\$30.6	2%
Net transaction and clearing fees <sup>1</sup>	\$25.8	\$25.6	1%
Access and capacity	\$4.5	\$4.4	2%
Market data	\$2.0	\$1.6	25%
Futures Key Operating Stats	1Q22	1021	Chg
(in thousands, except RPC)	10,22	IQZI	Cit
Total ADV	254	256	-1%
Total RPC	\$1.637	\$1.639	0%

<sup>&</sup>lt;sup>1</sup>See appendix for "Non-GAAP Information."

### **Global FX Net 1Q22 Revenue Up 16%**



- Revenue increase driven by higher volumes and slightly higher net capture within transaction revenue
- ◆ Market share increased to 17.3%

FX Selected Revenue Data	1Q22	1Q21	Chg
(\$ in millions)	,	Ì	ŭ
Net Revenue	\$17.1	\$14.7	16%
Net transaction and clearing fees <sup>1</sup>	14.4	12.4	16%
Non-transaction revenue	2.7	2.3	17%
FX Key Operating Stats	1Q22	1Q21	Chg
FX Key Operating Stats  Market share <sup>1</sup>	1Q22 17.3%	<b>1Q21</b> 16.5%	Chg 0.8pts
7.		<u> </u>	

<sup>&</sup>lt;sup>1</sup>See appendix for "Non-GAAP Information."

<sup>&</sup>lt;sup>2</sup>Market share represents Cboe FX volume divided by the total volume of publicly reporting spot FX venues (Cboe FX, EBS, Refinitiv, and FastMatch).

### First Quarter Financial Overview



Adjusted Financial Results <sup>1</sup> (\$ in millions, except per share)	1Q22	1Q21	% Chg
Net Revenue <sup>2</sup>	\$418.1	\$365.5	14%
Adjusted Operating Expenses <sup>1</sup>	145.8	124.6	17%
Adjusted Operating Income <sup>1</sup>	\$272.3	\$240.9	13%
Adjusted Operating Margin <sup>1</sup>	65.1%	65.9%	-0.8pts
Adjusted Net Income Allocated to Common Stockholders <sup>1</sup>	\$184.3	\$164.8	12%
Adjusted Diluted EPS <sup>1</sup>	\$1.73	\$1.53	13%
Adjusted EBITDA <sup>1</sup>	\$281.2	\$250.2	12%
Adjusted EBITDA Margin <sup>1</sup>	67.3%	68.5%	-1.2pts

<sup>&</sup>lt;sup>1</sup>Adjusted to reflect the impact of certain items. See Appendix for "Non-GAAP Information."

<sup>&</sup>lt;sup>2</sup>Net revenue referenced in this presentation represents revenue less cost of revenues.

### **Net Revenue Detail**



- Derivatives Markets driven by strong transaction and clearing fees
- Data and Access Solutions benefited from strong new subscription / unit growth

Net Revenue (in millions)	1Q22	1Q21	% Chg
Cash and Spot Markets	\$110.3	\$105.3	5%
Data and Access Solutions	116.5	98.6	18%
Derivatives Markets	191.3	161.6	18%
Total	\$418.1	\$365.5	14%

### **Expense Bridge Summary**



Adjusted Operating Expenses Bridge for 2020 to 2021	
(\$ in millions)	
2020 adjusted operating expenses <sup>1</sup>	\$ 416
Acquisitions	49
Non-recurring savings	12
Core	17
Facilities overlap	5
Investments	12
EU derivatives buildout	8
Chi-X 2H21 investment	12
	\$ 115
2021 adjusted operating expenses <sup>1</sup>	\$ 531

#### Prioritizing investments to:

- Broaden geographic footprint (Chi-X, Euro derivs)
- Leverage core capabilities (24x5, BIDS and Nanos) and
- Expanding our access (Derivatives, Cloud)

Adjusted Operating Expenses Bridge for 20 2022 Guidance of \$617 to \$625 million (\$5 in millions)	021 to	2022				
2021 adjusted operating expenses <sup>1</sup>	\$	531	*	Guidan	ce R	ange
Acquisitions				22		22
Core				31		36
Revenue Investments				23		26
Infrastructure Investments				10		10
			\$	86	\$	94
2022 Guidance as of April 29, 2022			\$	617	\$	625
ErisX <sup>2</sup> and Neo <sup>2</sup>				30		35
2022 Guidance plus Pending Acquisitions			\$	647	\$	660

<sup>&</sup>lt;sup>1</sup>Adjusted to reflect the impact of certain items. See Appendix for "Non-GAAP Information."

