CME GROUP INC.
Form 10-Q
August 01, 2018
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

(Mark One)
ý QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended June 30, 2018
- OR -
¨ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to
Commission file number 001-31553
CME GROUP INC.
(Exact name of registrant as 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, Illinois	60606
(Address of principal executive offices)	(Zip Code)

(312) 930-1000
(Registrant's telephone number, including area code)
Not Applicable
(Former name, former address and former fiscal year, if changed since last report)
Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ý No ¨
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ý No ¨
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer x	Accelerated filer o
Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company o
	Emerging growth company o

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).
Yes ¨ No ý

The number of shares outstanding of each of the registrant's classes of common stock as of July 11, 2018 was as follows: 340,577,215 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.

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PART I. FINANCIAL INFORMATION

Certain Terms

Unless otherwise indicated, references to CME Group Inc. (CME Group or the company) products include references to products listed on one of its regulated exchanges: Chicago Mercantile Exchange Inc. (CME), Board of Trade of the City of Chicago, Inc. (CBOT), New York Mercantile Exchange, Inc. (NYMEX) and Commodity Exchange, Inc. (COMEX). Products listed on these exchanges are subject to the rules and regulations of the particular exchange and the applicable rulebook should be consulted. Unless otherwise indicated, references to NYMEX include its subsidiary, COMEX.

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 exclude our interest rate swaps and credit default swaps (CDS) contracts. CME exited the CDS clearing business in March 2018.

Trademark Information

CME Group, the Globe logo, CME, Chicago Mercantile Exchange, Globex and E-mini are trademarks of Chicago Mercantile Exchange Inc. CBOT, Chicago Board of Trade, KCBT and Kansas City 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. 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. 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 expressio 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, including our ability to provide effective services to the swaps market;
- our ability to adjust our fixed costs and expenses if our revenues decline;
- our ability to maintain existing customers, develop strategic relationships and attract new customers;
- our ability to retain key employees;
- our ability to expand and offer our products outside the United States;
- changes in regulations, including the impact of any changes in laws or government policy with respect to 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;

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- decreases in revenue from our market data as a result of decreased demand;
- 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 financial safeguards package to adequately protect us from the credit risks of clearing members;
- the ability of our compliance and risk management methods 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;
- changes in price levels and volatility in the derivatives markets and in underlying equity, foreign exchange, interest rate and commodities markets;
- economic, 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 and control the costs associated with our strategy for acquisitions, investments and alliances;
- our ability to continue to generate funds and/or manage our indebtedness to allow us to continue to invest in our business;
- industry and customer consolidation;
- decreases in trading and clearing activity;
- the imposition of a transaction tax or user fee on futures and options on futures transactions and/or repeal of the 60/40 tax treatment of such transactions;
- failure to maintain our brand's reputation;
- the unfavorable resolution of material legal proceedings; and
- the uncertainties of the ultimate impact of the Tax Cuts and Jobs Act (2017 Tax Act).

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, filed with the Securities and Exchange Commission on February 28, 2018 and Item 1A. of this Quarterly Report on Form 10-Q.

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ITEM 1. FINANCIAL STATEMENTS

CME GROUP INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(dollars in millions, except par value data; shares in thousands)

	June 30, 2018 (unaudited)	December 31, 2017
Assets		
Current Assets:		
Cash and cash equivalents	$ 1,098.9	$ 1,903.6
Marketable securities	80.9	90.1
Accounts receivable, net of allowance of $3.0 and $2.2	433.9	359.7
Other current assets (includes $1,635.5 and $0 in restricted cash)	1,801.6	367.8
Performance bonds and guaranty fund contributions	36,885.2	44,185.3
Total current assets	40,300.5	46,906.5
Property, net of accumulated depreciation and amortization of $726.9 and $676.6	380.0	399.7
Intangible assets—trading products	17,175.3	17,175.3
Intangible assets—other, net	2,299.0	2,346.3
Goodwill	7,569.0	7,569.0
Other assets (includes $1.4 and $2.4 in restricted cash)	1,475.5	1,394.4
Total Assets	$ 69,199.3	$ 75,791.2
Liabilities and Equity		
Current Liabilities:		
Accounts payable	$ 27.8	$ 31.3
Other current liabilities	266.6	1,456.3
Performance bonds and guaranty fund contributions	36,885.2	44,185.3
Total current liabilities	37,179.6	45,672.9
Long-term debt	3,419.0	2,233.1
Deferred income tax liabilities, net	4,863.1	4,857.7
Other liabilities	614.0	615.7
Total Liabilities	46,075.7	53,379.4
Shareholders’ Equity:		
Preferred stock, $0.01 par value, 10,000 shares authorized at June 30, 2018 and December 31, 2017; none issued	—	—
Class A common stock, $0.01 par value, 1,000,000 shares authorized at June 30, 2018 and December 31, 2017; 339,520 and 339,235 shares issued and outstanding as of June 30, 2018 and December 31, 2017, respectively	3.4	3.4
Class B common stock, $0.01 par value, 3 shares authorized, issued and outstanding as of June 30, 2018 and December 31, 2017	—	—
Additional paid-in capital	17,928.3	17,896.9
Retained earnings	5,173.3	4,497.2
Accumulated other comprehensive income (loss)	18.6	14.3
Total shareholders’ equity	23,123.6	22,411.8
Total Liabilities and Equity	$ 69,199.3	$ 75,791.2

See accompanying notes to unaudited consolidated financial statements.

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CME GROUP INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME
(dollars in millions, except per share data; shares in thousands)
(unaudited)

	Quarter Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Revenues				
Clearing and transaction fees	$906.1	$792.0	$1,879.7	$1,584.0
Market data and information services	113.8	96.1	208.7	192.9
Access and communication fees	26.2	24.9	52.2	49.2
Other	13.5	11.6	28.0	27.8
Total Revenues	1,059.6	924.6	2,168.6	1,853.9
Expenses				
Compensation and benefits	150.8	139.7	303.5	282.3
Communications	5.9	6.0	11.8	12.3
Technology support services	19.3	18.2	38.9	36.9
Professional fees and outside services	31.9	28.6	74.5	57.2
Amortization of purchased intangibles	23.6	24.0	47.3	48.0
Depreciation and amortization	27.5	28.8	55.6	58.2
Occupancy and building operations	20.2	19.2	40.2	39.3
Licensing and other fee agreements	39.9	32.9	89.4	66.7
Other	73.6	22.0	99.6	46.9
Total Expenses	392.7	319.4	760.8	647.8
Operating Income	666.9	605.2	1,407.8	1,206.1
Non-Operating Income (Expense)				
Investment income	241.9	112.4	398.3	251.3
Interest and other borrowing costs	(33.1)	(29.0)	(63.2)	(58.8)
Equity in net earnings of unconsolidated subsidiaries	36.4	31.8	76.5	62.6
Other non-operating income (expense)	(155.3)	(83.1)	(273.9)	(116.9)
Total Non-Operating Income (Expense)	89.9	32.1	137.7	138.2
Income before Income Taxes	756.8	637.3	1,545.5	1,344.3
Income tax provision	190.7	221.5	380.6	528.7
Net Income	$566.1	$415.8	$1,164.9	$815.6
Earnings per Common Share:				
Basic	$1.67	$1.23	$3.43	$2.41
Diluted	1.66	1.22	3.42	2.40
Weighted Average Number of Common Shares:				
Basic	339,465	338,556	339,386	338,448
Diluted	340,872	340,020	340,838	339,974

See accompanying notes to unaudited consolidated financial statements.

