UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

| | FORM : | 10-Q | |
|--|--|--|-------|
| (Mark One) | | | |
| QUARTERLY REPORT PU | | TION 13 OR 15(d) OF THE SECURI | TIES |
| For the q | uarterly period e - OR | ended March 31, 2024 - | |
| TRANSITION REPORT P EXCHANGE ACT OF 193 | | CTION 13 OR 15(d) OF THE SECUR | ITIES |
| | nsition period fro mmission file num | | |
| C | ME GRO | UP INC. | |
| (Exact name | of registrant as | s specified in its charter) | |
| Delaware | | 36-4459170 | |
| (State or other jurisdiction of incorporation or organization) | | (I.R.S. Employer Identification No.) | |
| 20 South Wacker Drive | Chicago Illinoi | is 60606 | |
| (Address of principal exe | cutive offices) | (Zip Code) | |
| | (312) 930 | -1000 | |
| (Registra | ant's telephone numb Not Appli | oer, including area code) cable | |
| (Former name, former a Securities registered pursuant | | scal year, if changed since last report) the Act: | |
| | | ame of each exchange on which | |
| | rading symbol | registered | |
| Class A Common Stock | CME | The Nasdaq Stock Market | |
| by Section 13 or 15(d) of the S | ecurities Exchange riod that the regist | (1) has filed all reports required to be e Act of 1934 during the preceding 12 trant was required to file such reports; for the past 90 days. Yes \square | |
| Interactive Data File required t | o be submitted pur ng the preceding 1 | has submitted electronically every rsuant to Rule 405 of Regulation S-T 2 months (or for such shorter period Y Yes \square No \square | that |

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company.

| | _ | d filer," "accelerated filer," "smaller rep any" in Rule 12b-2 of the Exchange Act | _ | | | |
|--|---------------------|--|----------|-----------|--|--|
| Large accelerated filer | \boxtimes | Accelerated filer | | | | |
| Non-accelerated filer | | Smaller reporting cor | npany | | | |
| | | Emerging growth con | npany | | | |
| use the extended tran | sition period for o | cate by check mark if the registrant ha omplying with any new or revised final t to Section 13(a) of the Exchange Act. | ncial | ed not to | | |
| Indicate by check mof the Exchange Act). | nark whether the | registrant is a shell company (as define | d in Rul | le 12b-2 | | |
| Yes \square No \boxtimes The number of shares outstanding of each of the registrant's classes of common stock as of April 10, 2024 was as follows: 360,062,233 shares of Class A common stock, \$0.01 par value; 625 shares of Class B-1 common stock, \$0.01 par value; 813 shares of Class B-2 common stock, \$0.01 par value; 1,287 shares of Class B-3 common stock, \$0.01 par value; and 413 shares of Class B-4 common stock, \$0.01 par value. | | | | | | |
| | | 1 | | | | |

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PART I. FINANCIAL INFORMATION

Certain Terms

All references to "options" or "options contracts" in the text of this document refer to options on futures contracts.

Further information about CME Group and its products can be found at http://www.cmegroup.com. Information made available on our website does not constitute a part of this Quarterly Report on Form 10-Q.

Information about Contract Volume and Average Rate per Contract

All amounts regarding contract volume and average rate per contract are for CME Group's listed futures and options on futures contracts unless otherwise noted.

Trademark Information

CME Group, the Globe logo, CME, Chicago Mercantile Exchange, Globex, and E-mini are trademarks of Chicago Mercantile Exchange Inc. CBOT and Chicago Board of Trade are trademarks of Board of Trade of the City of Chicago, Inc. NYMEX, New York Mercantile Exchange and ClearPort are trademarks of New York Mercantile Exchange, Inc. COMEX is a trademark of Commodity Exchange, Inc. BrokerTec is a trademark of BrokerTec Americas LLC and EBS is a trademark of EBS Group Limited. OSTTRA is a trademark of MarkitSERV Limited. Dow Jones, Dow Jones Industrial Average, S&P 500 and S&P are service and/or trademarks of Dow Jones Trademark Holdings LLC, Standard & Poor's Financial Services LLC and S&P Dow Jones Indices LLC, as the case may be, and have been licensed for use by Chicago Mercantile Exchange Inc. (CME). All other trademarks are the property of their respective owners.

Forward-Looking Statements

From time to time, in this Quarterly Report on Form 10-Q as well as in other written reports and verbal statements, we discuss our expectations regarding future performance. These forward-looking statements are identified by their use of terms and phrases such as "believe," "anticipate," "could," "estimate," "intend," "may," "plan," "expect" and similar expressions, including references to assumptions. These forward-looking statements are based on currently available competitive, financial and economic data, current expectations, estimates, forecasts and projections about the industries in which we operate and management's beliefs and assumptions. These statements are not guarantees of future performance and involve risks, uncertainties and assumptions that are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed or implied in any forward-looking statements. We want to caution you not to place undue reliance on any forward-looking statements. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise. Among the factors that might affect our performance are:

- increasing competition by foreign and domestic entities, including increased competition from new entrants into our markets and consolidation of existing entities;
- our ability to keep pace with rapid technological developments, including our ability to complete the development, implementation and maintenance of the enhanced functionality required by our customers while maintaining reliability and ensuring that such technology is not vulnerable to security risks;
- our ability to continue introducing competitive new products and services on a timely, cost-effective basis, including through our electronic trading capabilities, and our ability to maintain the competitiveness of our existing products and services;

- our ability to adjust our fixed costs and expenses if our revenues decline;
- our ability to maintain existing customers at substantially similar trading levels, develop strategic relationships and attract new customers;
- our ability to expand and globally offer our products and services;
- changes in regulations, including the impact of any changes in laws or government
 policies with respect to our products or services or our industry, such as any changes
 to regulations and policies that require increased financial and operational resources
 from us or our customers;
- the costs associated with protecting our intellectual property rights and our ability to operate our business without violating the intellectual property rights of others;
- decreases in revenue from our market data as a result of decreased demand or changes to regulations in various jurisdictions;
- changes in our rate per contract due to shifts in the mix of the products traded, the trading venue and the mix of customers (whether the customer receives member or non-member fees or participates in one of our various incentive programs) and the impact of our tiered pricing structure;
- the ability of our credit and liquidity risk management practices to adequately protect us from the credit risks of clearing members and other counterparties, and to satisfy the margin and liquidity requirements associated with the BrokerTec matched principal business;

- the ability of our compliance and risk management programs to effectively monitor and manage our risks, including our ability to prevent errors and misconduct and protect our infrastructure against security breaches and misappropriation of our intellectual property assets;
- our dependence on third-party providers and exposure to risk through third parties, including risks related to the performance, reliability and security of technology used by our third-party providers and third-party providers that our clients rely on;
- volatility in commodity, equity and fixed income prices, and price volatility of financial benchmarks and instruments such as interest rates, equity indices, fixed income instruments and foreign exchange rates;
- economic, social, political and market conditions, including the volatility of the capital and credit markets and the impact of economic conditions on the trading activity of our current and potential customers;
- our ability to accommodate increases in contract volume and order transaction traffic and to implement enhancements without failure or degradation of the performance of our trading and clearing systems;
- our ability to execute our growth strategy and maintain our growth effectively;
- our ability to manage the risks, control the costs and achieve the synergies associated
 with our strategy for acquisitions, investments and alliances, including those
 associated with the performance of our joint ventures with S&P Dow Jones (S&P Dow
 Jones Indices LLC) in index services and in trade processing/post trade services
 (OSTTRA), our primary business and distribution partners' actions and our partnership
 with Google Cloud;
- variances in earnings on cash accounts and collateral that our clearing house holds for its clients;
- impact of CME Group pricing and incentive changes;
- impact of aggregation services and internalization on trade flow and volumes;
- any negative financial impacts from changes to the terms of intellectual property and index rights;
- our ability to continue to generate funds and/or manage our indebtedness to allow us to continue to invest in our business;
- industry, channel partner and customer consolidation and/or concentration;
- · decreases in trading and clearing activity;
- the imposition of a transaction tax or user fee on futures and options transactions and/or repeal of the 60/40 tax treatment of such transactions;
- increases in effective tax rates, borrowing costs or changes in tax policy;
- our ability to maintain our brand and reputation; and
- the unfavorable resolution of material legal proceedings.

For a detailed discussion of these and other factors that might affect our performance, see Item 1A. of our Annual Report on Form 10-K for the year ended December 31, 2023, filed with the Securities and Exchange Commission on February 28, 2024 and Item 1A. in Part II of this Quarterly Report on Form 10-Q.

ITEM 1. FINANCIAL STATEMENTS

CME GROUP INC. AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS

(dollars in millions, except par value data; shares in thousands)

| | | March 31, 2024 | D | ecember 31, 2023 |
|---|----|-------------------|----|---------------------|
| | (| (unaudited) | | |
| Assets | | | | |
| Current Assets: | | | | |
| Cash and cash equivalents | \$ | 1,436.9 | \$ | 2,912.0 |
| Marketable securities | | 121.0 | | 111.7 |
| Accounts receivable, net of allowance of \$7.9 and \$7.1 | | 628.2 | | 535.6 |
| Other current assets (includes \$5.2 in restricted cash) | | 647.7 | | 1,138.4 |
| Performance bonds and guaranty fund contributions | | 94,473.9 | | 90,192.5 |
| Total current assets | | 97,307.7 | | 94,890.2 |
| Property, net of accumulated depreciation and amortization of \$958.8 and \$931.1 | | 396.0 | | 409.5 |
| Intangible assets—trading products | | 17,175.3 | | 17,175.3 |
| Intangible assets—other, net | | 2,990.0 | | 3,050.2 |
| Goodwill | | 10,489.6 | | 10,495.3 |
| Other assets | | 3,695.1 | | 3,685.6 |
| Total Assets | \$ | 132,053.7 | \$ | 129,706.1 |
| | _ | | _ | |
| Liabilities and Equity | | | | |
| Current Liabilities: | | | | |
| Accounts payable | \$ | 111.0 | \$ | 90.6 |
| Short-term debt | | 749.3 | | _ |
| Other current liabilities | | 767.2 | | 3,133.8 |
| Performance bonds and guaranty fund contributions | | 94,473.9 | | 90,192.5 |
| Total current liabilities | | 96,101.4 | | 93,416.9 |
| Long-term debt | | 2,676.7 | | 3,425.4 |
| Deferred income tax liabilities, net | | 5,317.2 | | 5,327.7 |
| Other liabilities | | 804.2 | | 798.2 |
| Total Liabilities | | 104,899.5 | | 102,968.2 |
| Shareholders' Equity: | | | | |
| Preferred stock, \$0.01 par value, 10,000 shares authorized as of March 31, 2024 and December 31, 2023; 4,584 issued and outstanding as of March 31, 2024 and December 31, 2023 | | _ | | _ |
| Class A common stock, \$0.01 par value, 1,000,000 shares authorized at March 31, 2024 and December 31, 2023; 359,322 and 359,231 shares issued and outstanding as of March 31, 2024 and December 31, 2023, respectively | | 3.6 | | 3.6 |
| Class B common stock, \$0.01 par value, 3 shares authorized, issued and outstanding as of March 31, 2024 and December 31, 2023 | | _ | | _ |
| Additional paid-in capital | | 22,345.6 | | 22,334.7 |
| Retained earnings | | 4,891.1 | | 4,455.2 |
| Accumulated other comprehensive income (loss) | | (86.1) | | (55.6) |
| Total CME Group Shareholders' Equity | | 27,154.2 | | 26,737.9 |
| Total Liabilities and Equity | \$ | 132,053.7 | \$ | 129,706.1 |