<sup>2</sup> ErisX is expected to close in the second quarter of this year, subject to customary closing conditions, and NEO is expected to close in the second or third quarter of the year, subject to regulatory review and other customary closing conditions. Guidance as of April 29, 2022. Guidance as of April 29, 2022

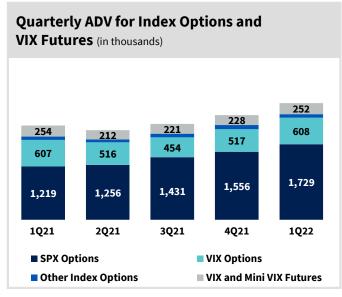
<sup>\*</sup>Totals may not foot due to rounding

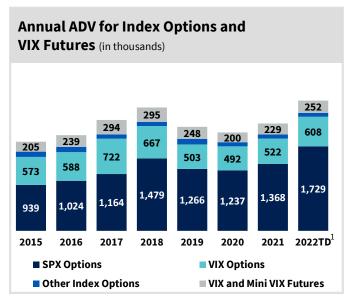
### Focused on Growing Highest-Margin Proprietary Index Suite



Index customers at Cboe typically use SPX and VIX options and futures interchangeably or in tandem, depending on market conditions

- Plan to further penetrate existing markets with an emphasis on education, targeting key market segments and geographies
  - Expanded global trading hours for SPX and VIX options in November 2021
  - Launched Nanos by Cboe in March 2022, small and simple options designed for retail traders; available on Mini-S&P 500 index option
  - ◆ Launched Tuesday-expiring SPX weeklys April 18, 2022, Thursday expirations beginning May 11, 2022
- Engaging institutional and retail investors through derivatives education forums





<sup>1</sup>2022TD is through 1Q22.

### **Cboe's Commitment to ESG Initiatives**





- Carbon credits: Offset our Scope 1 and 2 emissions from 2020 and our Scope 3 emissions from our 2020 business air travel through the purchase of carbon offsets
- Reducing our impact: Implemented business recycling, repurposing, and waste management reduction programs and provide pre-tax public transportation and bike sharing passes
- ESG Exchange Traded Products: Trade clean energy, diversity and inclusion, emerging markets, and water ETPs on the BZX Equities Exchange and list options on the S&P 500 ESG index
- SSE member: Named a founding member of the SSE derivatives network



- Cboe Empowers: Community engagement program that provides mentorship, scholarships and guidance to underresourced students throughout their educational journey
- Diversity: Developed the Cboe Diversity Leadership Council (DLC) to drive a resultsdriven Diversity and Inclusion (D&I) program
- Charity: Strong focus on supporting global communities in times of need; as the world watches the conflict unfold in Ukraine, Cboe and our associates committed to helping relief efforts. As of March 18th, 2022, Cboe and our associates donated over \$560,000 to various organizations on the ground.



