



Cboe Global Markets Reports Results for Fourth Quarter 2022 and Full Year

Fourth Quarter and Full Year Highlights*

- Diluted EPS for the Quarter of \$1.49, Down 3 percent; Diluted EPS for the Full Year of \$2.19, Down 55 percent
- Adjusted Diluted EPS¹ for the Quarter of \$1.80, Up 6 percent; Adjusted Diluted EPS for the Full Year of \$6.93, Up 15 percent
- Net Revenue for the Quarter of \$457.1 million, Up 17 percent; Net Revenue for the Full Year of \$1.7 billion, Up 18 percent
- Establishing Organic Total Net Revenue Growth Target² for 2023 of 7 to 9 percent and Data and Access Solutions Organic Net Revenue Growth Target² of 7 to 10 percent
- Establishing 2023 Adjusted Operating Expense Guidance² of \$769 to \$779 million, Reflecting Continued Investment to Drive Long-Term Revenue and Earnings Growth

CHICAGO, IL – February 3, 2023 - Cboe Global Markets, Inc. (Cboe: CBOE) today reported financial results for the fourth quarter of 2022 and full year.

“2022 was a year of substantial progress at Cboe as we continued to build out our global network, while delivering record financial results. Our accomplishments in 2022 have laid a strong foundation and, as we enter our 50th year of business, we are more optimistic than ever about the future,” said Edward T. Tilly, Cboe Global Markets Chairman and Chief Executive Officer. “We are focused on accelerating our momentum in three key areas of our business – Derivatives, Data and Access Solutions and Digital. Furthermore, organic growth efforts aimed at deepening our geographic reach and extending market access to our unique set of products and services around the globe will be critical for us. I want to thank the entire team at Cboe for the tremendous accomplishments produced in 2022, and I look forward to an outstanding year ahead.”

“Cboe reported a very strong fourth quarter to cap a record year for the company. I could not be more pleased with the consistent progress we showed as a firm throughout 2022,” said Brian N. Schell, Cboe Global Markets Executive Vice President, Chief Financial Officer and Treasurer. “During 2022 our Derivatives business net revenues grew an impressive 28%, Cash and Spot Market net revenues were up 3%, and Data and Access Solutions net revenues increased by 16%. Following our record year of revenue generation, we anticipate organic total net revenue growth² will average 7-9% in 2023, above our medium-term guidance range of 5-7%. We anticipate Data and Access Solutions organic net revenue growth² will average an attractive 7-10%, in line with our medium-term expectations. While we will be making continued investments in our business to drive future durable growth, we anticipate delivering long-term shareholder value through an attractive capital return policy. 2022 provided us with many great opportunities to build upon in the year ahead, and we look forward to delivering on our objectives in 2023.”

**All comparisons are fourth quarter 2022 compared to the same period in 2021.*

⁽¹⁾A full reconciliation of our non-GAAP results to our GAAP (“Generally Accepted Accounting Principles”) results is included in the attached tables. See “Non-GAAP Information” in the accompanying financial tables.

⁽²⁾Specific quantifications of the amounts that would be required to reconcile the company’s organic 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 cost 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.

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Consolidated Fourth Quarter Results -Table 1

Table 1 below presents summary selected unaudited condensed consolidated financial information for the company as reported and on an adjusted basis for the three months ended December 31, 2022 and 2021.

Table 1						
Consolidated Fourth Quarter Results (\$ in millions except per share data)	4Q22	4Q21	Change	4Q22 Adjusted¹	4Q21 Adjusted¹	Change
Total Revenues Less Cost of Revenues	\$ 457.1	\$ 390.5	17 %	\$ 457.1	\$ 390.5	17 %
Total Operating Expenses	\$ 206.6	\$ 169.9	22 %	\$ 176.6	\$ 137.5	28 %
Operating Income	\$ 250.5	\$ 220.6	14 %	\$ 280.5	\$ 253.0	11 %
Operating Margin %	54.8 %	56.5 %	(170)pp	61.4 %	64.8 %	(340)pp
Net Income Allocated to Common Stockholders	\$ 159.0	\$ 165.3	(4)%	\$ 192.2	\$ 181.7	6 %
Diluted EPS	\$ 1.49	\$ 1.54	(3)%	\$ 1.80	\$ 1.70	6 %
EBITDA ¹	\$ 295.5	\$ 262.7	12 %	\$ 292.3	\$ 263.7	11 %
EBITDA Margin % ¹	64.6 %	67.3 %	(270)pp	63.9 %	67.5 %	(360)pp

- Total revenues less cost of revenues (referred to as “net revenue”) of \$457.1 million increased 17 percent, compared to \$390.5 million in the prior-year period, reflecting increases in derivatives markets and data and access solutions. Inorganic net revenue¹ in the fourth quarter of 2022 was \$5.1 million.
- Total operating expenses were \$206.6 million versus \$169.9 million in the fourth quarter of 2021, an increase of \$36.7 million, while adjusted operating expenses¹ of \$176.6 million increased 28 percent compared to \$137.5 million in the fourth quarter of 2021. These increases were primarily due to the acquisitions of Cboe Digital (formerly ErisX) and NEO, as well as higher compensation and benefits, travel and promotional, and technology support services expenses.
- The effective tax rate for the fourth quarter of 2022 was 32.3 percent compared with 21.1 percent in the fourth quarter of 2021. The increase is primarily due to releases of reserves for unrecognized tax benefits in 2021. The effective tax rate on adjusted earnings¹ was 27.4 percent compared with 24.8 percent in last year’s fourth quarter. The higher effective tax rate in the fourth quarter of 2022 was primarily due to favorable non-recurring adjustments in the fourth quarter of 2021.
- Diluted EPS for the fourth quarter of 2022 decreased 3 percent to \$1.49 compared to the fourth quarter of 2021. Adjusted diluted EPS¹ of \$1.80 increased 6 percent compared to 2021’s fourth quarter results.