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CME GROUP INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in millions)
(unaudited)

	Quarter Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Net income	$566.1	$415.8	$1,164.9	$815.6
Other comprehensive income (loss), net of tax:				
Investment securities:				
Net unrealized holding gains (losses) arising during the period	—	1.7	(0.9)	31.1
Reclassification of net (gains) losses on sales included in investment income	—	—	—	(87.1)
Income tax benefit (expense)	—	(0.5)	0.2	76.1
Investment securities, net	—	1.2	(0.7)	20.1
Defined benefit plans:				
Net change in defined benefit plans arising during the period	—	—	1.7	0.4
Amortization of net actuarial (gains) losses included in compensation and benefits expense	0.6	0.7	1.3	1.4
Income tax benefit (expense)	(0.2)	(0.3)	(0.8)	(0.7)
Defined benefit plans, net	0.4	0.4	2.2	1.1
Derivative investments:				
Amortization of effective portion of net (gains) losses on cash flow hedges included in interest expense	(0.3)	(0.3)	(0.6)	(0.6)
Income tax benefit (expense)	0.1	0.1	0.2	0.2
Derivative investments, net	(0.2)	(0.2)	(0.4)	(0.4)
Foreign currency translation:				
Foreign currency translation adjustments	(1.5)	1.1	(0.6)	9.5
Income tax benefit (expense)	—	—	—	(2.9)
Foreign currency translation, net	(1.5)	1.1	(0.6)	6.6
Other comprehensive income (loss), net of tax	(1.3)	2.5	0.5	27.4
Comprehensive Income	$564.8	$418.3	$1,165.4	$843.0

See accompanying notes to unaudited consolidated financial statements.

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CME GROUP INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF EQUITY
(dollars in millions, except per share data; shares in thousands)
(unaudited)

	Class A Common Stock (Shares)	Class B Common Stock (Shares)	Common Stock and Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity
Balance at December 31, 2017	339,235	3	$17,900.3	$4,497.2	$ 14.3	$22,411.8
Net income				1,164.9		1,164.9
Other comprehensive income (loss)					0.5	0.5
Dividends on common stock of $1.40 per share				(476.3)		(476.3)
Impact of adoption of standards update on tax effects related to accumulated other comprehensive income and revenue recognition				(12.5)	3.8	(8.7)
Exercise of stock options	116		8.2			8.2
Vesting of issued restricted Class A common stock	145		(14.9)			(14.9)
Shares issued to Board of Directors	14		2.4			2.4
Shares issued under Employee Stock Purchase Plan	10		1.8			1.8
Stock-based compensation			33.9			33.9
Balance at June 30, 2018	339,520	3	$17,931.7	$5,173.3	$ 18.6	$23,123.6

See accompanying notes to unaudited consolidated financial statements.

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CME GROUP INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF EQUITY (continued)
(dollars in millions, except per share data; shares in thousands)
(unaudited)

	Class A Common Stock (Shares)	Class B Common Stock (Shares)	Common Stock and Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity
Balance at December 31, 2016	338,240	3	$17,830.3	$2,524.5	$ (14.1)	$ 20,340.7
Net income				815.6		815.6
Other comprehensive income (loss)					27.4	27.4
Dividends on common stock of $1.32 per share				(448.2)		(448.2)
Impact of adoption of standards update on employee share-based payments, net of tax			1.4	(2.2)		(0.8)
Exercise of stock options	242		22.9			22.9
Vesting of issued restricted Class A common stock	162		(12.1)			(12.1)
Shares issued to Board of Directors	20		2.4			2.4
Shares issued under Employee Stock Purchase Plan	9		1.2			1.2
Stock-based compensation			27.7			27.7
Balance at June 30, 2017	338,673	3	$17,873.8	$2,889.7	$ 13.3	$ 20,776.8

See accompanying notes to unaudited consolidated financial statements.

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CME GROUP INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions)
(unaudited)

	Six Months Ended June 30, 2018	2017
Cash Flows from Operating Activities		
Net income	$1,164.9	$815.6
Adjustments to reconcile net income to net cash provided by operating activities:		
Stock-based compensation	33.9	27.7
Amortization of purchased intangibles	47.3	48.0
Depreciation and amortization	55.6	58.2
Unrealized losses on derivative contracts	36.9	—
Realized and unrealized gains on privately-held equity investments	(88.2)	—
Gain on sale of BM&FBOVESPA shares	—	(86.5)
Income tax expense reclassified from accumulated other comprehensive income upon final sale of BM&FBOVESPA shares	—	87.8
Undistributed earnings, net of losses, of unconsolidated subsidiaries	(4.7)	(12.4)
Deferred income taxes	5.0	11.8
Change in:		
Accounts receivable	(75.0)	(50.6)
Other current assets	36.5	(2.6)
Other assets	(0.8)	9.0
Accounts payable	(3.5)	(0.7)
Income taxes payable	171.0	(98.6)
Other current liabilities	(26.4)	(25.5)
Other liabilities	(5.9)	2.6
Other	1.2	(0.4)
Net Cash Provided by Operating Activities	1,347.8	783.4
Cash Flows from Investing Activities		
Proceeds from maturities of available-for-sale marketable securities	3.4	1.2
Purchases of available-for-sale marketable securities	(1.9)	(0.5)
Purchases of property, net	(29.6)	(37.6)
Investments in privately-held equity investments	—	(2.3)
Proceeds from sales of privately-held equity investments	20.4	—
Proceeds from sale of BM&FBOVESPA shares	—	244.0
Net Cash Provided by (Used in) Investing Activities	(7.7)	204.8
Cash Flows from Financing Activities		
Cash dividends	(1,662.5)	(1,546.1)
Proceeds from exercise of stock options	8.2	22.9
Proceeds from debt, net of issuance costs	1,187.2	—
Premium payment for derivative contract	(30.0)	—
Employee taxes paid on restricted stock vesting	(14.9)	(12.1)
Other	1.7	1.2
Net Cash Used in Financing Activities	(510.3)	(1,534.1)

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

	Six Months Ended June 30,	
	2018	2017
Net change in cash, cash equivalents and restricted cash	$829.8	$(545.9)
Cash, cash equivalents and restricted cash, beginning of period	1,906.0	1,960.3
Cash, Cash Equivalents and Restricted Cash, End of Period	$2,735.8	$1,414.4
Reconciliation of cash, cash equivalents and restricted cash:		
Cash and cash equivalents	$1,098.9	$1,362.3
Short-term restricted cash	1,635.5	30.0
Long-term restricted cash	1.4	22.1
Total	$2,735.8	$1,414.4
Supplemental Disclosure of Cash Flow Information		
Income taxes paid	$272.8	$476.2
Interest paid	42.4	42.4

See accompanying notes to unaudited consolidated financial statements.