CME GROUP INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF INCOME

(dollars in millions, except per share data; shares in thousands) (unaudited)

Quarter Ended

| | March 31, | | | 1, |
|--|-----------|---------|----|-----------|
| | | 2024 | | 2023 |
| Revenues | _ | | | |
| Clearing and transaction fees | \$ | 1,208.9 | \$ | 1,200.2 |
| Market data and information services | | 175.4 | | 165.8 |
| Other | | 103.6 | | 75.6 |
| Total Revenues | _ | 1,487.9 | | 1,441.6 |
| Expenses | | | | |
| Compensation and benefits | | 206.0 | | 204.5 |
| Technology | | 59.4 | | 51.3 |
| Professional fees and outside services | | 33.1 | | 38.3 |
| Amortization of purchased intangibles | | 55.2 | | 56.8 |
| Depreciation and amortization | | 30.1 | | 31.9 |
| Licensing and other fee agreements | | 87.9 | | 84.7 |
| Other | | 56.6 | | 60.4 |
| Total Expenses | | 528.3 | | 527.9 |
| Operating Income | | 959.6 | | 913.7 |
| Non-Operating Income (Expense) | | | | |
| Investment income | | 1,071.3 | | 1,357.7 |
| Interest and other borrowing costs | | (39.9) | | (39.9) |
| Equity in net earnings of unconsolidated subsidiaries | | 87.2 | | 78.2 |
| Other non-operating income (expense) | | (964.8) | | (1,152.8) |
| Total Non-Operating Income (Expense) | | 153.8 | | 243.2 |
| Income before Income Taxes | | 1,113.4 | | 1,156.9 |
| Income tax provision | | 258.2 | | 273.1 |
| Net Income | | 855.2 | | 883.8 |
| Net Income Attributable to Common Shareholders of CME Group | \$ | 844.4 | \$ | 872.7 |
| | | | | |
| Earnings per Share Attributable to Common Shareholders of CME Group: | | | | |
| Basic | \$ | 2.35 | \$ | 2.43 |
| Diluted | | 2.35 | | 2.43 |
| Weighted Average Number of Common Shares: | | | | |
| Basic | | 359,258 | | 358,933 |
| Diluted | | 359,833 | | 359,313 |

CME GROUP INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(in millions) (unaudited)

| | | Quarte | r En | ded |
|---|-----------|--------|------|-------|
| | March 31, | | | L, |
| | | 2024 | | 2023 |
| Net income | \$ | 855.2 | \$ | 883.8 |
| Other comprehensive income (loss), net of tax: | | | | |
| Investment securities: | | | | |
| Net unrealized holding gains (losses) arising during the period | | _ | | 0.4 |
| Income tax benefit (expense) | | | | (0.1) |
| Investment securities, net | | _ | | 0.3 |
| Defined benefit plans: | | | | |
| Net change in defined benefit plans arising during the period | | (5.9) | | (3.5) |
| Income tax benefit (expense) | | 1.5 | | 0.9 |
| Defined benefit plans, net | | (4.4) | | (2.6) |
| Derivative investments: | | | | |
| Reclassification of net unrealized (gains) losses to interest | | | | |
| expense and other non-operating income (expense) | | (0.9) | | (1.2) |
| Income tax benefit (expense) | | 0.2 | | 0.3 |
| Derivative investments, net | | (0.7) | | (0.9) |
| Foreign currency translation: | | | | |
| Foreign currency translation adjustments | | (25.4) | | 5.9 |
| Foreign currency translation, net | | (25.4) | | 5.9 |
| Other comprehensive income (loss), net of tax | | (30.5) | | 2.7 |
| Comprehensive income | \$ | 824.7 | \$ | 886.5 |

CME GROUP INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF EQUITY

(dollars in millions, except per share data; shares in thousands) (unaudited)

| | | Class A | Class B | Preferred Stock, Common Stock and | | Accumulated | Total CME |
|---|-----------------|----------|----------|--|-----------|---------------|---------------|
| | Preferred | Common | Common | Additional | | Other | Group |
| | Stock | Stock | Stock | Paid-in | Retained | Comprehensive | Shareholders' |
| | (Shares) | (Shares) | (Shares) | Capital | Earnings | Income (Loss) | Equity |
| Balance at December 31, 2023 | 4,584 | 359,231 | 3 | \$22,338.3 | \$4,455.2 | \$ (55.6) | \$ 26,737.9 |
| Net income | | | | | 855.2 | | 855.2 |
| Other comprehensive income (loss) | | | | | | (30.5) | (30.5) |
| Dividends on common and preferred stock of \$1.15 per share | | | | | (419.3) | | (419.3) |
| Vesting of issued restricted Class A | | | | | | | |
| common stock | | 91 | | (12.4) | | | (12.4) |
| Stock-based compensation | | | | 23.3 | | | 23.3 |
| Balance at March 31, 2024 | 4,584 | 359,322 | 3 | \$22,349.2 | \$4,891.1 | \$ (86.1) | \$ 27,154.2 |
| 2024 | ,504 | | | Ψ <u></u> <u> </u> | Ψ-7,001.1 | Ψ (00.1) | Ψ 21,134.2 |

CME GROUP INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF EQUITY (continued)

(dollars in millions, except per share data; shares in thousands) (unaudited)

| | | | | Common | | | |
|---|-----------|----------|----------|------------|-----------|---------------|---------------|
| | | Class A | Class B | Stock and | | Accumulated | Total CME |
| | Preferred | Common | Common | Additional | | Other | Group |
| | Stock | Stock | Stock | Paid-in | Retained | Comprehensive | Shareholders' |
| | (Shares) | (Shares) | (Shares) | Capital | Earnings | Income (Loss) | Equity |
| Balance at December 31, 2022 | 4,584 | 358,929 | 3 | \$22,265.2 | \$4,746.8 | \$ (133.3) | \$ 26,878.7 |
| Net income | | | | | 883.8 | | 883.8 |
| Other comprehensive income (loss) | | | | | 00.0 | 2.7 | 2.7 |
| Dividends on common stock of \$1.10 per share | | | | | (400.7) | | (400.7) |
| Vesting of issued restricted Class A common stock | | 2 | | (0.3) | | | (0.3) |
| Stock-based compensation | | | | 20.2 | | | 20.2 |
| Balance at March 31, 2023 | 4,584 | 358,931 | 3 | \$22,285.1 | \$5,229.9 | \$ (130.6) | \$ 27,384.4 |

CME GROUP INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions) (unaudited)

Quarter Ended March 31,

| | March 31, | | | L, |
|---|-----------|-----------|----|-----------|
| | | 2024 | | 2023 |
| Cash Flows from Operating Activities | | | | |
| Net income | \$ | 855.2 | \$ | 883.8 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | | | |
| Stock-based compensation | | 23.3 | | 20.2 |
| Amortization of purchased intangibles | | 55.2 | | 56.8 |
| Depreciation and amortization | | 30.1 | | 31.9 |
| Net realized and unrealized (gains) losses on investments | | (2.5) | | (74.8) |
| Deferred income taxes | | (7.4) | | (8.7) |
| Change in: | | | | |
| Accounts receivable | | (93.4) | | (241.2) |
| Other current assets | | 464.0 | | 54.7 |
| Other assets | | (0.2) | | 19.4 |
| Accounts payable | | 20.5 | | (24.2) |
| Income taxes payable | | 151.4 | | 282.5 |
| Other current liabilities | | (605.3) | | (106.7) |
| Other liabilities | | (1.8) | | (7.2) |
| Other | | 3.6 | | 15.9 |
| Net Cash Provided by Operating Activities | | 892.7 | | 902.4 |
| Cash Flows from Investing Activities | | | | |
| Proceeds from maturities of available-for-sale marketable | | | | |
| securities | | 1.7 | | 0.7 |
| Purchases of available-for-sale marketable securities | | (1.2) | | (0.3) |
| Purchases of property, net | | (19.8) | | (15.2) |
| Investments in privately-held equity investments | | (3.5) | | (2.4) |
| Net Cash Used in Investing Activities | | (22.8) | | (17.2) |
| Cash Flows from Financing Activities | | | | |
| Cash dividends | | (2,328.4) | | (2,035.6) |
| Change in performance bond and guaranty fund contributions | | 4,281.4 | | (7,158.5) |
| Employee taxes paid on restricted stock vesting | | (12.3) | | (0.3) |
| Other | | (4.3) | | (4.1) |
| Net Cash Provided by (Used in) Financing Activities | | 1,936.4 | | (9,198.5) |
| itel cash i rovided by (osed in/ i maliching Activities | | | | (3,130.3) |

CME GROUP INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS (continued)

(in millions) (unaudited)

| | Quarter Ended March 31, | | | |
|---|----------------------------|----------|-----|-----------|
| | | 2024 | | 2023 |
| Net change in cash, cash equivalents, restricted cash and restricted cash equivalents | \$ | 2,806.3 | \$ | (8,313.3) |
| Cash, cash equivalents, restricted cash and restricted cash equivalents, beginning of period | 9 | 93,109.7 | 1 | 37,974.3 |
| Cash, Cash Equivalents, Restricted Cash and Restricted Cash Equivalents, End of Period | \$ 9 | 95,916.0 | \$1 | 29,661.0 |
| Reconciliation of cash, cash equivalents, restricted cash and restricted cash equivalents: | | | | |
| Cash and cash equivalents | \$ | 1,436.9 | \$ | 1,565.2 |
| Short-term restricted cash | | 5.2 | | 5.1 |
| Restricted cash and restricted cash equivalents (performance bonds and guaranty fund contributions) | Q | 94,473.9 | 1 | 28,090.7 |
| Total | \$ 9 | 95,916.0 | \$1 | 29,661.0 |
| Supplemental Disclosure of Cash Flow Information | | | | |
| Income taxes paid | \$ | 114.8 | \$ | 30.9 |
| Interest paid | | 41.1 | | 41.1 |
| Non-cash investing activities: | | | | |
| Accrued proceeds from sale of investments | | _ | | 97.9 |

NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS

1. Basis of Presentation

The consolidated financial statements consist of CME Group Inc. (CME Group) and its subsidiaries (collectively, the company), including Chicago Mercantile Exchange Inc. (CME), Board of Trade of the City of Chicago, Inc. (CBOT), New York Mercantile Exchange, Inc. (NYMEX), Commodity Exchange, Inc. (COMEX) and NEX Group Limited (NEX). The clearing house is operated by CME.