Business Segment Information:

Table 2			
Total Revenues Less Cost of Revenues by Business Segment (in millions)	4Q22	4Q21	Change
Options	\$ 273.2	\$ 202.5	35 %
North American Equities	96.4	91.6	5 %
Europe and Asia Pacific	44.2	51.7	(15)%
Futures	26.8	29.9	(10)%
Global FX	16.9	14.8	14 %
Digital	(0.4)	*	* %
Total	\$ 457.1	\$ 390.5	17 %

⁽¹⁾A full reconciliation of our non-GAAP results to our GAAP results is included in the attached tables. See “Non-GAAP Information” in the accompanying financial tables.

*Not meaningful, due to the establishment of the Digital segment during the second quarter of 2022 as a result of the Cboe Digital acquisition on May 2, 2022.

Discussion of Results by Business Segment¹:

Options:

- Options net revenue of \$273.2 million was up \$70.7 million, or 35 percent, from the fourth quarter of 2021. The growth was driven by double-digit increases in net transaction and clearing fees², access and capacity fees, and market data. Net transaction and clearing fees² increased primarily as a result of a 55 percent increase in index options trading volumes versus the fourth quarter of 2021, along with a 4 percent increase in index options revenue per contract (“RPC”) for the quarter. Access and capacity fees were 15 percent higher than fourth quarter 2021 and market data fees were 34 percent higher than fourth quarter 2021.
- Net transaction and clearing fees² increased \$65.9 million, or 41 percent, reflecting a 15 percent increase in total options average daily volume (“ADV”) and a 25 percent increase in total options RPC compared to the fourth quarter 2021. The increase in total options RPC was due to a mix shift, with index options representing a higher percentage of total options volume. The RPC for index options increased 4 percent as higher-priced SPX options accounted for a higher percentage of index options volume.
- Cboe’s Options exchanges had total market share of 34.1 percent for the fourth quarter of 2022 compared to 31.1 percent in the fourth quarter of 2021, primarily reflecting an increase in Cboe’s multi-listed options market share for the quarter of 28.5 percent compared to 27.3 percent in the fourth quarter of 2021.

North American (N.A.) Equities:

- N.A. Equities net revenue of \$96.4 million was up \$4.8 million, or 5 percent. The increase was primarily due to a \$5.5 million fourth quarter net revenue contribution from the 2022 acquisition of NEO and higher access and capacity fees, partially offset by lower transaction and clearing fees and industry market data revenue.
- Net transaction and clearing fees² decreased by \$1.2 million, or 4 percent, as compared to the fourth quarter of 2021. The decrease was primarily due to lower U.S. Equities off-exchange revenue, a result of lower volumes and slightly lower net capture and market share trends versus the fourth quarter of 2021. U.S. Equities exchange revenues benefited from a 4 percent increase in U.S. Equities industry volumes, offsetting a 2 percent decline in net capture.
- Cboe’s U.S. Equities exchanges had market share of 13.1 percent for the fourth quarter of 2022 compared to 13.3 percent in the fourth quarter of 2021. U.S. Equities off-exchange market share was 21.5 percent versus 22.5 percent in the fourth quarter of 2021. Canadian Equities market share rose to 13.6 percent as compared to 3.3 percent in the fourth quarter of 2021 given the inclusion of NEO.

Europe and Asia Pacific (APAC):

- Europe and APAC net revenue of \$44.2 million decreased by 15 percent, reflecting continued currency headwinds. On a constant currency basis², net revenues were \$49.8 million, down 4 percent on a year-over-year basis. European Equities average daily notional value (“ADNV”) traded on Cboe European Equities was €10.0 billion, up 14 percent compared to the fourth quarter of 2021, outperforming a 9 percent decline in industry market volumes. Net capture decreased 13 percent for the quarter, reflecting a mix shift with the strongest market share gains coming in Lit markets, outpacing the growth in higher-capture Cboe BIDS Europe and Periodic Auction services, as well as greater industry volume declines in higher-priced block activity relative to Lit markets.
- For the fourth quarter of 2022, Cboe European Equities had 24.9 percent market share, up from 19.8 percent in the fourth quarter of 2021, as a result of positive momentum across all orderbooks, making Cboe the largest stock exchange and block trading venue in Europe in the fourth quarter of 2022.

Futures:

- Futures net revenue of \$26.8 million decreased \$3.1 million, or 10 percent, due to a decline in net transaction and clearing fees², offset slightly by an increase in market data fees.
- Net transaction and clearing fees² decreased \$3.7 million, reflecting a 16 percent decline in volumes during the quarter.