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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) and Commodity Exchange, Inc. (COMEX). CME, CBOT, NYMEX, COMEX and their subsidiaries are referred to collectively as “the exchange” in the notes to the consolidated financial statements. The clearing house is a division of 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 normal recurring adjustments considered necessary to present fairly the financial position of the company at June 30, 2018 and December 31, 2017 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, 2017, filed with the Securities and Exchange Commission (SEC) on February 28, 2018.

2. Accounting Policies

Newly Adopted Accounting Policies. In May 2014, the Financial Accounting Standards Board (FASB) issued a new standard on revenue recognition that replaces numerous, industry-specific requirements and converges U.S. accounting standards with International Financial Reporting Standards. The new standard introduces a framework for recognizing revenue that focuses on the transfer of control rather than risks and rewards. The new standard also requires significant additional disclosures about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments, changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. The company implemented this standard as of January 1, 2018 using the modified retrospective approach with the cumulative effect of initially applying the guidance recognized at the date of initial adoption. Management recognized an $8.7 million reduction to the opening balance of retained earnings as of January 1, 2018, which it believes to be an immaterial impact to the consolidated financial statements. The adjustment to the opening balance of retained earnings primarily relates to a deferral of a portion of clearing and transaction fees revenue earned and recognized subsequent to the contract trade execution date. The on-going application of the new standard is not expected to have a material impact on the company's financial statements.

In January 2016, the FASB issued a standards update that changes how entities measure certain equity investments. It does not change the guidance for classifying and measuring investments in debt securities, loans and equity method investments. Under the new guidance, entities will have to measure many equity investments at fair value and recognize any changes in fair value in net income, unless the investments qualify for a practicability exception. Entities will no longer be able to recognize unrealized holding gains and losses on equity securities previously classified as available-for-sale in other comprehensive income. For equity investments in privately-held entities that do not have a readily determinable fair value, our accounting policy is to utilize the measurement alternative for valuation of these investments, which permits the company to estimate fair value at cost minus impairment, plus or minus changes resulting from observable price changes. The company adopted this guidance on January 1, 2018. During the six months ended June 30, 2018, the company recorded an increase to the fair values of some of our privately-held equity investments of $70.0 million, which is presented in investment income on the consolidated statement of income.

In November 2016, the FASB issued a standards update aimed at promoting consistency in the classification and presentation of changes in restricted cash on the statement of cash flows. Previously, there was diversity in practice as to whether the change in restricted cash was included in the reconciliation of beginning-of-period and end-of-period total cash amounts shown on the statements of cash flows. The amendments require that statements of cash flows explain the change during the period in the total of cash, cash equivalents, as well as amounts described as restricted cash on the consolidated balance sheets. This guidance was adopted on January 1, 2018 using the retrospective approach. The statements of cash flows show an increase in our cash balances of $829.8 million for the six months ended June 30, 2018 and a decrease in our cash balances of $545.9 million for the six months ended June 30, 2017.

In March 2017, the FASB issued a standards update that changes certain presentation and disclosure requirements for employers that sponsor defined benefit pension as well as other postretirement benefit plans. Defined benefit pension cost and postretirement benefit cost (net benefit cost) are comprised of several components that reflect different aspects of an employer’s financial arrangements as well as the cost of benefits provided to the employees. Under previous accounting guidance, those components were aggregated for reporting in the financial statements within compensation and benefits on the consolidated statements of income. The amendments in the update require that the service cost component is reported in the same line as

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other compensation costs, whereas the other components of net benefit cost are required to be presented on the consolidated statements of income separately from the service cost component. This update was adopted as of January 1, 2018 with retrospective application to the earliest period presented. Total net pension expense remains unchanged upon adoption of the standards update. Following the reclassification, pension expense consists of the following for the periods presented:

(in millions)	Quarter Ended June 30, 2018	2017	Six Months Ended June 30, 2018	2017
Service cost recognized in compensation and benefits expense	$4.8	$4.7	$9.6	$9.4
Other components of pension expense recognized in other non-operating income (expense)	(2.3)	(0.4)	(4.5)	(0.7)
Total net pension expense	$2.5	$4.3	$5.1	$8.7

In February 2018, the FASB issued guidance that gives entities the option to reclassify to retained earnings the tax effects related to items in accumulated other comprehensive income (AOCI) that were previously stranded within AOCI as a result of applying the Tax Cuts and Jobs Act (2017 Tax Act). An entity that elects to reclassify these amounts must reclassify stranded tax effects related to the change in federal tax rate for all items accounted for within AOCI. Entities can also elect to reclassify other stranded tax effects that relate to the 2017 Tax Act but do not directly relate to the change in federal rate. Tax effects that are stranded in AOCI for other reasons may not be reclassified. These amendments should be applied either in the period of adoption as a cumulative adjustment to the opening balance of retained earnings or retrospectively to each period in which the effect of the 2017 Tax Act is recognized. This guidance is effective for entities with fiscal years beginning after December 15, 2018. The company early adopted this guidance as of January 1, 2018, resulting in an adjustment of $3.8 million to reduce beginning retained earnings and increase AOCI. Tax effects from previously stranded items are released from AOCI when the entire portfolio of similar items is liquidated.

Recently Issued Accounting Pronouncements. In February 2016, the FASB issued a standards update that requires lessees to recognize on the balance sheet the assets and liabilities associated with the rights and obligations created by those leases. The guidance for lessors is largely unchanged from current U.S. GAAP. Under the new guidance, a lessee will be required to recognize assets and liabilities for leases with lease terms of more than 12 months. Consistent with current U.S. GAAP, the recognition, measurement, and presentation of expenses and cash flows arising from a lease by a lessee primarily will depend on its classification as a finance or operating lease. The update is effective for reporting periods beginning after December 15, 2018. Early adoption is permitted. Adoption of the guidance in 2019 will result in the gross-up of the consolidated balance sheets to reflect the present value of the lease payments over the lease term and offsetting lease liability at the lease commencement date. Presentation of lease expense and the pattern of expense recognition on the consolidated statements of income is expected to remain materially consistent with existing lease accounting guidance.

In June 2016, the FASB issued guidance that changes how credit losses are measured for most financial assets measured at amortized cost and certain other instruments. The standard requires an entity to estimate its lifetime expected credit loss and record an allowance, that when deducted from the amortized cost basis of the financial asset, presents the net amount expected to be collected on the financial asset. This forward-looking expected loss model generally will result in the earlier recognition of allowances for losses. The standard also amends the impairment model for available-for-sale debt securities and requires entities to determine whether all or a portion of the unrealized loss on an available-for-sale debt security is a credit loss. Severity and duration of the unrealized loss are no longer permissible factors in concluding whether a credit loss exists. Entities will recognize improvements to estimated credit losses on available-for-sale debt securities immediately in earnings rather than as interest income over time. The standard is effective for reporting periods beginning after December 15, 2019. The standard’s provisions must be applied as a cumulative adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. Early adoption is permitted for reporting periods beginning in 2019. The company does not believe that the adoption of this guidance will have a material impact on the consolidated financial statements.