- Independent Board: 13 of the 14 Directors are independent
- Accountability: Pay for performance philosophy, with a strong emphasis on strategy and risk oversight
- Fresh perspectives: 8 years average tenure of Board
- Diverse Board: 50% of Directors represent gender and ethnic diversity: 29% of Directors women and 21% African American/Asian-American

C\*boe\*

# Non-GAAP Information



In addition to disclosing results determined in accordance with GAAP, Cboe Global Markets has disclosed certain non-GAAP measures of operating performance. These measures are not in accordance with, or a substitute for, GAAP, and may be different from or inconsistent with non-GAAP financial measures used by other companies. The non-GAAP measures provided in this presentation include net transaction and clearing fees, adjusted operating expenses, adjusted operating income, organic net revenue, inorganic net revenue, adjusted operating margin, adjusted net income allocated to common stockholders and adjusted diluted earnings per share, adjusted income before income taxes, adjusted revenue less cost of revenue, effective tax rate on adjusted earnings, adjusted cash, EBITDA, EBITDA margin, adjusted EBITDA and adjusted EBITDA margin.

Management believes that the non-GAAP financial measures presented in this presentation, including adjusted operating income, organic net revenue and adjusted operating expenses, provide additional and comparative information to assess trends in our core operations and a means to evaluate period-to-period comparisons. Non-GAAP financial measures disclosed by management are provided as additional information to investors in order to provide them with an alternative method for assessing our financial condition and operating results.

Organic net revenue, inorganic net revenue, organic adjusted operating expenses and organic net revenue guidance: These are non-GAAP financial measures that exclude or have otherwise been adjusted for the impact of our acquisitions for the period or guidance, as applicable. Management believes the organic net revenue growth and guidance measures provide users with supplemental information regarding the company's ongoing and future potential revenue performances and trends by presenting revenue growth and guidance excluding the impact of the acquisitions. Revenues from acquisitions that have been owned for at least one year are considered organic and are no longer excluded from organic net revenue from either period for comparative purposes.

Amortization expense of acquired intangible assets: We amortize intangible assets acquired in connection with various acquisitions. Amortization of intangible assets is inconsistent in amount and frequency and is significantly affected by the timing and size of our acquisitions. As such, if intangible asset amortization is included in performance measures, it is more difficult to assess the day-to-day operating performance of the businesses, the relative operating performance of the businesses between periods and the earnings power of the company. Therefore, we believe performance measures excluding intangible asset amortization expense provide investors with an additional basis for comparison across accounting periods.

Acquisition-related expenses: From time to time, we have pursued small acquisitions and in 2017 completed a larger transformative acquisition, which have resulted in expenses which would not otherwise have been incurred in the normal course of the company's business operations. These expenses include integration costs, as well as legal, due diligence and other third-party transaction costs. The frequency and the amount of such expenses vary significantly based on the size, timing and complexity of the transaction. Accordingly, we exclude these costs for purposes of calculating non-GAAP measures which provide an additional analysis of Cboe's ongoing operating performance or comparisons in Cboe's performance between periods.

The tables below show the reconciliation of each financial measure from GAAP to non-GAAP. The non-GAAP financial measures exclude the impact of those items detailed below and are referred to as adjusted financial measures.

### C\*boe

#### **Reconciliation of Net Transaction and Clearing Fees by Segment**

For the Three Months Ended	Opt	ions	N.A. E	quities	Europe and	Asia Pacific	Futi	ures	Glob	al FX	Total		
June 30 (in millions)	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	
Transaction and clearing fees	\$ 283.2	\$ 250.8	\$ 268.0	\$ 325.1	\$ 33.3	\$ 15.2	\$ 22.2	\$ 15.8	\$ 11.5	\$ 11.4	\$ 618.2	\$ 618.3	
Liquidity payments	(144.1)	(132.0)	(228.4)	(279.4)	(5.4)	(4.2)	-	-	-	-	(377.9)	(415.6)	
Routing and clearing	(5.0)	(5.0)	(10.0)	(12.7)	(4.9)	-	-	-	-	-	(19.9)	(17.7)	
Net transaction and clearing	4 424.4		<b>.</b> 20.6	á 22.0	4 22.0	<b>.</b> 44.0	<b>A</b> 22.2	4 45 0			4 220 4	ć 405.0	
fees	\$ 134.1	\$ 113.8	\$ 29.6	\$ 33.0	\$ 23.0	\$ 11.0	\$ 22.2	\$ 15.8	\$ 11.5	\$ 11.4	\$ 220.4	\$ 185.0	