Global FX:

- Global FX net revenue of \$16.9 million increased 14 percent, primarily as a result of higher net transaction and clearing fees². ADNV traded on the Cboe FX platform was \$40.8 billion for the quarter, up 21 percent compared to last year’s fourth quarter, and net capture per one million dollars traded was \$2.69 for the quarter, down 3 percent compared to \$2.77 in the fourth quarter of 2021.
- Cboe FX market share was 18.4 percent for the quarter compared to 16.8 percent in last year’s fourth quarter, which is a quarterly record for Cboe FX. The increase was driven by the continued adoption of our diverse set of FX order types and trading protocols.

¹The Digital and Corporate segments are not further discussed as results were not material during the fourth quarter of 2022.

²A full reconciliation of our non-GAAP results to our GAAP results is included in the attached tables. See “Non-GAAP Information” in the accompanying financial tables.

2023 Fiscal Year Financial Guidance

Cboe provided guidance for the 2023 fiscal year as noted below.

- Organic total net revenue growth¹ is expected to be in the range of 7 to 9 percentage points in 2023, above medium-term organic total net revenue¹ guidance expectations of 5 to 7 percentage points.
- Revenue from acquisitions held less than a year¹ is expected to contribute total net revenue growth of 0.5 percentage points in 2023.
- Organic net revenue¹ from Data and Access Solutions is expected to increase by approximately 7 to 10 percentage points in 2023, in line with medium-term guidance expectations.
- Adjusted operating expenses¹ in 2023 are expected to be in the range of \$769 to \$779 million, from a base of \$652 million in 2022. The guidance excludes the expected amortization of acquired intangible assets of \$112 million; the company plans to reflect the exclusion of this amount in its non-GAAP reconciliation.
- Depreciation and amortization expense for 2023, which is included in adjusted operating expenses above, is expected to be in the range of \$48 to \$52 million, excluding the expected amortization of acquired intangible assets.
- Other income (expense), net, is expected to contribute a \$27 to \$33 million benefit in 2023 given expected performance of minority investments.
- The effective tax rate¹ on adjusted earnings for the full year 2023 is expected to be in the range of 28.5 to 30.5 percent. Significant changes in trading volume, expenses, tax laws or rates and other items could materially impact this expectation.
- Capital expenditures for 2023 are expected to be in the range of \$60 to \$66 million.

⁽¹⁾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. Acquisitions are considered organic after 12 months of closing. 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 cost 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.

Capital Management

At December 31, 2022, the company had adjusted cash² of \$403.2 million. Total debt as of December 31, 2022 was \$1,742.0 million, a decrease of \$117.8 million from September 30, 2022.

The company paid cash dividends of \$53.4 million, or \$0.50 per share, during the fourth quarter of 2022 and utilized \$15.3 million to repurchase 132 thousand shares of its common stock under its share repurchase program at an average price of \$116.07 per share. As of December 31, 2022, the company had approximately \$217.9 million of availability remaining under its existing share repurchase authorizations.

Earnings Conference Call

Executives of Cboe Global Markets will host a conference call to review its fourth-quarter financial results today, February 3, 2023, at 8:30 a.m. ET/7:30 a.m. CT. The conference call and any accompanying slides will be publicly available via live webcast from the Investor Relations section of the company's website at www.cboe.com under Events & Presentations. Participants may also listen via telephone by dialing (877) 255-4313 from the United States, (866) 450-4696 from Canada or (412) 317-5466 for international callers. Telephone participants should place calls 10 minutes prior to the start of the call. The webcast will be archived on the company's website for replay. A telephone replay of the earnings call also will be available from approximately 11:00 a.m. CT, February 3, 2023, through 11:00 p.m. CT, February 10, 2023, by calling (877) 344-7529 from the U.S., (855) 669-9658 from Canada or (412) 317-0088 for international callers, using replay code 10160639.

⁽²⁾A full reconciliation of our non-GAAP results to our GAAP results is included in the attached tables. See "Non-GAAP Information" in the accompanying financial tables.

About Cboe Global Markets

Cboe Global Markets (Cboe: CBOE), a leading provider of market infrastructure and tradable products, delivers cutting-edge trading, clearing and investment solutions to market participants around the world. The Company is committed to operating a trusted, inclusive global marketplace, and to providing leading products, technology and data solutions that enable participants to define a sustainable financial future. Cboe provides trading solutions and products in multiple asset classes, including equities, derivatives, FX, and digital assets, across North America, Europe, and Asia Pacific. To learn more, visit www.cboe.com.

Cautionary Statements Regarding Forward-Looking Information

This press release 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.

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, cybersecurity risks, insider threats and unauthorized disclosure of confidential information; 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; 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 and clearing volume and transaction traffic, including significant increases, without failure or degradation of performance of our systems; misconduct by those who use our markets or our products or for whom we clear transactions; challenges to our use of open source software code; our ability to meet our compliance obligations, including managing potential conflicts between our regulatory responsibilities and our for-profit status; our ability to maintain BIDS Trading as an independently managed and operated trading venue, separate from and not integrated with our registered national securities exchanges; damage to our reputation; the ability of our compliance and risk management methods to effectively monitor and manage our risks; our ability to manage our growth and strategic acquisitions or alliances effectively; restrictions imposed by our debt obligations and our ability to make payments on or refinance our debt obligations; our ability to maintain an investment grade credit rating; impairment of our goodwill, long-lived assets, investments or intangible assets; the accuracy of our estimates and expectations; litigation risks and other liabilities; and operating a digital asset business and clearinghouse, including the expected benefits of our ErisX acquisition, subsequently rebranded to Cboe Digital, cybercrime, changes in digital asset regulation, losses due to digital asset custody, and fluctuations in digital asset prices. More detailed information about factors that may affect our actual results to differ may be found in our filings with the SEC, including in our Annual Report on Form 10-K for the year ended December 31, 2021 and other filings made from time to time with the SEC.