The accompanying interim consolidated financial statements have been prepared by CME Group without audit. Certain notes and other information normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States have been condensed or omitted. In the opinion of management, the accompanying consolidated financial statements include all adjustments (consisting only of normal recurring adjustments) considered necessary to present fairly the financial position of the company at March 31, 2024 and December 31, 2023 and the results of operations and cash flows for the periods indicated. Quarterly results are not necessarily indicative of results for any subsequent period.

The accompanying consolidated financial statements should be read in conjunction with the consolidated financial statements and notes thereto in CME Group's Annual Report on Form 10-K for the year ended December 31, 2023, filed with the Securities and Exchange Commission (SEC) on February 28, 2024.

2. Revenue Recognition

The company generates revenue from customers from the following sources:

Clearing and transaction fees. Clearing and transaction fees include electronic trading fees and brokerage commissions, surcharges for privately-negotiated transactions, risk mitigation and other volume-related charges for trade contracts. Clearing and transaction fees are assessed upfront at the time of trade execution. As such, the company recognizes the majority of the fee revenue upon successful execution of the trade. The minimal remaining portion of the fee revenue related to settlement activities performed after trade execution is recognized over the short-term period that the contract is outstanding, based on management's estimates of the average contract lifecycle. These estimates are based on various assumptions to approximate the amount of fee revenue to be attributed to services performed through contract settlement, expiration, or termination. For cleared trades, these assumptions include the average number of days that a contract remains in open interest, contract turnover, average revenue per day, and revenue remaining in open interest at the end of each period.

The nature of contracts gives rise to several types of variable consideration, including volume-based pricing tiers, customer incentives associated with market maker programs and other fee discounts. The company includes fee discounts and incentives in the estimated transaction price when there is a basis to reasonably estimate the amount of the fee reduction. These estimates are based on historical experience, anticipated performance, and best judgment at the time. Because of the company's certainty in estimating these amounts, they are included in the transaction price of contracts.

Market data and information services. Market data and information services represent revenue from the dissemination of market data to subscribers, distributors, and other third-party licensees of market data. Pricing for market data is primarily based on the number of reportable devices used as well as the number of subscribers enrolled under the arrangement. Fees for these services are generally billed monthly. Market data services are satisfied over time and revenue is recognized on a monthly basis as the customers receive and consume the benefit of the market data services. However, the company also maintains certain annual license arrangements with one-time upfront fees. The fees for annual licenses are initially recorded as a contract liability and recognized as revenue monthly over the term of the annual period.

Other. Other revenues include certain access and communication fees, fees for non-cash collateral management, equity membership subscription fees, and fees for trade order routing through agreements from various strategic relationships. Access and communication fees are charged to customers that utilize various telecommunications networks and communications services. Fees for these services are generally billed monthly and the associated fee revenue is recognized as billed. Collateral management fees are charged to clearing firms that have non-cash collateral on deposit with the clearing house to meet their minimum performance bond and guaranty fund obligations on the exchange. These fees are calculated based on daily non-cash collateral balances and are billed monthly. This fee revenue is recognized monthly as billed as the customers receive and consume the benefits of the services. The company also has an equity membership program which provides equity members the option to substitute a monthly subscription fee for their existing requirement to hold CME Group Class A common stock. Choosing to pay this fee in lieu of holding Class A shares is entirely voluntary and the client's choice. Fee revenue under this program is earned monthly as billed over the contractual term. Pricing for strategic relationships may be driven by customer levels and activity. There are fee arrangements which provide for monthly as well as quarterly payments in arrears. Revenue is recognized monthly for strategic relationship arrangements as the customers receive and consume the benefits of the services.

The following table represents a disaggregation of revenue from contracts with customers by product line for the quarters ended March 31, 2024 and 2023:

| | Quarter Ended | | |
|---|---------------|-----------|--|
| | Marc | :h 31, | |
| (in millions) | 2024 | 2023 | |
| Interest rates | \$ 410.3 | \$ 444.8 | |
| Equity indexes | 268.1 | 269.2 | |
| Foreign exchange | 47.2 | 47.5 | |
| Agricultural commodities | 132.0 | 115.3 | |
| Energy | 196.2 | 167.9 | |
| Metals | 64.0 | 60.9 | |
| BrokerTec fixed income | 37.8 | 39.2 | |
| EBS foreign exchange | 31.3 | 35.8 | |
| Interest rate swap | 22.0 | 19.6 | |
| Total clearing and transaction fees | 1,208.9 | 1,200.2 | |
| Market data and information services | 175.4 | 165.8 | |
| Other | 103.6 | 75.6 | |
| Total revenues | \$1,487.9 | \$1,441.6 | |
| Timing of Revenue Recognition | | | |
| Services transferred at a point in time | \$1,183.9 | \$1,177.5 | |
| Services transferred over time | 299.5 | 259.5 | |
| One-time charges and miscellaneous revenues | 4.5 | 4.6 | |
| Total revenues | \$1,487.9 | \$1,441.6 | |

The timing of revenue recognition, billings and cash collections results in billed accounts receivable, and customer advances and deposits (contract liabilities) on the consolidated balance sheets. Certain fees for transactions, annual licenses, and other revenue arrangements are billed upfront before revenue is recognized, which results in the recognition of contract liabilities. These liabilities are recognized on the consolidated balance sheets on a contract-by-contract basis upon commencement of services under the customer contract. These upfront customer payments are recognized as revenue over time as the obligations under the contracts are satisfied. Changes in the contract liability balances during the first quarter of March 31, 2024 were not materially impacted by any other factors. The balance of contract liabilities was \$54.5 million and \$13.2 million as of March 31, 2024 and December 31, 2023, respectively.

3. Performance Bonds and Guaranty Fund Contributions

Performance Bonds and Guaranty Fund Contribution Reinvestment. CME reinvests cash performance bonds and guaranty fund contributions and distributes a portion of the interest earned back to the clearing firms. The reinvestment of cash can include certain commercial and central bank deposits, government securities, reverse repurchase agreements, and

money market funds. CME has been designated as a systemically important financial market utility by the Financial Stability Oversight Council and is authorized to maintain cash accounts at the Federal Reserve Bank of Chicago. At March 31, 2024, CME maintained \$86.4 billion within the cash account at the Federal Reserve Bank of Chicago. The cash deposit at the Federal Reserve Bank of Chicago is included within performance bonds and guaranty fund contributions on the consolidated balance sheets. Cash performance bonds and guaranty fund contributions are included as restricted cash and cash equivalents on the consolidated statements of cash flows.

In the first quarter of 2024 and 2023, earnings from cash performance bond and guaranty fund contributions were \$1,036.7 million and \$1,256.3 million, respectively. In the first quarter of 2024 and 2023, expense related to the distribution of interest earned on collateral reinvestments were \$967.4 million and \$1,163.5 million, respectively. The earnings from cash performance bonds and guaranty fund contributions are included in investment income and the expense related to the distribution of interest earned is included in other non-operating income (expense) on the consolidated statements of income.

Clearing House Contract Settlement. The clearing house marks-to-market open positions at least once a day (twice a day for all futures and options contracts). Based on values derived from the mark-to-market process, the clearing house requires payments from clearing firms whose positions have lost value and makes payments to clearing firms whose positions have gained value. Under the extremely unlikely scenario of simultaneous default by every clearing firm who has open positions with unrealized

losses, the maximum exposure related to positions other than cleared-only interest rate swap contracts would be one half day of changes in fair value of all open positions, before considering the clearing house's ability to access defaulting clearing firms' collateral deposits.

For cleared interest rate swap contracts, the maximum exposure at the time of default related to the clearing house's guarantee would be one full day of changes in fair value of all open positions, before considering the clearing house's ability to access defaulting clearing firms' collateral.

During the first quarter of 2024, the clearing house transferred an average of approximately \$5.2 billion a day through its clearing systems for settlement from clearing firms whose positions had lost value to clearing firms whose positions had gained value. The clearing house reduces its guarantee exposure through initial and maintenance performance bond requirements and mandatory guaranty fund contributions. Management has assessed the fair value of the company's settlement guarantee liability by taking the following factors into consideration: the design and operations of the clearing risk management process, the financial safeguard packages in place, historical evidence of default by a clearing member and the estimated probability of potential payouts by the clearing house. Based on the assessment performed, management estimates the guarantee liability to be nominal and therefore has not recorded any liability at March 31, 2024 and December 31, 2023. The company does not have a history of significant losses recognized on performance bond collateral as posted by our clearing members, and management currently does not anticipate any future credit losses on its performance bond assets. Accordingly, the company has not provided an allowance for credit losses on these performance bond deposits, nor has it recorded any liabilities to reflect an allowance for credit losses related to our off-balance sheet credit exposures and guarantees.