For the Three Months Ended	Options		N.A. Equities			Europe and Asia Pacific				c Futures				Global FX				Total			
September 30 (in millions)	2	2021	2020	2021	2020		2021	- 2	2020		2021	2	020	2	021	2	2020		2021		2020
Transaction and clearing fees	\$	308.4	\$ 241.4	\$ 253.2	\$ 253.0	\$	36.2	\$	23.4	\$	23.2	\$	16.8	\$	11.9	\$	10.9	\$	632.9	\$	545.5
Liquidity payments		(152.7)	(130.1)	(216.9)	(225.1	)	(5.7)		(4.2)		-		-		-		-		(375.3)		(359.4)
Routing and clearing		(5.2)	(5.2)	(9.0)	(9.7	)	(4.7)				-		-		(0.1)		-		(19.0)		(14.9)
Net transaction and clearing																					
fees	\$	150.5	\$ 106.1	\$ 27.3	\$ 18.2	\$	25.8	\$	19.2	\$	23.2	\$	16.8	\$	11.8	\$	10.9	\$	238.6	\$	171.2

For the Three Months Ended		Options			N.A. Equities			Europe and Asia Pacific				c Futures				Global FX				Total				
December 31 (in millions)	:	2021		2020	20	2021 2020		2	2021		2020		2021		020	2	021	2020		2021			2020	
Transaction and clearing fees	\$	330.9	\$	269.9	\$ 2	270.1	\$ 2	265.1	\$	41.1	\$	30.0	\$	24.2	\$	16.0	\$	12.5	\$	11.7	\$	678.8	\$	592.7
Liquidity payments		(162.2)		(145.0)	(2	226.3)	(2	237.0)		(7.2)		(4.7)		-								(395.7)		(386.7)
Routing and clearing		(6.9)		(4.6)		(9.8)		(10.4)		(4.9)		(6.8)		-				(0.2)				(21.8)		(21.8)
Net transaction and clearing																								
fees	\$	161.8	\$	120.3	\$	34.0	\$	17.7	\$	29.0	\$	18.5	\$	24.2	\$	16.0	\$	12.3	\$	11.7	\$	261.3	\$	184.2

For the Three Months Ended		Opti	ions	N.A. E	quities	Europe and	d Asia Pacif	ic	Futu	ıres	Glo	X	Total			
March 31 (in millions)	20	)22	2021	2022	2022 2021		2021		2022	2021	2022	2021		2022	2	2021
Transaction and clearing fees	\$ 3	348.3	\$ 308.7	\$ 330.8	\$ 381.8	\$ 50.1	\$ 34.7	7	\$ 25.8	\$ 25.6	\$ 14.6	\$	12.4	\$ 769.6	\$	763.2
Liquidity payments	(1	167.6)	(166.0)	(288.3)	(330.5)	(11.6)	(5.3	3)		-	-		-	(467.5)		(501.8)
Routing and clearing		(6.7)	(5.5)	(10.5)	(17.3)	(4.9)	(4.3	3)		-	(0.2	)	-	(22.3)		(27.1)
Net transaction and clearing																
fees	\$ 1	174.0	\$ 137.2	\$ 32.0	\$ 34.0	\$ 33.6	\$ 25.1	L	\$ 25.8	\$ 25.6	\$ 14.4	\$	12.4	\$ 279.8	\$	234.3