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.

The condensed consolidated statements of income and balance sheets are unaudited and subject to revision.

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**Cboe Global Markets, Inc.
Key Performance Statistics by Business Segment**

	4Q 2022	3Q 2022	2Q 2022	1Q 2022	4Q 2021
Options					
Total industry ADV (in thousands)	42,694	39,947	39,377	42,464	40,794
Total Company Options ADV (in thousands)	14,545	13,521	13,054	13,392	12,694
Multi-listed options	11,186	10,592	10,378	10,978	10,527
Index options	3,359	2,929	2,677	2,414	2,167
Total Options market share	34.1 %	33.8 %	33.2 %	31.5 %	31.1 %
Multi-listed options	28.5 %	28.6 %	28.3 %	27.4 %	27.3 %
Total Options RPC:	\$ 0.248	\$ 0.242	\$ 0.233	\$ 0.210	\$ 0.199
Multi-listed options	\$ 0.060	\$ 0.061	\$ 0.066	\$ 0.067	\$ 0.066
Index options	\$ 0.876	\$ 0.896	\$ 0.883	\$ 0.857	\$ 0.845
North American Equities					
U.S. Equities - Exchange:					
Total industry ADV (shares in billions)	11.2	10.9	12.6	12.9	10.8
Market share %	13.1 %	13.3 %	13.6 %	14.3 %	13.3 %
Net capture (per 100 touched shares)	\$ 0.024	\$ 0.023	\$ 0.020	\$ 0.017	\$ 0.025
U.S. Equities - Off-Exchange:					
ADV (touched shares, in millions)	80.8	80.1	92.7	108.5	84.2
Off-Exchange ATS Block Market Share % (reported on a two-month lag)	21.5 %	21.7 %	22.7 %	24.4 %	22.5 %
Net capture (per 100 touched shares)	\$ 0.113	\$ 0.114	\$ 0.108	\$ 0.117	\$ 0.115
Canadian Equities:					
ADV (matched shares, in millions)	139.0	113.2	73.7	41.1	41.3
Total market share %	13.6 %	12.2 %	6.4 %	3.2 %	3.3 %
Net capture (per 10,000 shares, in Canadian Dollars)	\$ 3.901	\$ 4.316	\$ 5.668	\$ 9.103	\$ 8.475
Europe and Asia Pacific					
European Equities:					
Total industry ADNV (Euros - in billions)	€ 40.1	€ 39.2	€ 46.9	€ 58.7	€ 44.0
Market share %	24.9 %	24.6 %	23.2 %	21.8 %	19.8 %
Net capture (bps)	€ 0.224	€ 0.229	€ 0.238	€ 0.233	€ 0.256
Cboe Clear Europe:					
Trades cleared (in thousands)	340,932.2	341,549.2	356,351.1	454,437.8	345,074.8
Fee per trade cleared	€ 0.008	€ 0.008	€ 0.009	€ 0.009	€ 0.011
Net settlement volume (shares in thousands)	2,490.5	2,546.8	2,501.6	2,802.1	2,664.9
Net fee per settlement	€ 0.886	€ 0.902	€ 0.808	€ 0.924	€ 0.860
Australian Equities:					
ADNV (AUD billions)	\$ 0.7	\$ 0.7	\$ 0.8	\$ 0.9	\$ 0.8
Market share - Continuous	17.2 %	16.7 %	17.0 %	15.8 %	16.1 %
Net capture (per matched notional value (bps), in Australian Dollars)	\$ 0.142	\$ 0.168	\$ 0.171	\$ 0.173	\$ 0.171
Japanese Equities:					
ADNV (JPY billions)	¥ 114.1	¥ 160.6	¥ 136.0	¥ 161.8	¥ 111.4
Market share - Lit Continuous	2.9 %	4.4 %	3.5 %	3.8 %	2.9 %
Net capture (per matched notional value (bps))	¥ 0.265	¥ 0.259	¥ 0.258	¥ 0.228	¥ 0.358
Futures					
ADV (in thousands)	193	205	222	254	230
RPC	\$ 1.689	\$ 1.700	\$ 1.677	\$ 1.637	\$ 1.651
Global FX					
Market share %	18.4 %	17.8 %	17.0 %	17.3 %	16.8 %
ADNV (\$ in billions)	\$ 40.8	\$ 41.3	\$ 39.6	\$ 42.0	\$ 33.7
Net capture (per one million dollars traded)	\$ 2.69	\$ 2.69	\$ 2.71	\$ 2.67	\$ 2.77

ADV = average daily volume; ADNV = average daily notional value.