4. Intangible Assets and Goodwill

Intangible assets consisted of the following at March 31, 2024 and December 31, 2023:

| | | March 31, 202 | 4 | December 31, 2023 | | | |
|---|-------------------|-----------------------------|-------------------|-------------------|-----------------------------|-------------------|--|
| (in millions) | Assigned Value | Accumulated Amortization | Net Book Value | Assigned Value | Accumulated Amortization | Net Book Value | |
| Amortizable Intangible Assets: | | | | | | | |
| Clearing firm, market data and other customer relationships | \$4,687.2 | \$(2,175.7) | \$ 2,511.5 | \$4,694.4 | \$(2,124.9) | \$ 2,569.5 | |
| Technology-related intellectual property | 62.5 | (62.2) | 0.3 | 62.5 | (62.2) | 0.3 | |
| Other | 71.2 | (43.0) | 28.2 | 71.6 | (41.2) | 30.4 | |
| Total amortizable intangible assets | \$4,820.9 | \$(2,280.9) | \$ 2,540.0 | \$4,828.5 | \$(2,228.3) | \$ 2,600.2 | |
| Indefinite-Lived Intangible Assets: | | | | | | | |
| Trade names | | | 450.0 | | | 450.0 | |
| Total intangible assets - other, net | | | \$ 2,990.0 | | | \$ 3,050.2 | |
| Trading products (1) | | | \$17,175.3 | | | \$17,175.3 | |

(1) Trading products represent futures and options products acquired in our business combinations with CBOT Holdings, Inc., NYMEX Holdings, Inc. and The Board of Trade of Kansas City, Missouri, Inc. Clearing and transaction fees are generated through the trading of these products. These trading products, most of which have traded for decades, require authorization from the Commodity Futures Trading Commission (CFTC). Product authorizations from the CFTC have no term limits.

Total amortization expense for intangible assets was \$55.2 million and \$56.8 million for the quarters ended March 31, 2024 and 2023, respectively.

As of March 31, 2024, the future estimated amortization expense related to amortizable intangible assets is expected to be as follows:

| | Am | ortization |
|-------------------|----|------------|
| (in millions) | E | xpense |
| Remainder of 2024 | \$ | 166.3 |
| 2025 | | 221.7 |
| 2026 | | 221.7 |
| 2027 | | 220.4 |
| 2028 | | 214.0 |
| 2029 | | 214.0 |
| Thereafter | | 1,281.9 |

Goodwill activity consisted of the following for the periods ended March 31, 2024 and December 31, 2023:

| (in millions) | Goodwill |
|------------------------------|----------------|
| Balance at December 31, 2022 | \$ 10,482.5 |
| Foreign currency translation | 12.8 |
| Balance at December 31, 2023 | 10,495.3 |
| Foreign currency translation | (5.7) |
| Balance at March 31, 2024 | \$ 10,489.6 |

5. Debt

Short-term debt consisted of the following at March 31, 2024 and December 31, 2023:

| | M | larch 31, | De | ecember 31, |
|--|----|-----------|----|-------------|
| (in millions) | | 2024 | | 2023 |
| \$750.0 million fixed rate notes due March 2025, stated rate of 3.00% $^{(1)}$ | \$ | 749.3 | \$ | _ |
| Total short-term debt | \$ | 749.3 | \$ | _ |

(1) The company maintained a forward-starting interest rate swap agreement that modified the interest obligation associated with these notes so that the interest payable on the notes effectively became fixed at a rate of 3.11%

Long-term debt consisted of the following at March 31, 2024 and December 31, 2023:

| (in millions) | M | 1arch 31, 2024 | De | cember 31, 2023 |
|--|----|-------------------|----|--------------------|
| \$750.0 million fixed rate notes due March 2025, stated rate of 3.00% $^{(1)}$ | | _ | | 749.1 |
| \$500.0 million fixed rate notes due June 2028, stated rate of $3.75%$ | | 498.2 | | 498.1 |
| \$750.0 million fixed rate notes due March 2032, stated rate of 2.65% | | 743.1 | | 742.9 |
| \$750.0 million fixed rate notes due September 2043, stated rate of 5.30% $^{(2)}$ | | 744.0 | | 744.0 |
| \$700.0 million fixed rate notes due June 2048, stated rate of 4.15% | | 691.4 | | 691.3 |
| Total long-term debt | \$ | 2,676.7 | \$ | 3,425.4 |

(1) The company maintained a forward-starting interest rate swap agreement that modified the interest obligation associated with these notes so that the interest payable on the notes effectively became fixed at a rate of 3.11%.

(2) The company maintained a forward-starting interest rate swap agreement that modified the interest obligation associated with these notes so that the interest payable on the notes effectively became fixed at a rate of 4.73%.

Short and long-term debt maturities, at par value, were as follows at March 31, 2024:

| (in millions) | Par Value |
|---------------|----------------|
| 2025 | \$ 750.0 |
| 2026 | _ |
| 2027 | _ |
| 2028 | 500.0 |
| 2029 | - - |
| Thereafter | 2,200.0 |

6. Contingencies

Legal and Regulatory Matters. In the normal course of business, the company discusses matters with its regulators raised during regulatory examinations or otherwise subject to their inquiry and oversight. These matters could result in censures, fines, penalties or other sanctions. Management believes the outcome of any resulting actions will not have a material impact on the company's consolidated financial position or results of operations. However, the company is unable to predict the outcome or the timing of the ultimate resolution of these matters, or the potential fines, penalties or injunctive or other equitable relief, if any, that may result from these matters.

A putative class action complaint was filed January 15, 2014 in the Circuit Court of Cook County, Chancery Division, against CME Group Inc. and the Board of Trade of the City of Chicago, Inc. The plaintiffs, certain Class B shareholders of CME Group and Class B members of CBOT, allege breach of contract and breach of the implied covenant of good faith and fair dealing for violations of their core rights granted in the defendants' respective Certificates of Incorporation. On December 2, 2021, the court granted the plaintiffs' motion for certification of a damages-only class. No trial date has been set. Given the

uncertainty of factors that may potentially affect the resolution of the matter, at this time the company is unable to estimate the reasonably possible loss or range of reasonably possible losses in the unlikely event it were found to be liable at trial. Based on its investigation to date, the company believes that it has strong factual and legal defenses to the claims.

In addition, the company is a defendant in, and has potential for, various other legal proceedings arising from its regular business activities. While the ultimate results of such proceedings against the company cannot be predicted with certainty, the company believes that the resolution of any of these matters on an individual or aggregate basis will not have a material impact on its consolidated financial position or results of operations.

No accrual was required for contingent legal and regulatory matters as none were probable and estimable as of March 31, 2024 and December 31, 2023.

Intellectual Property Indemnifications. Certain agreements with customers and other third parties related to accessing the CME Group platforms, utilizing market data services and licensing SPAN and SPAN 2 software may contain indemnifications from intellectual property claims that may be made against them as a result of their use of the applicable products and/or services. The potential future claims relating to these indemnifications cannot be estimated and therefore no liability has been recorded.

7. Leases

The company has operating leases for corporate offices. The operating leases have remaining lease terms of up to 14 years, some of which include options to extend or renew the leases for up to an additional five years, and some of which include options to early terminate the leases in less than 12 months. Management evaluates whether these options are exercisable at least quarterly in order to determine whether the contract term must be reassessed. For a small number of the leases, primarily the international locations, management's approach is to enter into short-term leases for a lease term of 12 months or less in order to provide for greater flexibility in the local environment. For certain office spaces, the company has entered into arrangements to sublease excess space to third parties, while the original lease contract remains in effect with the landlord.

The company also has one finance lease, which is related to the sale of our data center in March 2016. In connection with the sale, the company leased back a portion of the property. The transaction was recognized under the financing method and not as a sale leaseback arrangement.

The right-of-use lease asset is recorded within other assets, and the present value of the lease liability is recorded within other liabilities (segregated between short term and long term) on the consolidated balance sheets. The discount rate applied to the lease payments represents the company's incremental borrowing rate.

The components of lease costs were as follows:

Quarter Ended March 31,

| (in millions) | 2024 | 2023 |
|---|------------|------------|
| Operating lease expense: | | |
| Operating lease cost | \$ 13.0 | \$ 14.0 |
| Short-term lease cost | 0.1 | 0.1 |
| Total operating lease expense included in other expense | \$ 13.1 | \$ 14.1 |
| | | |
| Finance lease expense: | | |
| Interest expense | \$ 0.6 | \$ 0.7 |
| Depreciation expense | 2.2 | 2.2 |
| Total finance lease expense | \$ 2.8 | \$ 2.9 |
| | - | |
| Sublease revenue included in other revenue | \$ 2.3 | \$ 2.4 |

Supplemental cash flow information related to leases was as follows:

| | Quarter Ended | | | | | |
|------------------------------------|---------------|------|------|--|--|--|
| | Marc | h 31 | , | | | |
| (in millions) | 2024 | | 2023 | | | |
| Cash outflows for operating leases | \$ 15.2 | \$ | 17.0 | | | |
| Cash outflows for finance leases | 4.3 | | 4.3 | | | |

Supplemental balance sheet information related to leases was as follows:

Operating leases

| | | | D | ecember 31, |
|---|-----|-------------|----|-------------|
| (in millions) | Mar | ch 31, 2024 | | 2023 |
| Operating lease right-of-use assets | \$ | 264.5 | \$ | 272.0 |
| | | | | |
| Operating lease liabilities: | | | | |
| Other current liabilities | \$ | 47.5 | \$ | 46.7 |
| Other liabilities | | 333.1 | | 344.0 |
| Total operating lease liabilities | \$ | 380.6 | \$ | 390.7 |
| | | | | |
| Weighted average remaining lease term (in months) | | 111 | | 114 |
| Weighted average discount rate | | 3.8 % | | 3.8 % |

Finance leases

| (in millions) | Mar | ch 31, 2024 | December 31, 2023 |
|---|-----|-------------|----------------------|
| Finance lease right-of-use assets | \$ | 60.7 | \$ 62.8 |
| | | | |
| Finance lease liabilities: | | | |
| Other current liabilities | \$ | 8.5 | \$ 8.4 |
| Other liabilities | | 57.2 | 59.4 |
| Total finance lease liabilities | \$ | 65.7 | \$ 67.8 |
| | | | |
| Weighted average remaining lease term (in months) | | 84 | 87 |
| Weighted average discount rate | | 3.5 % | 3.5 % |