In August 2017, the FASB issued a standards update that amends the existing hedge accounting model to enable entities to better reflect their risk management activities in the financial statements. The amendments expand an entity's ability to hedge nonfinancial and financial risk components and reduce complexity in fair value hedges of interest rate risk. The guidance eliminates the requirement to separately measure and report hedge ineffectiveness and generally requires the entire change in the fair value of a hedging instrument to be presented in the same income statement line as the hedged item. The guidance also eases certain documentation and assessment requirements and modifies the accounting for components excluded from the assessment of hedge effectiveness. The guidance is effective for fiscal years beginning after December 15, 2018. Early adoption is permitted. The company does not believe that the adoption of this standard will have a material impact on the consolidated financial statements.

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3. Revenue Recognition

Revenue from Contracts with Customers. The majority of revenue is comprised of clearing and transaction fees. The company accounts for revenue in accordance with “Revenue from Contracts with Customers,” which was adopted on January 1, 2018, using the modified retrospective approach. The new standard introduces a framework for recognizing revenue that focuses on the transfer of control rather than risks and rewards. The company recognized a one-time adjustment of $8.7 million within the opening balance of retained earnings as of January 1, 2018 as a result of adopting this standard. This deferral of revenue is primarily related to the outstanding performance obligations for clearing and transaction fees for longer-term cleared swap products.

Clearing and transaction fees. Clearing and transaction fees include electronic trading fees, surcharges for privately-negotiated transactions, and other volume-related charges for exchange-traded and cleared swaps 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 clearing activities performed after the 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. 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 incentive tiers, 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. 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 represents 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.

Access and communication fees. Access and communication fees are charges to members and clearing firms that utilize various telecommunications networks and communications services. Fees for these services are generally billed monthly. These services are satisfied over time and revenue is recognized on a monthly basis as the customers receive and consume the benefit of the services.

Other. Other revenues include fees for collateral management, fees for trade order routing through agreements from various strategic relationships, as well as other services to members and clearing firms. Collateral management fees are charged to clearing firms that have collateral on deposit with CME to meet their minimum performance bond and guaranty fund obligations. These fees are calculated based on daily collateral balances and are billed monthly. This fee revenue is recognized as billed as the customers receive and consume the benefits of the services. 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.

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The following table represents a disaggregation of revenue from contracts with customers for the quarters and six months ended June 30, 2018 and 2017:

	Quarter Ended June 30,		Six Months Ended June 30,	
(in millions)	2018	2017	2018	2017
Interest rate	$288.9	$254.1	$627.3	$533.7
Equity	157.3	124.6	352.3	247.7
Foreign exchange	49.1	44.7	100.2	90.3
Agricultural commodity	141.4	122.1	262.5	226.5
Energy	192.0	181.7	383.6	356.3
Metal	60.5	48.4	119.9	95.8
Interest rate swap and credit default swap	16.9	16.4	33.9	33.7
Total clearing and transaction fees	906.1	792.0	1,879.7	1,584.0
Market data and information services	113.8	96.1	208.7	192.9
Access and communication fees	26.2	24.9	52.2	49.2
Other	13.5	11.6	28.0	27.8
Total revenues	$1,059.6	$924.6	$2,168.6	$1,853.9
Timing of Revenue Recognition				
Services transferred at a point in time	890.6	775.2	1,848.4	1,552.3
Services transferred over time	166.7	146.6	315.5	295.2
One-time charges and miscellaneous revenues	2.3	2.8	4.7	6.4
Total revenues	$1,059.6	$924.6	$2,168.6	$1,853.9

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 reported on the consolidated balance sheets on a contract-by-contract basis at the end of each reporting period. For annual licenses and upfront fee arrangements, the company generally bills customers upon contract execution. These payments are recognized as revenue over time as the obligations under the contracts are satisfied. Changes in the contract liability balances during the six months ended June 30, 2018 were not materially impacted by any other factors. The balance of contract liabilities was $25.0 million and $3.9 million as of June 30, 2018 and December 31, 2017 respectively.

4. Performance Bonds and Guaranty Fund Contributions

Performance Bonds and Guaranty Fund Contributions. CME has been designated as a systemically important financial market utility by the Financial Stability Oversight Council and is authorized to establish and maintain a cash account at the Federal Reserve Bank of Chicago. At June 30, 2018, CME maintained $27.3 billion within the cash account at the Federal Reserve Bank of Chicago.

Clearing House Contract Settlement. The clearing house marks-to-market open positions for all futures and options contracts twice a day (once a day for CME's cleared-only interest rate swap 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 CME's cleared-only interest rate swap contracts, the maximum exposure related to CME's guarantee would be one full day of changes in fair value of all open positions, before considering CME's ability to access defaulting clearing firms' collateral. CME exited the CDS clearing business in March 2018.

During the first six months of 2018, the clearing house transferred an average of approximately $3.5 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

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mandatory guaranty fund contributions. The company believes that its guarantee liability is immaterial and therefore has not recorded any liability at June 30, 2018.

5. Intangible Assets

Intangible assets consisted of the following at June 30, 2018 and December 31, 2017:

	June 30, 2018			December 31, 2017		
(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	$2,838.8	$ (991.0)	$1,847.8	$2,838.8	$ (943.7)	$1,895.1
Technology-related intellectual property	29.4	(29.4)	—	29.4	(29.4)	—
Other	2.4	(1.2)	1.2	2.4	(1.2)	1.2
Total amortizable intangible assets	$2,870.6	$ (1,021.6)	1,849.0	$2,870.6	$ (974.3)	1,896.3
Indefinite-Lived Intangible Assets:						
Trade names			450.0			450.0
Total intangible assets – other, net			$2,299.0			$2,346.3
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 $23.6 million and $24.0 million for the quarters ended June 30, 2018 and 2017, respectively. Total amortization expense for intangible assets was $47.3 million and $48.0 million for the six months ended June 30, 2018 and 2017, respectively. As of June 30, 2018, the future estimated amortization expense related to amortizable intangible assets is expected to be as follows:

(in millions)	Amortization Expense
Remainder of 2018	$ 47.3
2019	94.7
2020	94.7
2021	94.7
2022	94.7
2023	94.7
Thereafter	1,328.2

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6. Debt

In June 2018, the company completed offerings of $500.0 million of 3.75% fixed rate notes due June 2028 and $700.0 million of 4.15% fixed rate notes due June 2048. The company intends to use the net proceeds from the offering, together with cash on hand, to finance the cash consideration for the proposed acquisition of NEX Group plc (NEX).

Long-term debt consisted of the following at June 30, 2018 and December 31, 2017:

(in millions)	June 30, 2018	December 31, 2017
$750.0 million fixed rate notes due September 2022, stated rate of 3.00% (1)	$746.5	$ 746.0
$750.0 million fixed rate notes due March 2025, stated rate of 3.00% (2)	745.2	744.9
$500.0 million fixed rate notes due June 2028, stated rate of 3.75%	495.7	—
$750.0 million fixed rate notes due September 2043, stated rate of 5.30% (3)	742.3	742.2
$700.0 million fixed rate notes due June 2048, stated rate of 4.15%	689.3	—
Total long-term debt	$3,419.0	$ 2,233.1

(1) In August 2012, the company entered into 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 3.32%.

(2) In December 2014, the company entered into 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%.

(3) In August 2012, the company entered into 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%.