RPC, average revenue per contract, for options and futures represents total net transaction fees recognized for the period divided by total contracts traded during the period.

Touched volume represents the total number of shares of equity securities and ETFs internally matched on our exchanges or routed to and executed on an external market center.

Matched volume represents the total number of shares of equity securities and ETFs executed on our exchanges.

U.S. Equities - Exchange, "net capture per 100 touched shares" refers to transaction fees less liquidity payments and routing and clearing costs divided by the product of one-hundredth ADV of touched shares on BZX, BYX, EDGX and EDGA and the number of trading days. U.S. Equities - Off-Exchange data reflects BIDS Trading. For U.S. Equities - Off-Exchange, "net capture per 100 touched shares" refers to transaction fees less order and execution management system (OMS/EMS) fees and clearing costs divided by the product of one-hundredth ADV of touched shares on BIDS Trading and the number of trading days for the period.

Canadian Equities, "net capture per 10,000 shares" refers to transaction fees divided by the product of one-ten thousandth ADV of shares for MATCHNow and NEO and the number of trading days. Total market share represents MATCHNow and NEO volume divided by the total volume of the Canadian Equities market.

European Equities, "net capture per matched notional value" refers to transaction fees less liquidity payments in Euros divided by the product of ADNV in Euros of shares matched on Cboe Europe Equities and the number of trading days. "Trades cleared" refers to the total number of non-interoperable trades cleared, "Fee per trade cleared" refers to clearing fees divided by number of non-interoperable trades cleared, "Net settlement volume" refers to the total number of settlements executed after netting, and "Net fee per settlement" refers to settlement fees less direct costs incurred to settle divided by the number of settlements executed after netting. Asia Pacific data reflects the acquisition of Cboe Asia Pacific (formerly Chi-X Asia Pacific) effective July 1, 2021. Australian Equities "Net capture per matched notional value" refers to transaction fees less liquidity payments in Australian dollars divided by the product of ADNV in Australian dollars of shares matched on Cboe Australia and the number of Australian Equities trading days. Japanese Equities "Net capture per matched notional value" refers to transaction fees less liquidity payments in Japanese Yen divided by the product of ADNV in Japanese Yen of shares matched on Cboe Japan and the number of Japanese Equities trading days.

Global FX, "net capture per one million dollars traded" refers to transaction fees less liquidity payments, if any, divided by the Spot and SEF products of one-thousandth of ADNV traded on the Cboe FX Markets and the number of trading days, divided by two, which represents the buyer and seller that are both charged on the transaction. Market Share represents Cboe FX volume divided by the total volume of publicly reporting spot FX venues (Cboe FX, EBS, Refinitiv, and Euronext FX).

Average transaction fees per contract can be affected by various factors, including exchange fee rates, volume-based discounts and transaction mix by contract type and product type.

Cboe Global Markets, Inc. and Subsidiaries
Condensed Consolidated Statements of Income (Unaudited)
Three and Twelve Months Ended December 31, 2022 and 2021

(in millions, except per share amounts)	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2022	2021	2022	2021
Revenues:				
Cash and spot markets	\$ 423.0	\$ 381.6	\$ 1,777.6	\$ 1,660.5
Data and access solutions	128.1	113.8	497.0	427.7
Derivatives markets	453.6	371.0	1,683.9	1,406.6
Total Revenues	1,004.7	866.4	3,958.5	3,494.8
Cost of Revenues:				
Liquidity payments	381.4	395.7	1,670.2	1,650.7
Routing and clearing	19.8	21.8	83.2	87.8
Section 31 fees	109.1	31.0	329.8	179.6
Royalty fees	34.4	23.7	120.0	86.3
Other cost of revenues	2.9	3.7	13.6	14.3
Total Cost of Revenues	547.6	475.9	2,216.8	2,018.7
Revenues Less Cost of Revenues	457.1	390.5	1,741.7	1,476.1
Operating Expenses:				
Compensation and benefits	93.6	74.5	363.0	288.5
Depreciation and amortization	44.7	42.0	166.8	167.4
Technology support services	21.3	16.6	77.7	66.7
Professional fees and outside services	24.8	21.7	89.0	83.7
Travel and promotional expenses	9.2	3.9	23.7	9.7
Facilities costs	5.8	5.7	25.1	22.2
Acquisition-related costs	2.0	3.7	19.9	15.6
Goodwill impairment	—	—	460.9	—
Other expenses	5.2	1.8	26.0	16.4
Total Operating Expenses	206.6	169.9	1,252.1	670.2
Operating Income	250.5	220.6	489.6	805.9
Non-operating Income (Expenses):				
Interest expense, net	(15.7)	(11.1)	(56.4)	(47.4)
Other income (expense), net	1.0	0.7	(0.3)	(2.4)
Total Non-operating Expenses	(14.7)	(10.4)	(56.7)	(49.8)
Income Before Income Tax Provision	235.8	210.2	432.9	756.1
Income tax provision	76.1	44.3	197.9	227.1
Net Income	159.7	165.9	235.0	529.0
Net income allocated to participating securities	(0.7)	(0.6)	(0.9)	(1.7)
Net Income Allocated to Common Stockholders	\$ 159.0	\$ 165.3	\$ 234.1	\$ 527.3
Net Income Per Share Allocated to Common Stockholders:				
Basic earnings per share	\$ 1.50	\$ 1.55	\$ 2.20	\$ 4.93
Diluted earnings per share	1.49	1.54	2.19	4.92
Weighted average shares used in computing earnings per share:				
Basic	106.2	106.8	106.3	107.0
Diluted	106.5	107.1	106.7	107.2