Future minimum lease payments were as follows as of March 31, 2024 for operating and finance leases:

| (in millions) | Operating Leas | | |
|----------------------------------|----------------|--------|--|
| Remainder of 2024 | \$ | 45.8 | |
| 2025 | | 58.2 | |
| 2026 | | 53.7 | |
| 2027 | | 50.7 | |
| 2028 | | 49.5 | |
| 2029 | | 35.5 | |
| Thereafter | | 156.2 | |
| Total lease payments | | 449.6 | |
| Less: imputed interest | | (69.0) | |
| Present value of lease liability | \$ | 380.6 | |

| (in millions) | Finance Leases | | |
|----------------------------------|----------------|--------|--|
| Remainder of 2024 | \$ | 13.0 | |
| 2025 | | 17.5 | |
| 2026 | | 17.6 | |
| 2027 | | 17.8 | |
| 2028 | | 17.9 | |
| 2029 | | 18.1 | |
| Thereafter | | 22.9 | |
| Total lease payments | | 124.8 | |
| Less: imputed interest | | (59.1) | |
| Present value of lease liability | \$ | 65.7 | |

8. Guarantees

Mutual Offset Agreement. CME and Singapore Exchange Limited (SGX) maintain a mutual offset agreement with a current term through April 2025. This agreement enables market participants to open a futures position on one exchange and liquidate it on the other. The term of the agreement will automatically renew for a two-year period after April 2025 unless either party provides advance notice of their intent to terminate. CME can maintain collateral in the form of irrevocable, standby letters of credit. At March 31, 2024, CME was contingently liable to SGX on letters of credit totaling \$285.0 million. CME also maintains a \$350.0 million line of credit to meet its obligations under this agreement. Regardless of the collateral, CME guarantees all cleared transactions submitted through SGX and would initiate procedures designed to satisfy these financial obligations in the event of a default, such as the use of performance bonds and guaranty fund contributions of the defaulting clearing firm. Management has assessed the fair value of the company's guarantee liability under this mutual offset agreement by taking the following factors into consideration: the design and operations of the clearing risk management process, the financial safeguard packages in place, historical evidence of default by a clearing member and the estimated probability of potential payouts by the clearing house. Based on the assessment performed, management estimates the guarantee liability to be nominal and therefore has not recorded any liability at March 31, 2024 and December 31, 2023.

Family Farmer and Rancher Protection Fund. In 2012, the company established the Family Farmer and Rancher Protection Fund (the Fund). The Fund is designed to provide payments, up to certain maximum levels, to family farmers, ranchers and other agricultural industry participants who use the company's agricultural commodity products and who suffer losses to their segregated account balances due to their CME clearing member becoming insolvent. Under the terms of the Fund, farmers and ranchers are eligible for up to \$25,000 per participant. Farming and ranching cooperatives are eligible for up to \$100,000 per cooperative. The Fund was established with a maximum of \$100.0 million available for distribution to participants. Since its establishment, the Fund has made payments of approximately \$2.0 million, which leaves \$98.0 million available for future claims. If, at any time, payments due to participants were to exceed the amount remaining in the Fund, payments would be pro-rated. Clearing members and customers must register with the company in advance and provide certain documentation in order to substantiate their

eligibility. The company believes that its guarantee liability is nominal and therefore has not recorded any liability at March 31, 2024 and December 31, 2023.

9. Accumulated Other Comprehensive Income (Loss)

The following tables present changes in the accumulated balances for each component of other comprehensive income (loss), including current period other comprehensive income (loss) and reclassifications out of accumulated other comprehensive income (loss):

| (in millions) | | estment curities | | Defined Benefit Plans | | erivative estments | C | Foreign Currency anslation | | Total |
|--|-----|---------------------|----|-----------------------------|-----|-----------------------|-----|----------------------------------|----|----------------------|
| Balance at December 31, 2023 | \$ | (0.4) | \$ | (23.4) | \$ | 62.0 | \$ | (93.8) | \$ | (55.6) |
| Other comprehensive income (loss) before reclassifications and income tax benefit (expense) | | _ | | (5.9) | | _ | | (25.4) | | (31.3) |
| Amounts reclassified from accumulated other comprehensive income (loss) | | _ | | _ | | (0.9) | | _ | | (0.9) |
| Income tax benefit (expense) | | _ | | 1.5 | | 0.2 | | _ | | 1.7 |
| Net current period other | | | | | | | | | _ | 2., |
| comprehensive income (loss) | | _ | | (4.4) | | (0.7) | | (25.4) | | (30.5) |
| Balance at March 31, 2024 | \$ | (0.4) | \$ | (27.8) | \$ | 61.3 | \$ | (119.2) | \$ | (86.1) |
| | | | | | | | | | | |
| (in millions) | | estment curities | | Defined Benefit Plans | | rivative estments | C | Foreign turrency anslation | | Total |
| (in millions) Balance at December 31, 2022 | Sec | | ı | Benefit | | | C | urrency | \$ | Total (133.3) |
| | Sec | urities | ı | Benefit Plans | Inv | estments | Tra | urrency anslation | \$ | |
| Balance at December 31, 2022 Other comprehensive income (loss) before reclassifications and income tax benefit | Sec | (0.9) | ı | Benefit Plans (22.8) | Inv | estments | Tra | currency anslation (174.3) | \$ | (133.3) |
| Balance at December 31, 2022 Other comprehensive income (loss) before reclassifications and income tax benefit (expense) Amounts reclassified from accumulated other | Sec | (0.9) | ı | Benefit Plans (22.8) | Inv | 64.7 | Tra | currency anslation (174.3) | \$ | 2.8 |
| Balance at December 31, 2022 Other comprehensive income (loss) before reclassifications and income tax benefit (expense) Amounts reclassified from accumulated other comprehensive income (loss) | Sec | (0.9) 0.4 | ı | (3.5) | Inv | 64.7 — (1.2) | Tra | currency anslation (174.3) | \$ | 2.8 |

10. Fair Value Measurements

The company uses a three-level classification hierarchy of fair value measurements for disclosure purposes:

• Level 1 inputs, which are considered the most reliable evidence of fair value, consist of quoted prices (unadjusted) for identical assets or liabilities in active markets.

- Level 2 inputs consist of observable market data, such as quoted prices for similar assets and liabilities in active markets, or inputs other than quoted prices that are directly observable.
- Level 3 inputs consist of unobservable inputs which are derived and cannot be corroborated by market data or other entity-specific inputs.

The company's level 1 assets generally include investments in publicly traded mutual funds, equity securities and corporate debt securities with quoted market prices. In general, the company uses quoted prices in active markets for identical assets to determine the fair value of marketable securities.

The company's level 2 assets and liabilities generally consist of long-term debt notes. The fair values of the long-term debt notes were based on quoted market prices in an inactive market.

The company's level 3 assets and liabilities include certain investments that were adjusted to fair value.

Recurring Fair Value Measurements. Financial assets and liabilities recorded at fair value on the consolidated balance sheet as of March 31, 2024 were classified in their entirety based on the lowest level of input that was significant to each asset and liability's fair value measurement. The following table presents financial instruments measured at fair value on a recurring basis:

| | March 31, 2024 | | | | | | | |
|-----------------------------|----------------|---------|----|---------|----|---------|----|-------|
| (in millions) | | Level 1 | | Level 2 | | Level 3 | | Total |
| Assets at Fair Value: | | | | | | | | |
| Marketable securities: | | | | | | | | |
| Corporate debt securities | \$ | 10.0 | \$ | _ | \$ | _ | \$ | 10.0 |
| Mutual funds | | 110.8 | | _ | | _ | | 110.8 |
| Equity securities | | 0.2 | | | | | | 0.2 |
| Total Marketable Securities | | 121.0 | | _ | | _ | | 121.0 |
| Total Assets at Fair Value | \$ | 121.0 | \$ | | \$ | | \$ | 121.0 |
| | | | | | | | | |

Non-Recurring Fair Value Measurements. The company recognized an unrealized gain on investments of \$1.5 million on an equity investment without readily determinable fair value. The fair value of this investment was estimated to be \$10.1 million at March 31, 2024. This fair value assessment was based on quantitative factors, including observable price changes. The fair value measurement of this investment is considered level 3 and non-recurring.

Fair Values of Long-Term Debt Notes. The following presents the estimated fair values of long-term debt notes, which are carried at amortized cost on the consolidated balance sheets. The fair values below are classified as level 2 under the fair value hierarchy and were estimated using quoted market prices in inactive markets.

At March 31, 2024, the fair values were as follows:

| (in millions) | Fair Value | Level |
|---|------------|---------|
| \$750.0 million fixed rate notes due March 2025 | 734.9 | Level 2 |
| \$500.0 million fixed rate notes due June 2028 | 485.8 | Level 2 |
| \$750.0 million fixed rate notes due March 2032 | 650.3 | Level 2 |
| \$750.0 million fixed rate notes due September 2043 | 758.6 | Level 2 |
| \$700.0 million fixed rate notes due June 2048 | 615.3 | Level 2 |

11. Earnings Per Share

The company uses the two-class method to calculate basic and diluted earnings per common share because its Series G preferred stock are participating securities. Under the two-class method, undistributed earnings are allocated to common stock and participating securities according to their respective rights in undistributed earnings, as if all of the earnings for the period had been distributed. Basic earnings per common share is computed by dividing the net income attributable to common shareholders by the weighted average number of common shares outstanding during the period. Net income attributable to common shareholders is reduced for preferred stock dividends earned during the period. Preferred stock also receives a proportionate allocation of undistributed or overdistributed earnings for the period because Series G preferred stock has a contractual obligation to share in profits and losses of the company. Diluted earnings per share is computed by dividing the net income attributable to common shareholders by the weighted average number of common shares outstanding plus potentially dilutive common shares. Anti-dilutive stock awards were as follows for the periods presented:

| | Quarter Marc | |
|----------------|-----------------|------|
| (in thousands) | 2024 | 2023 |
| Stock awards | 46 | 160 |
| Total | 46 | 160 |

The following table presents the earnings per share calculation for the periods presented:

| | | Quarte: Marc | | |
|---|----|-----------------|----|--------|
| | | 2024 | | 2023 |
| Net Income (in millions) | \$ | 855.2 | \$ | 883.8 |
| Less: preferred stock dividends | | (5.3) | | (5.0) |
| Less: undistributed earnings allocated to preferred stock | | (5.5) | | (6.1) |
| Net Income Attributable to Common Shareholders of CME Group | \$ | 844.4 | \$ | 872.7 |
| | | | | |
| Weighted Average Number of Common Shares (in thousands): | | | | |
| Basic | 3! | 59,258 | 3 | 58,933 |
| Effect of stock options, restricted stock and performance shares | | 575 | | 380 |
| Diluted | 3! | 59,833 | 3. | 59,313 |
| Earnings per Common Share Attributable to Common Shareholders of CME Group: | | | | |
| Basic | \$ | 2.35 | \$ | 2.43 |
| Diluted | | 2.35 | | 2.43 |

12. Subsequent Events

The company has evaluated subsequent events through the date the financial statements were issued. The company has determined that there were no subsequent events that met the requirement for recognition or disclosure in the consolidated financial statements.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion is provided as a supplement to, and should be read in conjunction with, the accompanying unaudited consolidated financial statements and notes in this Quarterly Report on Form 10-Q and our Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on February 28, 2024.