Long-term debt maturities, at par value, were as follows at June 30, 2018:

(in millions)	Par Value
2019	$ —
2020	—
2021	—
2022	750.0
2023	—
Thereafter	2,700.0

7. Contingencies

Legal and Regulatory Matters. In 2013, the CFTC filed suit against NYMEX and two former employees alleging disclosure of confidential customer information in violation of the Commodity Exchange Act. NYMEX’s motion to dismiss was denied in 2014. Based on its investigation to date and advice from legal counsel, the company believes that it has strong factual and legal defenses to the claim.

In 2003, the U.S. Futures Exchange, L.L.C. (Eurex U.S.) and U.S. Exchange Holdings, Inc. filed suit in federal court alleging that CBOT and CME violated the antitrust laws and tortuously interfered with the business relationship and contract between Eurex U.S. and The Clearing Corporation. On April 27, 2018, the Court informed the parties that it reached a preliminary decision to grant CBOT's and CME's motion for summary judgment on the antitrust claims. The Court is expected to issue a written decision finalizing that decision and dismissing the entire case. In the meantime, the previously set trial date has been vacated.

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 its 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.

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

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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 legal and regulatory matters as none were probable and estimable as of June 30, 2018 and December 31, 2017.

Intellectual Property Indemnifications. Certain agreements with customers and other third parties related to accessing the CME platforms, utilizing market data services and licensing CME SPAN 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.

8. Guarantees

Mutual Offset Agreement. CME and Singapore Exchange Limited (SGX) have a mutual offset agreement with a current term through October 2018. 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 one-year period unless either party provides advance notice of their intent to terminate. CME can maintain collateral in the form of U.S. Treasury securities or irrevocable, standby letters of credit. At June 30, 2018, CME was contingently liable to SGX on letters of credit totaling $285.0 million. 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. The company believes that its guarantee liability is immaterial and therefore has not recorded any liability at June 30, 2018.

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 immaterial and therefore has not recorded any liability at June 30, 2018.

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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)	Investment Securities	Defined Benefit Plans	Derivative Investments	Foreign Currency Translation	Total
Balance at December 31, 2017	$ 0.6	$(36.1)	$ 58.0	$ (8.2)	$14.3
Other comprehensive income (loss) before reclassifications and income tax benefit (expense)	(0.9)	1.7	—	(0.6)	0.2
Amounts reclassified from accumulated other comprehensive income (loss)	—	1.3	(0.6)	—	0.7
Income tax benefit (expense)	0.2	(0.8)	0.2	—	(0.4)
Net current period other comprehensive income (loss)	(0.7)	2.2	(0.4)	(0.6)	0.5
Impact of adoption of standards update on tax effects related to accumulated other comprehensive income	0.1	(8.2)	11.9	—	3.8
Balance at June 30, 2018	$ —	$(42.1)	$ 69.5	$ (8.8)	$18.6

(in millions)	Investment Securities	Defined Benefit Plans	Derivative Investments	Foreign Currency Translation	Total
Balance at December 31, 2016	$ (19.5)	$(37.8)	$ 58.9	$ (15.7)	$(14.1)
Other comprehensive income (loss) before reclassifications and income tax benefit (expense)	31.1	0.4	—	9.5	41.0
Amounts reclassified from accumulated other comprehensive income (loss)	(87.1)	1.4	(0.6)	—	(86.3)
Income tax benefit (expense)	76.1	(0.7)	0.2	(2.9)	72.7
Net current period other comprehensive income (loss)	20.1	1.1	(0.4)	6.6	27.4
Balance at June 30, 2017	$ 0.6	$(36.7)	$ 58.5	$ (9.1)	$13.3

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.

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. If quoted prices are not available to determine fair value, the company uses other inputs that are directly observable.

Level 2 assets and liabilities generally consist of asset-backed securities, equity investments and long-term debt notes. Asset-backed securities were measured at fair value based on matrix pricing using prices of similar securities with similar inputs such as maturity dates, interest rates and credit ratings. The fair values of the equity investments and long-term debt notes were based on quoted market prices.

Level 3 liabilities include a foreign exchange forward contract. The company is using the foreign exchange forward contract to mitigate certain exposure to foreign exchange rate fluctuation related to the anticipated acquisition of NEX. The forward

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contract was measured at fair value based on assumptions made by management regarding expectations on the settlement date as well as directly observable market inputs, including GBP forward rates, spot rates, and discount factors. Significant changes in these observable inputs may have a material impact on the fair value of the forward contract as these amounts affect the timing and extent of cash flows under the contract. Changes to the settlement date assumption do not have a material impact on the fair value of the forward contract. Changes in fair value of this contract are recognized within other non-operating income (expense) on the consolidated statements of income.

Financial assets and liabilities recorded in the consolidated balance sheet as of June 30, 2018 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:

	June 30, 2018			
(in millions)	Level 1	Level 2	Level 3	Total
Assets at Fair Value:				
Marketable securities:				
Corporate debt securities	$18.5	$ —	$ —	$18.5
Mutual funds	62.0	—	—	62.0
Equity securities	0.1	—	—	0.1
Asset-backed securities	—	0.3	—	0.3
Total Marketable Securities	80.6	0.3	—	80.9
Total Assets at Fair Value	$80.6	$ 0.3	$ —	$80.9
Liabilities at Fair Value:				
Foreign exchange forward contract	$—	$ —	$ 6.9	$6.9
Total Liabilities at Fair Value	$—	$ —	$ 6.9	$6.9

The following is a reconciliation of the level 3 liability valued at fair value on a recurring basis during the first six months of 2018:

(in millions)	Forward Contract
Fair value of liability at December 31, 2017	$ —
Unrealized losses included in other non-operating (income) expense	6.9
Fair Value of Liability at June 30, 2018	$ 6.9

There were no transfers of assets or liabilities between level 1, level 2 and level 3 during the first six months of 2018. There were no other level 3 assets or liabilities valued at fair value on a recurring or non-recurring basis during the first six months of 2018. During the second quarter of 2018, the company recognized mark-to-market increases in fair value of $70.0 million related to certain privately-held equity investments based on observable market price changes for an identical or similar investment of the same issuer. The fair values of these investments totaled $75.4 million and were considered level 2 and nonrecurring.

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, which are classified as level 2 under the fair value hierarchy, were estimated using quoted market prices. At June 30, 2018, the fair values were as follows:

(in millions)	Fair Value
$750.0 million fixed rate notes due September 2022, stated rate of 3.00%	$ 742.5
$750.0 million fixed rate notes due March 2025, stated rate of 3.00%	725.8
$500.0 million fixed rate notes due June 2028, stated rate of 3.75%	504.4
$750.0 million fixed rate notes due September 2043, stated rate of 5.30%	883.2
$700.0 million fixed rate notes due June 2048, stated rate of 4.15%	708.1

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11. Earnings Per Share

Basic earnings per share is computed by dividing net income by the weighted average number of shares of all classes of CME Group common stock outstanding for each reporting period. Diluted earnings per share reflects the increase in shares using the treasury stock method to reflect the impact of an equivalent number of shares of common stock if stock options were exercised and restricted stock awards were converted into common stock. Anti-dilutive restricted stock and performance share awards were as follows for the periods presented:

	Quarter Ended June 30,		Six Months Ended June 30,	
(in thousands)	2018	2017	2018	2017
Restricted stock and performance shares	7	70	9	71
Total	7	70	9	71

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

	Quarter Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Net Income (in millions)	$566.1	$415.8	$1,164.9	$815.6
Weighted Average Number of Common Shares (in thousands):				
Basic	339,465	338,556	339,386	338,448
Effect of stock options, restricted stock and performance shares	1,407	1,464	1,452	1,526
Diluted	340,872	340,020	340,838	339,974
Earnings per Common Share:				
Basic	$1.67	$1.23	$3.43	$2.41
Diluted	1.66	1.22	3.42	2.40

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.