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Cboe Global Markets, Inc. and Subsidiaries
Condensed Consolidated Balance Sheets (Unaudited)
December 31, 2022 and December 31, 2021

(in millions)	December 31, 2022	December 31, 2021
Assets		
Current Assets:		
Cash and cash equivalents	\$ 432.7	\$ 341.9
Financial investments	91.7	37.1
Accounts receivable, net	369.8	326.9
Margin deposits and clearing funds	543.0	745.9
Digital assets - safeguarded assets	22.9	—
Income taxes receivable	48.3	42.7
Other current assets	47.6	36.8
Total Current Assets	1,556.0	1,531.3
Investments	253.2	245.8
Land	2.3	2.3
Property and equipment, net	108.2	105.2
Operating lease right of use assets	111.7	110.1
Goodwill	3,122.8	3,025.4
Intangible assets, net	1,662.8	1,668.6
Other assets, net	181.9	125.8
Total Assets	\$ 6,998.9	\$ 6,814.5
Liabilities and Stockholders' Equity		
Current Liabilities:		
Accounts payable and accrued liabilities	\$ 420.2	\$ 295.4
Section 31 fees payable	147.1	40.8
Deferred revenue	11.7	15.2
Margin deposits and clearing funds	543.0	745.9
Income taxes payable	3.5	8.2
Digital assets - safeguard liabilities	22.9	—
Current portion of long-term debt	304.7	—
Current portion of contingent consideration liabilities	24.1	63.8
Total Current Liabilities	1,477.2	1,169.3
Long-term debt	1,437.3	1,299.3
Non-current unrecognized tax benefits	196.1	197.9
Deferred income taxes	222.9	372.7
Non-current operating lease liabilities	129.3	129.2
Non-current portion of contingent consideration liabilities	15.0	6.7
Other non-current liabilities	55.8	34.6
Total Liabilities	3,533.6	3,209.7
Stockholders' Equity:		
Preferred stock	—	—
Common stock	1.1	1.1
Treasury stock at cost	(131.0)	(106.8)
Additional paid-in-capital	1,455.1	1,509.4
Retained earnings	2,171.1	2,145.5
Accumulated other comprehensive (loss) income, net	(31.0)	55.6
Total Stockholders' Equity	3,465.3	3,604.8
Total Liabilities and Stockholders' Equity	\$ 6,998.9	\$ 6,814.5

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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 press release include net transaction and clearing fees, adjusted operating expenses, adjusted operating income, organic net revenue, inorganic net revenue, net revenues on a constant currency basis, and adjusted operating margin, adjusted net income allocated to common stockholders and adjusted diluted earnings per share, effective tax rate on adjusted earnings, net revenues on a constant currency basis, adjusted cash, EBITDA, EBITDA margin, adjusted EBITDA and adjusted EBITDA margin.

Management believes that the non-GAAP financial measures presented in this press release 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 non-transaction revenue 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 acquisitions, 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, impairment charges, 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.

Organic Net Revenue Reconciliation

Table 3 (in millions)	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2022	2021	2022	2021
Reconciliation of Revenues Less Cost of Revenues to Organic Net Revenue				
Revenues less cost of revenues (net revenue)	\$ 457.1	\$ 390.5	\$ 1,741.7	\$ 1,476.1
Less acquisitions:				
Acquisition revenues less cost of revenues (inorganic net revenue)	\$ (5.1)	\$ —	\$ (28.7)	\$ —
Organic net revenue	\$ 452.0	\$ 390.5	\$ 1,713.0	\$ 1,476.1