References in this discussion and analysis to "we" and "our" are to CME Group Inc. (CME Group) and its consolidated subsidiaries, collectively. References to "exchange" are to Chicago Mercantile Exchange Inc. (CME), the Board of Trade of the City of Chicago, Inc. (CBOT), New York Mercantile Exchange, Inc. (NYMEX), and Commodity Exchange, Inc. (COMEX), collectively, unless otherwise noted.

RESULTS OF OPERATIONS

Financial Highlights

The following summarizes significant changes in our financial performance for the periods presented.

| | Quarter Ended March 31, | _ |
|--|----------------------------|--------|
| (dollars in millions, except per share data) | 2024 2023 | Change |
| Total revenues | \$1,487.9 \$1,441.6 | 3 % |
| Total expenses | 528.3 527.9 | _ |
| Operating margin | 64.5 % 63.4 % | |
| Non-operating income (expense) | \$ 153.8 \$ 243.2 | (37) |
| Effective tax rate | 23.2 % 23.6 % | |
| Net income | \$ 855.2 \$ 883.8 | (3) |
| Diluted earnings per common share | 2.35 2.43 | (3) |
| Cash flows from operating activities | 892.7 902.4 | (1) |

Revenues

| | Quarte Marc | | |
|--------------------------------------|----------------|-----------|--------|
| (dollars in millions) | 2024 | 2023 | Change |
| Clearing and transaction fees | \$1,208.9 | \$1,200.2 | 1 % |
| Market data and information services | 175.4 | 165.8 | 6 |
| Other | 103.6 | 75.6 | 37 |
| Total Revenues | \$1,487.9 | \$1,441.6 | 3 |

Clearing and Transaction Fees

Futures and Options Contracts

The following table summarizes our total contract volume, revenue and average rate per contract for futures and options. Total contract volume includes contracts that are traded on

our exchange and cleared through our clearing house and certain cleared-only contracts. Volume is measured in round turns, which is considered a completed transaction that involves a purchase and an offsetting sale of a contract. Average rate per contract is determined by dividing total clearing and transaction fees by total contract volume. Contract volume and average rate per contract disclosures exclude trading volume for the cash markets business and interest rate swaps volume.

| | Quarte | r Ended | | |
|---|-----------|-----------|--------|--|
| | Marc | March 31, | | |
| | 2024 | 2023 | Change | |
| Total contract volume (in millions) | 1,608.0 | 1,666.1 | (3)% | |
| Clearing and transaction fees (in millions) | \$1,117.8 | \$1,105.6 | 1 | |
| Average rate per contract | \$ 0.695 | \$ 0.664 | 5 | |

We estimate the following net change in clearing and transaction fees based on the change in total contract volume and the change in average rate per contract for futures and options during the first quarter of 2024 when compared with the same period in 2023.

| | | Quarter |
|---|-----------|---------|
| (in millions) | | Ended |
| Decrease due to a change in total contract volu | me \$ | (40.4) |
| Increase due to a change in average rate per co | ontract _ | 52.6 |
| Net increase in clearing and transaction fees | | 12.2 |

Average rate per contract is impacted by our rate structure, including volume-based incentives; product mix; trading venue; and the percentage of volume executed by customers who are members compared with non-member customers. Due to the relationship between average rate per contract and contract volume, the change in clearing and transaction fees attributable to changes in each is only an approximation.

Contract Volume

The following table summarizes average daily contract volume. Contract volume can be influenced by many factors, including political and economic conditions, the regulatory environment and market competition.

| | Quarter | Ended | |
|---|---------|--------|--------|
| | Marc | h 31, | |
| (amounts in thousands) | 2024 | 2023 | Change |
| Average Daily Volume by Product Line: | | | |
| Interest rates | 13,839 | 14,490 | (4)% |
| Equity indexes | 6,856 | 7,303 | (6) |
| Foreign exchange | 984 | 969 | 1 |
| Agricultural commodities | 1,595 | 1,379 | 16 |
| Energy | 2,411 | 2,083 | 16 |
| Metals | 675 | 649 | 4 |
| Aggregate average daily volume | 26,360 | 26,873 | (2) |
| Average Daily Volume by Venue: | | | |
| CME Globex | 23,986 | 24,170 | (1) |
| Open outcry | 1,332 | 1,623 | (18) |
| Privately negotiated | 1,042 | 1,080 | (3) |
| Aggregate average daily volume | 26,360 | 26,873 | (2) |
| Electronic Volume as a Percentage of Total Volume | 91 % | 90 % | |

Market volatility within certain financial markets declined throughout the first quarter of 2024 following very high volatility in the first quarter of 2023. Interest rate and equity volatility were elevated due to significant market uncertainty in the first quarter of 2023 following the collapse of two U.S. regional banks as well as uncertainty surrounding the United States Federal Reserve's (Federal Reserve) interest rate policy decision. The Federal Open Markets Committee (FOMC) raised the federal funds rate multiple times throughout 2023 but has

initially signaled the potential for future rate cuts, as a result of easing inflation. Energy and agricultural commodities markets were more volatile in the first quarter of 2024 mainly as a result of uncertain weather conditions, which led to higher volumes within those markets. We believe these factors contributed to total volumes decreasing slightly in the first quarter of 2024 when compared with the same period in 2023.

Interest Rate Products

The following table summarizes average daily contract volume for our key interest rate products. We no longer offer Eurodollar contract trading as of June 2023.

| | Quarter | | |
|------------------------------------|---------|-------|--------|
| | March | 31, | |
| (amounts in thousands) | 2024 | 2023 | Change |
| Eurodollar futures and options: | | | |
| Futures expiring within two years | _ | 325 | (100)% |
| Options | _ | 137 | (100) |
| Futures expiring beyond two years | _ | 82 | (100) |
| SOFR futures and options: | | | |
| Futures expiring within two years | 2,661 | 3,001 | (11) |
| Options | 2,004 | 2,429 | (17) |
| Futures expiring beyond two years | 926 | 907 | 2 |
| U.S. Treasury futures and options: | | | |
| 10-Year | 3,138 | 2,921 | 7 |
| 5-Year | 1,954 | 1,896 | 3 |
| 2-Year | 967 | 828 | 17 |
| Treasury Bond | 671 | 560 | 20 |
| Federal Funds futures and options | 414 | 601 | (31) |

In the first quarter of 2024, overall interest rate contract volume decreased slightly when compared with the same period in 2023. The first quarter of 2023 saw significant interest rate volatility following interest rate hikes by the FOMC as well as market uncertainty following the collapse of two U.S. regional banks. U.S. Treasury volume increased in the first quarter of 2024 when compared with the same period in 2023 due to a shift in market expectations regarding the Federal Reserve's interest rate policy following the FOMC's indication of fewer rate cuts in the near future than previously anticipated.

Equity Index Products

The following table summarizes average daily contract volume for our key equity index products.

| | • | Quarter Ended March 31, | | | |
|---|-------|----------------------------|--------|--|--|
| (amounts in thousands) | 2024 | 2023 | Change | | |
| E-mini S&P 500 futures and options | 4,075 | 4,601 | (11)% | | |
| E-mini Nasdaq 100 futures and options | 2,036 | 1,896 | 7 | | |
| E-mini Russell 2000 futures and options | 337 | 332 | 1 | | |

In the first quarter of 2024, equity index contract volume decreased when compared with the same period in 2023, which we believe was due to lower overall equity volatility. The first quarter of 2023 saw significant market volatility as a result of the regional banking crisis as well as continued uncertainty surrounding the Federal Reserve's interest rate policy

decisions. We believe these factors led to lower overall equity contract volume in the first quarter of 2024.

Foreign Exchange Products

The following table summarizes average daily contract volume for our key foreign exchange products.

| | • | Quarter Ended March 31, | | |
|------------------------|------|----------------------------|--------|--|
| (amounts in thousands) | 2024 | 2023 | Change | |
| Euro | 257 | 268 | (4)% | |
| Japanese Yen | 184 | 173 | 6 | |
| British Pound | 114 | 112 | 2 | |
| Australian dollar | 110 | 104 | 6 | |

In the first quarter of 2024, overall foreign exchange volume increased slightly when compared with the same period in 2023. Continued uncertainty surrounding monetary policy expectations from the Federal Reserve and global central banks resulted in slightly higher volume compared with the same period in 2023.

Agricultural Commodity Products

The following table summarizes average daily contract volume for our key agricultural commodity products.

| | Quarter | Quarter Ended March 31, | | |
|------------------------|---------|--------------------------|--------|--|
| | March | | | |
| (amounts in thousands) | 2024 | 2023 | Change | |
| Corn | 473 | 409 | 16 % | |
| Soybean | 351 | 296 | 19 | |
| Wheat | 214 | 185 | 16 | |

Overall commodity contract volume increased in the first quarter of 2024 when compared with the same period in 2023. We believe this increase is due to higher overall market volatility as a result of a change in market expectations regarding grain supplies as well as weather conditions for 2024. In addition, the first quarter of 2023 saw lower overall volatility within the commodities markets due to risk aversion by market participants following price increases and global trade uncertainty resulting from the conflict between Russia and Ukraine. We believe these factors contributed to higher overall commodity volume in the first quarter of 2024.