### C\*boe

Reconciliation of Net Revenue by Revenue Caption -

Reconciliation of Net Revent	ic by hev	cirac cap								
For the Three Months Ended		and larkets	Data Access S			atives kets	Total			
March 31 (in millions)	2022	2021	2022	2021	2022	2021	2022	2021		
Transaction and clearing fees	\$ 395.5	\$ 428.9	\$ -	\$ -	\$ 374.1	\$ 334.3	\$ 769.6	\$ 763.2		
Access and capacity fees	-	1	77.9	66.4	-	-	77.9	66.4		
Market data fees	22.9	26.9	39.6	29.7	8.2	7.2	70.7	63.8		
Regulatory fees	31.9	82.4	-	-	10.7	19.1	42.6	101.5		
Other revenue	11.6	10.7	1.4	4.5	0.7	0.7	13.7	15.9		
Total revenues	461.9	548.9	118.9	100.6	393.7	361.3	974.5	1,010.8		
Liquidity payments	299.6	335.8	-	-	167.9	166.0	467.5	501.8		
Routing and clearing fees	15.6	21.6	1	1	6.7	5.5	22.3	27.1		
Section 31 fees	31.8	82.0	-	-	3.9	9.9	35.7	91.9		
Royalty fees	-	1	2.4	2.0	23.9	18.3	26.3	20.3		
Other cost of revenues	4.6	4.2	1	1	-	-	4.6	4.2		
Total cost of revenues	351.6	443.6	2.4	2.0	202.4	199.7	556.4	645.3		
Revenues less cost of revenues										
(net revenue)	110.3	105.3	116.5	98.6	191.3	161.6	418.1	365.5		
Acquisition revenue less cost of revenues (inorganic net revenue)	(2.4)	-	(6.0)	-	-	-	(8.4)	-		
Organic net revenue	107.9	105.3	110.5	98.6	191.3	161.6	409.7	365.5		

(in millions, except per share amounts)		1Q21		2Q21		3Q21		4Q21		2021		1Q22
Reconciliation of Net Income Allocated to Common Stockholders to Non-GAAP												
Net income allocated to common stockholders	\$	136.8	\$	105.2	\$	120.0	\$	165.3	\$	527.3	\$	109.2
Acquisition-related expenses (1)		3.4		1.8		6.7		3.7		15.6		2.0
Investment establishment costs (2)		-		-		-		-		-		3.0
Amortization of acquired intangible assets (3)		32.9		30.5		31.8		31.4		126.6		30.6
Total Non-GAAP operating expense adjustments		36.3		32.3		38.5		35.1		142.2		35.6
Impairment of Investment (4)		-		-		5.0				5.0		-
Change in contingent consideration (5)								(2.7)		(2.7)		
Total Non-GAAP adjustments - pretax		36.3		32.3		43.5		32.4		144.5		35.6
Income tax expense related to the items above		(8.2)		(7.7)		(8.5)		(7.4)		(31.8)		(8.7
Release of tax reserves		-		-		-		(5.4)		(5.4)		-
Deferred tax remeasurement		-		17.7		-		(3.1)		14.6		-
Tax reserves (6)												48.5
Net income allocated to participating securities - effect on reconciling items		(0.1)		(0.1)		(0.1)		(0.1)		(0.4)		(0.3
Adjusted net income allocated to common stockholders	\$	164.8	\$	147.4	\$	154.9	\$	181.7	\$	648.8	\$	184.3
Reconciliation of Diluted EPS to Non-GAAP												
Diluted earnings per common share	\$	1.27	\$	0.98	\$	1.12	\$	1.54	\$	4.92	\$	1.02
Per share impact of non-GAAP adjustments noted above		0.26		0.40		0.33		0.16		1.13		0.71
Adjusted diluted earnings per common share	\$	1.53	\$	1.38	\$	1.45	\$	1.70	\$	6.05	\$	1.73
Reconciliation of Operating Margin to Non-GAAP Revenue less cost of revenue	Ś	365.5	\$	350.6	\$	369.5	\$	390.5	ć	1,476.1	\$	418.1
Non-GAAP adjustments noted above	Ļ	303.3	٧	330.0	ب	303.3	٧	330.3	ڔ	1,470.1	۰	410.1
Adjusted revenue less cost of revenue	Ś	365.5	\$	350.6	Ś	369.5	Ś	390.5	¢	1.476.1	\$	418.1
			•		•		•		•	,		
Operating expenses (7)	\$		\$	160.6	\$	178.8	\$	169.9	\$	670.2	\$	178.4
Non-GAAP expense adjustments noted above		(36.3)		(32.3)		(38.5)		(32.4)		(139.5)		(32.6
Adjusted operating expenses	\$	124.6	\$	128.3	\$	140.3	Ş	137.5	\$	530.7	\$	145.8
Non-GAAP expense adjustments to arrive at organic adjusted operating expenses		(18.4)	\$	(17.0)	\$	(12.6)	\$	(10.7)	\$	(58.7)	\$	(6.4
Organic adjusted operating expenses	\$	106.2	\$	111.3	\$	127.7	\$	126.8	\$	472.0	\$	139.4
Operating income	Ś	204.6	Ś	190.0	\$	190.7	Ś	220.6	Ś	805.9	Ś	239.7
Non-GAAP expense adjustments noted above		36.3		32.3	•	38.5		32.4		139.5		32.6
Adjusted operating income	\$	240.9	\$	222.3	\$	229.2	\$	253.0	\$	945.4	\$	272.3
Adjusted operating margin (8)		65.9%		63.4%		62.0%		64.8%		64.0%		65.19
Reconciliation of Income Tax Rate to Non-GAAP												
Income before income taxes	Ś	192.9	Ś	179.2	Ś	173.8	Ś	210.2	Ś	756.1	Ś	224.9
Non-GAAP adjustments noted above	Ą	36.3	٧	32.3	٧	43.5	ب	32.4	ڔ	144.5	Ļ	35.6
Adjusted income before income taxes	Ś		\$		\$	217.3	\$	242.6	Ś		\$	260.5
•									•			
Income tax expense	\$		\$	73.7	\$	53.4	\$	44.3	\$		\$	115.3
Non-GAAP adjustments noted above		8.2	,	(10.0)		8.5		15.9		22.6		(39.8
Adjusted income tax expense	\$	63.9	\$	63.7	\$	61.9	\$	60.2	\$		\$	75.5
Adjusted income tax rate		27.9%		30.1%		28.5%		24.8%		27.7%		29.09