Reconciliation of GAAP and non-GAAP Information

Table 4 (in millions, except per share amounts)	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2022	2021	2022	2021
Reconciliation of Net Income Allocated to Common Stockholders to Non-GAAP (As shown on Table 1)				
Net income allocated to common stockholders	\$ 159.0	\$ 165.3	\$ 234.1	\$ 527.3
Non-GAAP adjustments				
Acquisition-related expenses (1)	2.0	3.7	19.9	15.6
Investment establishment costs (2)	—	—	3.0	—
Gain on investment (3)	—	—	(7.5)	—
Loan forgiveness (4)	—	—	(1.3)	—
Amortization of acquired intangible assets (5)	33.2	31.4	124.3	126.6
Goodwill impairment (6)	—	—	460.9	—
Impairment of investment (7)	—	—	10.6	5.0
Change in contingent consideration (8)	(5.2)	(2.7)	(5.2)	(2.7)
Total Non-GAAP adjustments	30.0	32.4	604.7	144.5
Income tax expense related to the items above	5.3	(7.4)	(143.7)	(31.8)
Tax reserves (9)	—	(5.4)	48.5	(5.4)
Deferred tax re-measurements	(2.0)	(3.1)	(2.0)	14.6
Net income allocated to participating securities - effect of reconciling items	(0.1)	(0.1)	(1.8)	(0.4)
Adjusted net income allocated to common stockholders	\$ 192.2	\$ 181.7	\$ 739.8	\$ 648.8
Reconciliation of Diluted EPS to Non-GAAP				
Diluted earnings per common share	\$ 1.49	\$ 1.54	\$ 2.19	\$ 4.92
Per share impact of non-GAAP adjustments noted above	0.31	0.16	4.74	1.13
Adjusted diluted earnings per common share	\$ 1.80	\$ 1.70	\$ 6.93	\$ 6.05
Reconciliation of Operating Margin to Non-GAAP				
Revenues less cost of revenues	\$ 457.1	\$ 390.5	\$ 1,741.7	\$ 1,476.1
Non-GAAP adjustments noted above	—	—	—	—
Adjusted revenues less cost of revenues	\$ 457.1	\$ 390.5	\$ 1,741.7	\$ 1,476.1
Operating expenses (10)	\$ 206.6	\$ 169.9	\$ 1,252.1	\$ 670.2
Non-GAAP adjustments noted above	30.0	32.4	599.9	139.5
Adjusted operating expenses	\$ 176.6	\$ 137.5	\$ 652.2	\$ 530.7
Operating income	\$ 250.5	\$ 220.6	\$ 489.6	\$ 805.9
Non-GAAP adjustments noted above	30.0	32.4	599.9	139.5
Adjusted operating income	\$ 280.5	\$ 253.0	\$ 1,089.5	\$ 945.4
Adjusted operating margin (11)	61.4 %	64.8 %	62.6 %	64.0 %
Reconciliation of Income Tax Rate to Non-GAAP				
Income before income taxes	235.8	210.2	432.9	756.1
Non-GAAP adjustments noted above	30.0	32.4	604.7	144.5
Adjusted income before income taxes	\$ 265.8	\$ 242.6	\$ 1,037.6	\$ 900.6
Income tax expense	76.1	44.3	197.9	227.1
Non-GAAP adjustments noted above	(3.3)	15.9	97.2	22.6
Adjusted income tax expense	\$ 72.8	\$ 60.2	\$ 295.1	\$ 249.7
Adjusted income tax rate	27.4 %	24.8 %	28.4 %	27.7 %

(1) This amount includes professional fees (which includes fees associated with the valuation of the Cboe Digital goodwill impairment) and outside services, related to the Company's acquisitions.

(2) This amount represents the investment establishment costs related to the company's investment in 7RIDGE Investments 3 LP, which acquired Trading Technologies, Inc.

(3) This amount represents the gain on the Company's investment in Eris Innovations Holdings, LLC in connection with the full acquisition of Cboe Digital (formerly ErisX).

(4) This amount represents the forgiveness of a PPP ("Paycheck Protection Program") loan previously held by Cboe Digital.

(5) This amount represents the amortization of acquired intangible assets related to the company's acquisitions.

(6) This amount represents the impairment of Cboe Digital goodwill.

(7) This amount represents the impairment of investment related to the Company's investments in American Financial Exchange, LLC in 2022 and Curve Global in 2021.

(8) This amount represents the gain on change in contingent consideration related to the acquisition of MATCHNow.

(9) This amount represents the tax reserves related to Section 199 matters.

(10) 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" (\$2.0 million and \$1.8 million in expense for the three months ended December 31, 2022 and 2021, respectively, and \$0.5 million and \$3.5 million in expense for the twelve months ended December, 2022 and 2021, respectively), and are directly offset by deferred compensation income, expenses and dividends included within "Other income, net" (\$2.0 million and \$1.8 million in income, expense and dividends in the three months ended December 31, 2022 and 2021, respectively, and \$0.5 million and \$3.5 million in income, expense and dividends in the twelve months ended December, 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."

(11) 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, change in contingent consideration, gain on investment, loan forgiveness, investment establishment costs, goodwill impairment, 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.

Table 5

(in millions)

Reconciliation of Net Income Allocated to Common Stockholders to EBITDA and Adjusted EBITDA
(Per Table 1)

Net income allocated to common stockholders

	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2022	2021	2022	2021
Net income allocated to common stockholders	\$ 159.0	\$ 165.3	\$ 234.1	\$ 527.3
Interest expense, net	15.7	11.1	56.4	47.4
Income tax provision	76.1	44.3	197.9	227.1
Depreciation and amortization	44.7	42.0	166.8	167.4
EBITDA	\$ 295.5	\$ 262.7	\$ 655.2	\$ 969.2
EBITDA Margin	64.6 %	67.3 %	37.6 %	65.7 %

Non-GAAP adjustments not included in above line items

Acquisition-related expenses	2.0	3.7	19.9	15.6
Investment establishment costs	—	—	3.0	—
Gain on investment	—	—	(7.5)	—
Loan forgiveness	—	—	(1.3)	—
Change in contingent consideration	(5.2)	(2.7)	(5.2)	(2.7)
Goodwill impairment	—	—	460.9	—
Impairment of investment	—	—	10.6	5.0
Adjusted EBITDA	\$ 292.3	\$ 263.7	\$ 1,135.6	\$ 987.1
Adjusted EBITDA Margin	63.9 %	67.5 %	65.2 %	66.9 %

Table 6

(in millions)