Energy Products

The following table summarizes average daily contract volume for our key energy products.

| | Quarter Ended | | | |
|------------------------|---------------|--------------|--------|--|
| | March | 1 31, ——— | | |
| (amounts in thousands) | 2024 | 2023 | Change | |
| WTI crude oil | 1,084 | 1,067 | 2 % | |
| Natural gas | 848 | 599 | 42 | |
| Refined products | 376 | 328 | 15 | |

Energy contract volume increased in the first quarter of 2024 when compared with the same period in 2023, which we believe was due to higher overall market volatility. Natural gas volatility was higher as a result of uncertain weather conditions in the U.S., which impacted prices throughout the quarter. In addition, crude oil volatility was slightly higher as a result of ongoing geopolitical issues in the Middle East as well economic uncertainty between the U.S. and China.

Metal Products

The following table summarizes average daily volume for our key metal products.

| | | Quarter Ended March 31, | | |
|------------------------|------|----------------------------|--------|--|
| (amounts in thousands) | 2024 | 2023 | Change | |
| Gold | 394 | 398 | (1)% | |
| Copper | 137 | 123 | 11 | |
| Silver | 95 | 94 | 1 | |

In the first quarter of 2024, overall metal contract volume increased when compared with the same period in 2023, which we believe is due to higher market volatility within the copper market due to increased demand along with supply shortages. We believe this market volatility led to the overall increase in metal contract volume.

Average Rate per Contract

The average rate per contract increased in the first quarter 2024, when compared with the same period in 2023. The increase in the average rate per contract was primarily due to increases in our fee structure that went into effect on February 1, 2024. The increase is also due to a change in product mix. In the first quarter of 2024, equity index and interest rate contract volumes decreased by 3 percentage points as a percent of total volume, while all other products collectively increased by 3 percentage points. In general, equity index and interest rate products have a lower rate per contract compared with the remaining contracts.

Cash Markets Business

Total clearing and transaction fees revenues in the first quarter of 2024 include \$69.1 million of transaction fees attributable to the cash markets business, compared with \$75.0 million in the first quarter of 2023. This revenue primarily includes BrokerTec Americas LLC's fixed income volume and EBS's foreign exchange volume.

| | | Quarte | ded | | |
|---|----|--------|-----|------|--------|
| | | Marc | h 3 | 1, | |
| (amounts in millions) | | 2024 | | 2023 | Change |
| BrokerTec fixed income transaction fees | \$ | 37.8 | \$ | 39.2 | (4)% |
| EBS foreign exchange transaction fees | | 31.3 | | 35.8 | (13)% |

The related average daily notional value for the first quarter 2024 and 2023 were as follows:

| | | Quarte | | | |
|--------------------------|----|--------|-------|-------|--------|
| | | Mar | ch 3: | 1, | |
| (amounts in billions) | | 2024 | | 2023 | Change |
| European Repo (in euros) | \$ | 282.3 | \$ | 354.7 | (20)% |
| U.S. Treasury | | 102.2 | | 123.7 | (17) |
| Spot FX | | 51.9 | | 64.4 | (19) |

Overall average daily notional values and transactions revenue for the cash markets business and spot FX business was lower in the first quarter of 2024 when compared with the same period 2023. We believe the decrease in U.S. Treasury, European Repo, and spot FX volumes were due to lower overall volatility when compared to the first quarter of 2023. The first quarter of 2023 saw higher volatility as a result of the regional banking crisis in the U.S. as well as uncertainty surrounding the Federal Reserve's interest rate policy decision. We believe these factors led to the overall decrease in cash market contract volume.

Concentration of Revenue

We bill a substantial portion of our clearing and transaction fees directly to our clearing firms. The majority of clearing and transaction fees received from clearing firms represent charges for trades executed and cleared on behalf of their customers. One individual firm represented at approximately 10% of our clearing and transaction fees in the first quarter of 2024. Should a clearing firm withdraw, we believe that the customer portion of the firm's trading activity would likely transfer to another clearing firm of the exchange. Therefore, we do not believe we are exposed to significant risk from the ongoing loss of revenue received from or through a particular clearing firm.

Other Sources of Revenue

Market data and information services. During the first quarter of 2024, overall market data and information services revenues increased when compared with the same period in 2023, largely due to price increases for certain products.

The two largest resellers of our market data represented approximately 30% of our market data and information services revenue in the first quarter of 2024. Despite this concentration, we consider exposure to significant risk of revenue loss to be minimal. In the event that one of these vendors no longer subscribes to our market data, we believe the majority of that vendor's customers would likely subscribe to our market data through another reseller. Additionally, several of our largest institutional customers that utilize services from our two largest resellers report usage and remit payment of their fees directly to us.

Other revenues. In the first quarter of 2024, the increase in other revenues when compared with the same period in 2023 was largely attributable to higher custody fees due to a fee increase as well as increases in co-location and other connectivity fees.

Expenses

| | Quarter Ended March 31, | | | |
|--|----------------------------|----------|------------|--|
| (dollars in millions) | 2024 | 2023 | Change | |
| Compensation and benefits | \$ 206.0 | \$ 204.5 | 1 % | |
| Technology | 59.4 | 51.3 | 16 | |
| Professional fees and outside services | 33.1 | 38.3 | (14) | |
| Amortization of purchased intangibles | 55.2 | 56.8 | (3) | |
| Depreciation and amortization | 30.1 | 31.9 | (6) | |
| Licensing and other fee agreements | 87.9 | 84.7 | 4 | |
| Other | 56.6 | 60.4 | (6) | |
| Total Expenses | \$ 528.3 | \$ 527.9 | - % | |

Operating expenses increased by \$0.4 million in the first quarter of 2024 when compared with the same period in 2023. The following table shows the estimated impacts of key factors resulting in the changes in operating expenses:

| | Quarter Ended March 31, | | |
|--|--------------------------|----------------------|--|
| (dollars in millions) | | nount of nange | Change as a Percentage of Total Expenses |
| Technology support services | \$ | 8.3 | 2 % |
| License fees | | 3.2 | 1 |
| Stock-based compensation | | 3.2 | 1 |
| Occupancy and building operations | | (3.4) | (1) |
| Bonus | | (4.6) | (1) |
| Professional fees and outside services | | (5.2) | (1) |
| Other expenses, net | | (1.1) | (1) |
| Total increase | \$ | 0.4 | <u> </u> |

Increases in operating expenses in the first quarter of 2024 when compared with the same period in 2023 were as follows:

- The increases in expenses related to technology support services were primarily driven by higher software license fees and third party services to support the ongoing Google Cloud transformation project.
- License fees were higher during the first quarter of 2024 when compared to the same period in 2023 primarily due to an increase in volume for certain equity products.
- Stock-based compensation expense increased largely due to the acceleration of expense related to certain restricted stock and performance award grants.

Decreases in operating expenses in the first quarter of 2024 when compared with the same period in 2023 were as follows:

- Occupancy and building operations expense decreased during the first quarter of 2024 due to lower rent and real estate taxes compared to the first quarter of 2023.
- Bonus expense decreased largely due to our performance relative to our 2024 cash earnings target when compared with the same period in 2023.
- The decrease in professional fees and outside services in the first quarter of 2024 is largely due to a decrease in costs associated with the Google Cloud Migration, which began in late 2021, as well as lower professional services and legal fees during the period.

Non-Operating Income (Expense)

| | Marc | March 31, | | |
|---|-----------|-----------|------------|--|
| (dollars in millions) | 2024 | 2023 | Change | |
| Investment income | \$1,071.3 | \$1,357.7 | (21)% | |
| Interest and other borrowing costs | (39.9) | (39.9) | – % | |
| Equity in net earnings of unconsolidated subsidiaries | 87.2 | 78.2 | 12 | |
| Other non-operating income (expense) | (964.8) | (1,152.8) | (16) | |
| Total Non-Operating | \$ 153.8 | \$ 243.2 | (37) | |

Quarter Ended

Investment income. Earnings from cash performance bond and guaranty fund contributions that are reinvested decreased in the first quarter of 2024 when compared with the same period in 2023, due to lower average reinvestment balances. In the first quarter of 2024 and 2023, earnings from cash performance bond and guaranty fund contributions were \$1,036.7 million and \$1,256.3 million, respectively. We also recognized lower net realized and unrealized gains on investments in the quarter of 2024.

Equity in net earnings (losses) of unconsolidated subsidiaries. Higher income generated from our S&P/Dow Jones Indices LLC (S&P/DJI) business venture contributed to an increase in equity in net earnings of unconsolidated subsidiaries in the first quarter of 2024 when compared with the same period in 2023.

Other income (expense). We recognized lower expense related to the distribution of interest earned on performance bond collateral reinvestments to the clearing firms in conjunction with lower interest income earned on our reinvestment during the first quarter of 2024 when compared with the same period in 2023. This was due to a lower reinvestment balance in the first quarter of 2024 compared with the same period in 2023. In the first quarter of 2024 and 2023, expenses related to the distribution of interest earned on collateral reinvestments were \$967.4 million and \$1,163.5 million, respectively.

Income Tax Provision

The following table summarizes the effective tax rates for the periods presented:

| | 2024 | 2023 |
|------------------------|--------|--------|
| Quarter ended March 31 | 23.2 % | 23.6 % |

The overall effective tax rate remained relatively consistent in the first quarter of 2024 when compared with the same period in 2023. On April 15, 2024, we filed our court case with the U.S. Court of Federal Claims related to our Section 199 deduction.

Liquidity and Capital Resources

<u>Sources and Uses of Cash</u>. Net cash provided by operating activities and used by investing activities remained consistent in the first quarter of 2024 when compared with the same period in 2023. Cash provided by financing activities was higher during the first quarter of 2024 when compared with the same period in 2023 due to an increase in cash performance bonds and guaranty fund contributions.

<u>Debt Instruments</u>. The following table summarizes our debt outstanding at March 31, 2024:

| (in millions) | Par Value |
|---|-----------|
| Fixed rate notes due March 2025, stated rate of 3.00% (1) | \$ 750.0 |
| Fixed rate notes due June 2028, stated rate of 3.75% | 500.0 |
| Fixed rate notes due March 2032, stated rate of 2.65% | 750.0 |
| Fixed rate notes due September 2043, stated rate of 5.30% (2) | 750.0 |
| Fixed rate notes due June 2048, stated rate of 4.15% | 700.0 |

- (1) We maintained a forward-starting interest rate swap agreement that modified the interest obligation associated with these notes so that the interest payable on the notes effectively became fixed at a rate of 3.11%.
- (2) We maintained a forward-starting interest rate swap agreement that modified the interest obligation associated with these notes so that the interest payable effectively became fixed at a rate of 4.73%.