- (1) This amount includes professional fees and outside services and impairment charges related to the company's acquisitions.
- (2) This amount represents the investment establishment costs related to the company's investment in TRIDGE investments 3LP, which acquired Trading Technologies, Inc.
- (3) This amount represents the amortization of acquired intangible assets related to the company's acquisitions.
- (4) This amount represents the impairment of investment related to the write down of the company's investment in CurveGlobal.
- (5) This amount represents the change in contingent consideration related to the adjustment recorded to MATCHNow's contingent consideration.
- (6) This amount represents the tax reserves related to Section 199 matters.
- (7) The company sponsors deferred compensation plans held in a trust. The expenses or income related to the deferred compensation plans are included in "Compensation and benefits" (\$0.6 million and \$0.4 million in expense for the three months ended March 31, 2022 and 2021, respectively), and are directly offset by deferred compensation income, expenses and dividends included within "Other income, net" (\$0.6 million and \$0.4 million in income, expense and dividends in the three months ended March 31, 2022 and 2021, respectively, on the condensed consolidated statements of income. The deferred compensation plans' expenses are not excluded from "adjusted operating expenses" and do not have an impact on "Income before income taxes."
- (8) Adjusted operating margin represents adjusted operating income divided by adjusted revenue less cost of revenue.





#### **EBITDA Reconciliations**

EBITDA (earnings before interest, income taxes, depreciation and amortization) and Adjusted EBITDA are widely used non-GAAP financial measures of operating performance. EBITDA margin represents EBITDA divided by revenues less cost of revenues (net revenue). It is presented as supplemental information that the company believes is useful to investors to evaluate its results because it excludes certain items that are not directly related to the company's core operating performance. EBITDA is calculated by adding back to net income interest expense, income tax expense, depreciation and amortization. Adjusted EBITDA is calculated by adding back to EBITDA acquisition-related expenses and investment establishment costs, change in contingent consideration and impairment of investment. EBITDA and Adjusted EBITDA should not be considered as substitutes either for net income, as an indicator of the company's operating performance, or for cash flow, as a measure of the company's liquidity. In addition, because EBITDA and Adjusted EBITDA may not be calculated identically by all companies, the presentation here may not be comparable to other similarly titled measures of other companies. Adjusted EBITDA margin represents Adjusted EBITDA divided by net revenue.