Reconciliation of Cash and cash equivalents to Adjusted Cash

	December 31,	December 31,
	2022	2021
Cash and cash equivalents	\$ 432.7	\$ 341.9
Financial investments	91.7	37.1
Less deferred compensation plan assets	(27.5)	(28.0)
Less cash collected for Section 31 Fees	(93.7)	(25.9)
Adjusted Cash	\$ 403.2	\$ 325.1

Table 7

(in millions)

Reconciliation of Net Transaction and Clearing Fees - Three Months Ended December 31, 2022 and 2021

	Consolidated		Options		N.A. Equities		Europe and APAC		Futures		Global FX		Digital	
	December 31,		December 31,		December 31,		December 31,		December 31,		December 31,		December 31,	
	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
Transaction and clearing fees	\$ 718.4	\$ 678.8	\$ 392.7	\$ 330.9	\$ 255.4	\$ 270.1	\$ 35.3	\$ 41.1	\$ 20.5	\$ 24.2	\$ 14.4	\$ 12.5	\$ 0.1	\$ —
Liquidity payments	(381.4)	(395.7)	(157.7)	(162.2)	(214.4)	(226.3)	(8.8)	(7.2)	—	—	—	—	(0.5)	—
Routing and clearing	(19.8)	(21.8)	(7.3)	(6.9)	(8.2)	(9.8)	(4.2)	(4.9)	—	—	(0.1)	(0.2)	—	—
Net transaction and clearing fees	\$ 317.2	\$ 261.3	\$ 227.7	\$ 161.8	\$ 32.8	\$ 34.0	\$ 22.3	\$ 29.0	\$ 20.5	\$ 24.2	\$ 14.3	\$ 12.3	\$ (0.4)	\$ —

Table 8

(in millions)

Reconciliation of Net Revenue by Revenue Caption - Three Months Ended December 31, 2022 and 2021

	Cash and Spot Markets		Data and Access Solutions		Derivatives Markets		Total	
	Three Months Ended		Three Months Ended		Three Months Ended		Three Months Ended	
	December 31,		December 31,		December 31,		December 31,	
	2022	2021	2022	2021	2022	2021	2022	2021
Transaction and clearing fees	\$ 305.3	\$ 323.7	\$ —	\$ —	\$ 413.1	\$ 355.1	\$ 718.4	\$ 678.8
Access and capacity fees	—	—	82.7	74.4	—	—	82.7	74.4
Market data fees	18.2	19.7	45.0	36.0	8.5	7.8	71.7	63.5
Regulatory fees	89.2	27.8	—	—	31.2	7.5	120.4	35.3
Other revenue	10.3	10.4	0.4	3.4	0.8	0.6	11.5	14.4
Total revenues	\$ 423.0	\$ 381.6	\$ 128.1	\$ 113.8	\$ 453.6	\$ 371.0	\$ 1,004.7	\$ 866.4
Liquidity payments	\$ 223.1	\$ 233.3	\$ —	\$ —	\$ 158.3	\$ 162.4	\$ 381.4	\$ 395.7
Routing and clearing fees	12.5	14.9	—	—	7.3	6.9	19.8	21.8
Section 31 fees	86.9	27.0	—	—	22.2	4.0	109.1	31.0
Royalty fees and other cost of revenues	3.4	3.7	2.3	2.3	31.6	21.4	37.3	27.4
Total cost of revenues	\$ 325.9	\$ 278.9	\$ 2.3	\$ 2.3	\$ 219.4	\$ 194.7	\$ 547.6	\$ 475.9
Revenues less cost of revenues (net revenue)	\$ 97.1	\$ 102.7	\$ 125.8	\$ 111.5	\$ 234.2	\$ 176.3	\$ 457.1	\$ 390.5
Acquisition revenue less cost of revenues (inorganic net revenue)	(1.8)	—	(3.3)	—	—	—	(5.1)	—
Organic net revenue	\$ 95.3	\$ 102.7	\$ 122.5	\$ 111.5	\$ 234.2	\$ 176.3	\$ 452.0	\$ 390.5

Table 9

Reconciliation of GAAP Effective Tax Rate to Effective Tax Rate Excluding Goodwill Impairment and Section 199 Matters - Three Months and Twelve Months Ended December 31, 2022

	Three months ended, December 31,	Twelve Months Ended December 31,
	2022	2022
GAAP effective tax rate	32.3 %	45.7 %
Tax effect of goodwill impairment	— %	(8.5)%
Tax effect of Section 199 related matters	— %	(5.5)%
Effective tax rate excluding goodwill impairment and Section 199 matters	32.3 %	31.7 %

Table 10

Reconciliation of GAAP Net Revenues to Net Revenues in Constant Currency - Three and Twelve Months Ended December 31, 2022

	Three months ended, December 31,	Twelve months ended, December 31,
	2022	2022
Europe and Asia Pacific net revenues	\$ 44.2	\$ 196.1
Constant currency adjustment ¹	5.6	21.3
Europe and Asia Pacific net revenue in constant currency	\$ 49.8	\$ 217.4

⁽¹⁾ We define constant currency net revenues as total net revenues excluding the effect of foreign exchange rate movements. Constant currency impact in dollars is calculated by translating the current period GAAP net revenues using the foreign currency exchange rates that were in effect during the previous comparable period and subtracting it by the current period GAAP net revenues.

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