We maintain a \$2.3 billion multi-currency revolving senior credit facility with various financial institutions, which matures in November 2026. The proceeds from this facility can be used for general corporate purposes, which includes providing liquidity for our clearing house in certain circumstances at CME Group's discretion and, if necessary, for maturities of commercial paper. As long as we are not in default under this facility, we have the option to increase it up to \$3.3 billion with the consent of the agent and lenders providing the additional funds. This facility is voluntarily pre-payable from time to time without premium or

penalty. Under this facility, we are required to remain in compliance with a consolidated net worth test, which is defined as our consolidated shareholders' equity at September 30, 2021, giving effect to share repurchases made and special dividends paid during the term of the agreements (and in no event greater than \$2.0 billion in aggregate), multiplied by 0.65. We currently do not have any borrowings outstanding under this facility, but any commercial paper balance if or when outstanding can be backstopped against this facility.

We maintain a 364-day multi-currency revolving secured credit facility with a consortium of domestic and international banks to be used in certain situations by the clearing house. The facility provides for borrowings of up to \$7.0 billion. We may use the proceeds to provide temporary liquidity in the unlikely event a clearing firm fails to promptly discharge an obligation to CME Clearing, in the event of a liquidity constraint or default by a depositary (custodian for our collateral), in the event of a temporary disruption with the domestic payments system that would delay payment of settlement variation between us and our clearing firms, or in other cases as provided by the CME rulebook. Clearing firm guaranty fund contributions received in the form of cash or U.S. Treasury securities as well as the performance bond assets (pursuant to the CME rulebook) can be used to collateralize the facility. At March 31, 2024, guaranty fund contributions available to collateralize the facility totaled \$9.7 billion. We have the option to request an increase in the line from \$7.0 billion to \$10.0 billion. Our 364-day facility contains a requirement that CME remain in compliance with a consolidated tangible net worth test, defined as CME's consolidated shareholder's equity less intangible assets (as defined in the agreement), of not less than \$800.0 million. We currently do not have any borrowings outstanding under this facility.

The indentures governing our fixed rate notes, our \$2.3 billion multi-currency revolving senior credit facility and our 364-day multi-currency revolving secured credit facility for \$7.0 billion do not contain specific covenants that restrict the ability to pay dividends. These documents, however, do contain other customary financial and operating covenants that place restrictions on the operations of the company that could indirectly affect the ability to pay dividends.

At March 31, 2024, we have excess borrowing capacity for general corporate purposes of approximately \$2.3 billion under our multi-currency revolving senior credit facility.

At March 31, 2024, we were in compliance with the various covenant requirements of all our debt facilities.

CME Group, as a holding company, has no operations of its own. Instead, it relies on dividends declared and paid to it by its subsidiaries in order to provide the funds which it uses to pay dividends to its shareholders.

To satisfy our performance bond obligation with Singapore Exchange Limited, we may pledge irrevocable standby letters of credit. At March 31, 2024, the letters of credit totaled \$285.0 million. We also maintain a \$350.0 million line of credit to meet our obligations under this agreement.

The following table summarizes our credit ratings at March 31, 2024:

| | Short-Term | Long-Term | |
|----------------------------------|-------------|-------------|---------|
| Rating Agency | Debt Rating | Debt Rating | Outlook |
| Standard & Poor's Global Ratings | A1+ | AA- | Stable |
| Moody's Investors Service, Inc. | P1 | Aa3 | Stable |

Given our cash flow generation, our ability to pay down debt levels and our ability to refinance existing debt facilities if necessary, we expect to maintain an investment grade rating. If our ratings are downgraded below investment grade within certain specified time periods due to a change of control, we are required to make an offer to repurchase our fixed rate notes at a price equal to 101% of the principal amount, plus accrued and unpaid interest. No report of any rating agency is incorporated by reference herein.

Liquidity and Cash Management. Cash and cash equivalents totaled \$1.4 billion and \$2.9 billion at March 31, 2024 and December 31, 2023, respectively. The balance retained in cash and cash equivalents is a function of anticipated or possible short-term cash needs, prevailing interest rates, our corporate investment policy and alternative investment choices. A majority of our cash and cash equivalents balance is invested in money market mutual funds that invest only in U.S. Treasury securities, U.S. government agency securities and U.S. Treasury security reverse repurchase agreements and short-term bank deposits. Our exposure to credit and liquidity risk is minimal given the nature of the investments. Cash that is not available for general corporate purposes because of regulatory requirements or other restrictions is classified as restricted cash and is included in other current assets or other assets in the consolidated balance sheets.

Regulatory Requirements. CME is regulated by the CFTC as a Derivatives Clearing Organization (DCO). DCOs are required to maintain capital, as defined by the CFTC, in an amount at least equal to one year of projected operating expenses as well as cash, liquid securities, or a line of credit at least equal to six months of projected operating expenses.

CME was designated by the Financial Stability Oversight Council as a systemically important financial market utility under Title VIII of the Dodd-Frank Wall Street Reform and Consumer Protection Act. As a result, CME must comply with CFTC regulations applicable to a systemically important DCO for financial resources and liquidity resources. CME is in compliance with all DCO financial requirements.

CME, CBOT, NYMEX and COMEX are regulated by the CFTC as Designated Contract Markets (DCM). DCMs are required to maintain capital, as defined by the CFTC, in an amount at least equal to one year of projected operating expenses as well as cash, liquid securities or a line of credit at least equal to six months of projected operating expenses. Our DCMs are in compliance with all DCM financial requirements.

BrokerTec Americas LLC is required to maintain sufficient net capital under Securities Exchange Act of 1934, as amended (Exchange Act), Rule 15c3-1 (the Net Capital Rule). The Net Capital Rule focuses on liquidity and is designed to protect securities customers, counterparties, and creditors by requiring that broker-dealers have sufficient liquid resources on hand at all times to satisfy claims promptly. Rule 15c3-3, or the customer protection rule, which complements Rule 15c3-1, is designed to ensure that customer property (securities and funds) in the custody of broker-dealers is adequately safeguarded. By law, both of these rules apply to the activities of registered broker-dealers, but not to unregistered affiliates. The firm began operating as a (k)(2)(i) broker dealer in November 2017 following notification to the Financial Industry Regulatory Authority and the SEC. A company operating under the (k)(2)(i) exemption is not required to lock up customer funds as would otherwise be required under Exchange Act Rule 15c3-3.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are subject to various market risks, including those caused by changes in interest rates, credit, foreign currency exchange rates and equity prices. There have not been material changes in our exposure to market risk since December 31, 2023. Refer to Item 7A. of CME Group's Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on February 28, 2024, for additional information.

ITEM 4. CONTROLS AND PROCEDURES

- (a) Disclosure Controls and Procedures. Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this report. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of such period, our disclosure controls and procedures are effective.
- (b) Changes in Internal Control Over Financial Reporting. As required by Rule 13a-15(d) under the Exchange Act, the company's management, including the company's Chief Executive Officer and Chief Financial Officer, have evaluated the company's internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) to determine whether any changes occurred during the quarter covered by this quarterly report that have materially affected, or are reasonably likely to materially affect, the company's internal control over financial reporting. There were no changes in the company's internal control over financial reporting which occurred during the fiscal quarter ended March 31, 2024, that have materially affected, or are reasonably likely to materially affect, the company's internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

The disclosure under "Legal and Regulatory Matters" in Note 6. Contingencies in the Notes to Unaudited Consolidated Financial Statements in Item 1 of Part I of this report is incorporated herein by reference. Such disclosure includes updates to the legal proceedings disclosed in the company's Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on February 28, 2024.

ITEM 1A. RISK FACTORS

There have been no material changes in the company's risk factors from those disclosed in the company's Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on February 28, 2024.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Issuer Purchases of Equity Securities

| | | | | Number (or |
|---------------|----------------------|-------------------|----------------------------|--------------------|
| | | | | Approximate Value) |
| | | | (c) Total Number of | of shares that |
| | | | Class A | May Yet Be |
| | | | Shares Purchased as | Purchased |
| | (a) Total Number of | | Part of Publicly | Under the Plans or |
| | Class A | (b) Average Price | Announced | Programs |
| Period | Shares Purchased (1) | Paid Per Share | Plans or Programs | (in millions) |
| January 1 to | | | | |
| January 31 | 5,302 | \$ 202.66 | _ | \$ |
| February 1 to | | | | |
| February 28 | 157 | 209.24 | _ | _ |
| March 1 to | | | | |
| March 31 | 51,774 | 217.52 | | _ |
| Total | 57,233 | | | |

(d) Maximum

⁽¹⁾ Shares purchased consist of an aggregate of 57,233 shares of Class A common stock surrendered in the first quarter of 2024 to satisfy employees' tax obligations upon the vesting of restricted stock.

ITEM 6. EXHIBITS

| 10.1(1) | CME Group Inc,'s Fourth Amended and Restated Omnibus Stock Plan (As amended and restated effective March 1, 2024) (incorporated by reference to Exhibit 10.1 to CME Group Inc.'s Current Report on Form 8-K, filed with the SEC on March 7, 2024). |
|---------|---|
| 31.1 | Section 302 Certification—Terrence A. Duffy |
| 31.2 | Section 302 Certification—Lynne Fitzpatrick |
| 32.1 | Section 906 Certification |
| 101 | The following materials from CME Group Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2024, formatted in Inline XBRL (Xtensible Business Reporting Language): (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Income, (iii) the Consolidated Statements of Comprehensive Income, (iv) the Consolidated Statements of Equity, (v) the Consolidated Statements of Cash Flows and (vi) Notes to Unaudited Consolidated Financial Statements, tagged as blocks of text. |
| 104 | Cover Page Interactive Data File included in the Inline XBRL Document Set for Exhibit 101. |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase |
| 101.LAB | XBRL Taxonomy Extension Label Linkbase Document |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase Document |
| (1) | Management contract, compensatory plan or arrangement. |

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

| | (Registrant | - | |
|--------------------|-------------|-----------------------|--|
| Dated: May 1, 2024 | Ву: | /s/ Lynne Fitzpatrick | |
| | | Lynne Fitzpatrick | |
| | | | |

Senior Managing Director and Chief Financial Officer

Principal Financial Offer and Duly Authorized Officer