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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, 2017.

References in this discussion and analysis to "we," "us" and "our" are to CME Group Inc. (CME Group) and its consolidated subsidiaries, collectively. References to "exchange" are to Chicago Mercantile Exchange Inc. (CME), 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 June 30,			Six Months Ended June 30,		
(dollars in millions, except per share data)	2018	2017	Change	2018	2017	Change
Total revenues	$1,059.6	$924.6	15 %	$2,168.6	$1,853.9	17 %
Total expenses	392.7	319.4	23	760.8	647.8	17
Operating margin	62.9 %	65.5 %		64.9 %	65.1 %	
Non-operating income (expense)	$89.9	$32.1	181	$137.7	$138.2	—
Effective tax rate	25.2 %	34.7 %		24.6 %	39.3 %	
Net income	$566.1	$415.8	36	$1,164.9	$815.6	43
Diluted earnings per common share	1.66	1.22	36	3.42	2.40	43
Cash flows from operating activities				1,347.8	783.4	72

Revenues

	Quarter Ended June 30,			Six Months Ended June 30,		
(dollars in millions)	2018	2017	Change	2018	2017	Change
Clearing and transaction fees	$906.1	$792.0	14 %	$1,879.7	$1,584.0	19 %
Market data and information services	113.8	96.1	18	208.7	192.9	8
Access and communication fees	26.2	24.9	5	52.2	49.2	6
Other	13.5	11.6	17	28.0	27.8	1
Total Revenues	$1,059.6	$924.6	15	$2,168.6	$1,853.9	17

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 interest rate swaps and credit default swaps.

	Quarter Ended June 30,			Six Months Ended June 30,		
	2018	2017	Change	2018	2017	Change
Total contract volume (in millions)	1,175.0	1,036.5	13 %	2,529.4	2,096.6	21 %
Clearing and transaction fees (in millions)	$889.1	$776.1	15	$1,845.6	$1,550.8	19
Average rate per contract	$0.757	$0.749	1	$0.730	$0.740	(1)

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We estimate the following net increases in clearing and transaction fees based on changes in total contract volumes and changes in average rate per contract for futures and options during the second quarter and first six months of 2018 when compared with the same periods in 2017.

(in millions)	Quarter Ended	Six Months Ended
Increases due to changes in total contract volume	$104.8	$315.8
Increase (decrease) due to changes in average rate per contract	8.2	(21.0)
Net increases in clearing and transaction fees	$113.0	$294.8

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 June 30,			Six Months Ended June 30,		
(amounts in thousands)	2018	2017	Change	2018	2017	Change
Average Daily Volume by Product Line:						
Interest rate	9,200	8,210	12 %	10,541	8,686	21 %
Equity	3,086	2,707	14	3,579	2,736	31
Foreign exchange	1,035	879	18	1,066	887	20
Agricultural commodity	1,734	1,492	16	1,665	1,377	21
Energy	2,630	2,632	—	2,691	2,565	5
Metal	674	533	27	693	522	33
Aggregate average daily volume	18,359	16,453	12	20,235	16,773	21
Average Daily Volume by Venue:						
Electronic	16,644	14,582	14	18,182	14,763	23
Open outcry	1,066	1,115	(4)	1,305	1,238	5
Privately negotiated	649	756	(14)	748	772	(3)
Aggregate average daily volume	18,359	16,453	12	20,235	16,773	21
Electronic Volume as a Percentage of Total Volume	91 %	89 %		90 %	88 %	

Overall market volatility was higher in the first half of 2018 compared with the same period in 2017. We believe the markets continued to experience uncertainty surrounding the Federal Reserve's interest rate policy in 2018. In June, the Federal Open Markets Committee (FOMC) raised the federal funds rate for the second time in 2018, which led to volatility across multiple asset classes. During the first half of 2018, uncertainties regarding United States' trade policies and the potential for changes in tariff rates as well as the anticipation of increased United States' government spending and the potential for future inflation also contributed to ongoing market uncertainty. We believe these factors led to the overall increases in contract volumes.

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Interest Rate Products

The following table summarizes average daily contract volume for our key interest rate products. Eurodollar Front 8 futures include contracts expiring in two years or less. Eurodollar Back 32 futures include contracts with expirations after two years through ten years.

(amounts in thousands)	Quarter Ended June 30, 2018	2017	Change	Six Months Ended June 30, 2018	2017	Change
Eurodollar futures and options:						
Front 8 futures	1,919	1,761	9 %	2,350	1,946	21 %
Back 32 futures	775	738	5	968	837	16
Options	1,227	1,464	(16)	1,598	1,537	4
U.S. Treasury futures and options:						
10-Year	2,259	1,883	20	2,395	1,931	24
5-Year	1,235	994	24	1,301	1,044	25
2-Year	532	381	40	580	382	52
Treasury bond	430	382	13	465	376	24
Federal Funds futures and options	277	217	27	280	235	19

Overall interest rate contract volumes increased in the second quarter and first six months of 2018 when compared with the same periods in 2017 largely due to volatility caused by continued uncertainty surrounding future interest rate hikes by the Federal Reserve, including volatility caused by the federal funds rate increase by the FOMC in March and June 2018. In addition, we believe interest rate volatility resulted from increased issuance of U.S. Treasury bills by the U.S. Department of Treasury. We also believe the increase in contract volume in the first half of 2018 when compared with the same period in 2017 was due to the uncertainty surrounding the United States' foreign trade policies, future rates of inflation and the potential for increased government spending.

Equity Products

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

(amounts in thousands)	Quarter Ended June 30, 2018	2017	Change	Six Months Ended June 30, 2018	2017	Change
E-mini S&P 500 futures and options	2,173	2,116	3 %	2,556	2,182	17 %
E-mini NASDAQ 100 futures and options	418	304	37	456	259	76

In the second quarter and first six months of 2018 when compared with the same periods in 2017, overall equity contract volumes increased due to overall higher equity market volatility, as measured by the CBOE Volatility Index and CBOE Nasdaq-100 Volatility Index. We believe the comparatively higher volatility is caused by greater uncertainty surrounding the Federal Reserve's interest rate policy and the continued uncertainty surrounding the United States' foreign trade policies.