(in millions, except per share amounts)	1Q21	2Q21	3Q21	4Q21	2021	1Q22
Net income allocated to common stockholders	\$ 136.8	\$ 105.2	\$ 120.0	\$ 165.3	\$ 527.3	\$ 109.2
Interest expense	12.3	12.3	11.7	11.1	47.4	10.8
Income tax provision	55.7	73.7	53.4	44.3	227.1	115.3
Depreciation and amortization	 42.0	40.6	42.8	42.0	167.4	40.9
EBITDA	\$ 246.8	\$ 231.8	\$ 227.9	\$ 262.7	\$ 969.2	\$ 276.2
EBITDA Margin	67.5%	66.1%	61.7%	67.3%	65.7%	66.1%
Non-GAAP adjustments not included in above line items						
Acquisition-related expenses	3.4	1.8	6.7	3.7	15.6	2.0
Change in contingent consideration	-	-	-	(2.7)	(2.7)	-
Investment establishment costs						3.0
Impairment of investment	 -	-	5.0	-	5.0	-
Adjusted EBITDA	\$ 250.2	\$ 233.6	\$ 239.6	\$ 263.7	\$ 987.1	\$ 281.2
Adjusted EBITDA Margin	68.5%	66.6%	64.8%	67.5%	66.9%	67.3%

Adjusted Debt to EBITDA - Trailing Twelve Months1

Adjusted Debt to Edit DA - Italing Twelve Worth						
(in millions)	2Q21	3Q21	4Q21	1Q22		LTM
Net income allocated to common stockholders	\$ 105.2	\$ 120.0	\$ 165.3	\$ 109.2	\$	499.7
Interest expense, net	12.3	11.7	11.1	10.8		45.9
Income tax provision	73.7	53.4	44.3	115.3		286.7
Depreciation and amortization	40.6	42.8	42.0	40.9		166.3
EBITDA	\$ 231.8	\$ 227.9	\$ 262.7	\$ 276.2	\$	998.6
Non-GAAP adjustments not included in above line it	ems:					
Acquisition-related expenses	1.8	6.7	3.7	2.0		14.2
Change in contingent consideration			(2.7)	-		(2.7)
Investment establishment costs				3.0		3.0
Impairment of investment		5.0	-	-		5.0
Adjusted EBITDA	\$ 233.6	\$ 239.6	\$ 263.7	\$ 281.2	\$ :	1,018.1
Debt at end of period		•	•	•	\$ :	1,610.0
Debt to EBITDA						1.6x

<sup>&</sup>lt;sup>1</sup>A full reconciliation of our non-GAAP to our GAAP results are available in this section.

#### **Adjusted Cash**

Adjusted cash is a non-GAAP measure and represents cash and cash equivalents plus financial investments minus deferred compensation plan assets and cash collected for Section 31 fees, which will need to be remitted in the near term. We have presented adjusted cash because we consider it an important supplemental measure of our liquidity and believe that it is frequently used by analysts, investors and other interested parties in the evaluation of companies.

Adjusted Cash (in millions)	As of '31/21	As of 6/30/21	As of 9/30/21	As of /31/21	As of /31/22
Cash and cash equivalents	\$ 263.3	\$ 450.9	\$ 392.4	\$ 341.9	\$ 659.4
Financial investments	95.5	118.7	26.7	37.1	48.7
Less deferred compensation plan assets	(24.0)	(25.6)	(26.2)	(28.0)	(27.4)
Less cash collected for Section 31 fees	(70.9)	(101.4)	-	(25.9)	(20.7)
Adjusted Cash	\$ 263.9	\$ 442.6	\$ 392.9	\$ 325.1	\$ 660.0





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