Foreign Exchange Products

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

(amounts in thousands)	Quarter Ended June 30, 2018	2017	Change	Six Months Ended June 30, 2018	2017	Change
Euro	336	214	57 %	333	224	49 %
Japanese yen	151	165	(8)	169	172	(2)
British pound	137	123	12	146	124	18
Australian dollar	115	91	26	124	92	34

Canadian dollar	96	83	15	97	78	25

Overall foreign exchange contract volumes increased in the second quarter and first six months of 2018 when compared with the same periods in 2017. Increases in Euro contract volumes were largely driven by overall high volatility, which we believe was caused by market uncertainty resulting from different monetary policies by the European Central Bank and the Federal Reserve. Australian dollar contract volumes were higher due to volatile commodity markets and uncertainty surrounding the United States' foreign trade policies. We believe the increases in British pound contract volumes were attributed to the ongoing

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uncertainty from the United Kingdom European Union membership referendum as well as the potential for future interest rate hikes.

Agricultural Commodity Products

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

	Quarter Ended June 30,			Six Months Ended June 30,		
(amounts in thousands)	2018	2017	Change	2018	2017	Change
Corn	597	532	12 %	557	471	18 %
Soybean	373	279	34	358	274	31
Wheat	284	260	9	279	232	21

In the second quarter and first six months of 2018 when compared with the same periods in 2017, overall agricultural commodity contract volume increases were driven by higher corn and soybean contract volumes, which we believe resulted from higher price volatility in 2018. We believe the increases in volatility resulted from uncertainty surrounding crop production due to drought conditions over the winter months in South America. In addition, we believe the overall increases in commodity contract volumes were attributable to volatility caused by concern surrounding the United States' foreign trade policies.

Energy Products

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

	Quarter Ended June 30,			Six Months Ended June 30,		
(amounts in thousands)	2018	2017	Change	2018	2017	Change
WTI crude oil	1,591	1,483	7 %	1,567	1,406	11 %
Natural gas	484	580	(16)	572	590	(3)
Refined products	409	387	6	413	388	7

Overall energy contract volumes remained flat in the second quarter and increased slightly in the first six months of 2018 when compared with the same periods in 2017. We believe the increases in crude oil contract volumes were caused by volatility resulting from a shift in crude oil supplies, as United States crude oil production continued to exhibit strong growth in 2018. Natural gas contract volumes decreased due to lower price volatility caused by milder temperature outlooks across the United States.

Metal Products

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

	Quarter Ended June 30,			Six Months Ended June 30,		
(amounts in thousands)	2018	2017	Change	2018	2017	Change
Gold	383	296	29 %	409	302	35 %
Copper	146	102	43	142	99	44
Silver	115	108	7	112	95	18

We believe the increases in metal contract volumes in the second quarter and first six months of 2018 when compared with the same periods in 2017 were due to international investors using gold and other precious metals as safe-haven alternative investments to other volatile markets in the first half of 2018.

Average Rate per Contract

The average rate per contract increased slightly in the second quarter when compared with the same period in 2017. The increase was largely due to strong agricultural commodity volume as well as lower discounts on certain equity products. The overall increase was partially offset by a shift in product mix. Energy contract volume decreased by 2 percentage points as a percentage of total volume, while nearly all other product lines increased by a combined 2 percentage points as a percentage of total volume. In general, energy contracts have a higher rate per contract compared with nearly all other product lines.

The average rate per contract decreased slightly in the first six months of 2018 when compared with the same period in 2017 largely due to a shift in product mix. Energy contract volume decreased by 2 percentage points as a percentage of total volume, while nearly all other product lines increased by a combined 2 percentage points as a percentage of total volume. The average

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rate per contract also decreased slightly in the first six months of 2018 due to an increase in trades executed by members, as a percentage of total trading 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 firm represented 13% and another firm represented 11% of our clearing and transaction fees in the first six months of 2018. 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

The increases in market data and information services revenues in the second quarter and first six months of 2018 when compared with the same periods in 2017 were attributable to an increase in fees for basic real-time market data service to $105 per month from $85 per month beginning in the second quarter of 2018. The increases were partially offset by modest declines in screen counts due to cost-cutting initiatives at member firms.

The two largest resellers of our market data represented approximately 42% of our market data and information services revenue in the first six months of 2018. 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.

Expenses

	Quarter Ended June 30,			Six Months Ended June 30,		
(dollars in millions)	2018	2017	Change	2018	2017	Change
Compensation and benefits	$150.8	$139.7	8 %	$303.5	$282.3	8 %
Communications	5.9	6.0	(2)	11.8	12.3	(4)
Technology support services	19.3	18.2	6	38.9	36.9	6
Professional fees and outside services	31.9	28.6	12	74.5	57.2	30
Amortization of purchased intangibles	23.6	24.0	(2)	47.3	48.0	(2)
Depreciation and amortization	27.5	28.8	(4)	55.6	58.2	(4)
Occupancy and building operations	20.2	19.2	4	40.2	39.3	2
Licensing and other fee agreements	39.9	32.9	21	89.4	66.7	34
Other	73.6	22.0	n.m.	99.6	46.9	112
Total Expenses	$392.7	$319.4	23	$760.8	$647.8	17

n.m. not meaningful

Operating expenses increased by $73.3 million and $113.0 million in the second quarter and first six months of 2018 when compared with the same periods in 2017. The following table shows the estimated impacts of key factors resulting in the changes in operating expenses:

	Quarter Ended, June 30, 2018		Six Months Ended, June 30, 2018	
(dollars in millions)	Amount of Change	Change as a Percentage of Total Expenses	Amount of Change	Change as a Percentage of Total Expenses
Foreign currency exchange rate fluctuation	$51.9	16 %	$56.0	9 %
Licensing and other fee agreements	7.0	2	22.7	4
Professional fees and outside services	3.3	1	17.3	3
Bonus expense	4.0	1	10.8	2
Salaries, benefits and employer taxes	5.6	2	10.0	1

Other expenses, net	1.5	—		(3.8	)	(1	)
Total increases	$73.3	23	%	$113.0		17	%

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Increases in operating expenses in the second quarter and first six months of 2018 when compared with the same periods in 2017 were as follows:

- In the second quarter of 2018, we recognized a net loss of $47.3 million primarily due to the decline in the British pound versus U.S. dollar exchange rate on $1.6 billion of restricted cash held for the acquisition of NEX Group plc (NEX), which is denominated in British pounds, compared with a net gain of $4.6 million on favorable changes in exchange rates on foreign cash balances in the second quarter of 2017. In the first six months of 2018, we recognized a net loss of $48.9 million, compared to a net gain of $7.1 million in the first six months of 2017. Gains and losses from exchange rate fluctuations result when subsidiaries with a U.S. dollar functional currency hold cash as well as certain other monetary assets and liabilities denominated in foreign currencies.
- Licensing and other fee agreement expenses increased due to higher fees related to revenue sharing agreements for certain equity contracts due to both increases in volume and an increase in license rates for certain products.
- Professional fees and outside service expenses increased compared with the same periods in 2017, largely due to higher fees incurred in 2018 as a result of our pending transaction with NEX and the Eurex litigation.
- Bonus expense increased due to improved performance relative to our cash earnings target in 2018 when compared with 2017 performance relative to our 2017 cash earnings target.
- Compensation and benefit expenses increased as a result of higher average headcount primarily in our international locations as well as normal cost of living adjustments.

Non-Operating Income (Expense)

	Quarter Ended June 30,			Six Months Ended June 30,		
(dollars in millions)	2018	2017	Change	2018	2017	Change
Investment income	$241.9	$112.4	115 %	$398.3	$251.3	59 %
Interest and other borrowing costs	(33.1)	(29.0)	14	(63.2)	(58.8)	7
Equity in net earnings (losses) of unconsolidated subsidiaries	36.4	31.8	15	76.5	62.6	22
Other non-operating income (expense)	(155.3)	(83.1)	87	(273.9)	(116.9)	134
Total Non-Operating	$89.9	$32.1	181	$137.7	$138.2	—

Investment income increased in the second quarter and first six months of 2018, when compared with the same periods in 2017, largely due to increases in earnings from cash performance bond and guaranty fund contributions that are reinvested, which resulted primarily from higher average reinvestment balances and higher rates of interest earned in the cash account at the Federal Reserve Bank of Chicago. In addition, we recognized realized and unrealized gains of $88.2 million on some privately- held equity investments in the second quarter of 2018. During 2017, we recognized a net gain of $86.5 million on the sale of our remaining ownership interest in BM&FBOVESPA, S.A. (BM&FBOVESPA).

Higher income generated from our S&P/Dow Jones Indices LLC business venture contributed to increases in equity in net earnings (losses) of unconsolidated subsidiaries in the second quarter and first six months of 2018 when compared with the same periods in 2017.

We recognized higher expenses in the second quarter and first six months of 2018 when compared with the same periods in 2017 related to the distribution of interest earned on performance bond collateral reinvestment to the clearing firms. In the second quarter of 2018, we also recognized a loss of $36.9 million on our foreign exchange option and forward contracts used to mitigate certain exposure to foreign exchange rate fluctuation on the anticipated currency required to facilitate the NEX transaction. These expenses are included in other non-operating income (expense) on the consolidated statements of income.

Income Tax Provision

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

	2018	2017
Quarter ended June 30	25.2%	34.7%
Six months ended June 30	24.6%	39.3%

The overall decreases in the effective tax rate in the second quarter and first six months of 2018 were primarily due to a reduction in the federal statutory rate from 35% to 21% on January 1, 2018. Also, in the first quarter of 2017, income tax

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expense was recognized pursuant to the sale of the remaining BM&FBOVESPA shares. This expense was partially offset by the benefits recognized in the second quarter of 2017 from settling various federal and state tax audit issues.

Liquidity and Capital Resources

Sources and Uses of Cash. Net cash provided by operating activities increased in the first six months of 2018 when compared with the same period in 2017. The increase in net cash provided by operating activities was largely attributable to the increase in trading volume as well as lower overall tax payments due to the reduction in the federal tax rate. The increase is also due to higher investment income related to our reinvestment of cash performance bonds and guaranty fund collateral, net of the distribution of interest earned to the clearing firms. Net cash provided by investing activities decreased in the first six months of 2018 when compared with the same period of 2017. In the first quarter of 2017, we received proceeds from our sale of BM&FBOVESPA shares. Cash used in financing activities was lower in the first six months of 2018 when compared with the same period in 2017 due to proceeds received from the recent debt offering in the second quarter of 2018. The company intends to use the net proceeds from the offering, together with cash on hand, to finance the cash consideration for the acquisition of NEX.

Debt Instruments. The following table summarizes our debt outstanding at June 30, 2018:

(in millions)	Par Value
Fixed rate notes due September 2022, stated rate of 3.00% (1)	$ 750.0
Fixed rate notes due March 2025, stated rate of 3.00% (2)	750.0
Fixed rate notes due June 2028, stated rate of 3.75%	500.0
Fixed rate notes due September 2043, stated rate of 5.30% (3)	750.0
Fixed rate notes due June 2048, stated rate of 4.15%	700.0

(1) In August 2012, we entered into 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 3.32%.

(2) In December 2014, we entered into 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 3.11%.

(3) In August 2012, we entered into 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%.

In June 2018, we completed offerings of $500.0 million of 3.75% fixed rate notes due June 2028 and $700.0 million of 4.15% fixed rate notes due June 2048. We intend to use the net proceeds from the offering, together with cash on hand, to finance the cash consideration for the acquisition of NEX. In the event that the NEX acquisition is not finalized by June 30, 2019 or the acquisition agreement is terminated, we are required to make an offer to repurchase these fixed rate notes at a price equal to 101% of the principal amount, plus accrued and unpaid interest.

We maintain a $2.3 billion multi-currency revolving senior credit facility with various financial institutions, which matures in November 2022. 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 $3.0 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, 2017, 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.

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 CME Clearing. The facility provides for borrowings of up to $7.0 billion. We may use the proceeds to provide temporary liquidity in the unlikely event of a clearing firm default, in the event of a liquidity constraint or default by a depositary (custodian for our collateral), or 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. Clearing firm guaranty fund contributions received in the form of cash or U.S. Treasury securities as well as the performance bond assets deposited by defaulting clearing members can be used to collateralize the facility. At June 30, 2018, guaranty funds available to collateralize the facility totaled $7.5 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 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 June 30, 2018, we have excess borrowing capacity for general corporate purposes of approximately $2.3 billion under our multi-currency revolving senior credit facility.

At June 30, 2018, we were in compliance with the various financial 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 CME-owned U.S. Treasury securities in lieu of, or in combination with, irrevocable standby letters of credit. At June 30, 2018, the letters of credit totaled $285.0 million.

The following table summarizes our credit ratings at June 30, 2018:

Rating Agency	Short-Term Debt Rating	Long-Term Debt Rating	Outlook
Standard & Poor’s	A1+	AA-	Stable
Moody’s Investors Service	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 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.

Liquidity and Cash Management. Cash and cash equivalents totaled $1.1 billion and $1.9 billion at June 30, 2018 and December 31, 2017, respectively. The balance retained in cash and cash equivalents is a function of anticipated or possible short-term cash needs, prevailing interest rates, our 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. 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.

In March 2018, we announced that we reached an agreement to acquire NEX in a transaction valued at £10 per share, consisting of 500 pence in cash and 0.0444 CME Group shares. We have received approval by NEX shareholders, but the proposed transaction is pending approvals by regulators. The transaction is expected to close in the second half of 2018. As of June 30, 2018, $1.6 billion of cash has been restricted related to the proposed transaction with NEX. In conjunction with the proposed transaction, we also purchased a foreign exchange forward contract to mitigate certain exposure to foreign exchange rate fluctuation on anticipated currency required to facilitate the acquisition. The foreign exchange forward contract has a notional value of £670 million and expires in April 2019. We recognized a loss of $6.9 million within other non-operating income (expense) on the consolidated statements of income in the second quarter of 2018 related to the forward contract. In the first quarter of 2018, we also purchased a foreign exchange option contract to mitigate certain exposure to foreign exchange rate fluctuation on anticipated currency required to facilitate the acquisition. The foreign exchange option had a notional value of £1.6 billion and expired in July 2018. We recognized a loss of $30.0 million in other non-operating income (expense) in the second quarter of 2018 related to the option contract. In connection with the acquisition, we maintain a 364-day bridge credit agreement with total commitments of approximately £0.7 billion. The proceeds from this bridge facility can only be used to fund the cash payment of the acquisition.

Regulatory Requirements. CME is regulated by the CFTC as a U.S. 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 Dodd-Frank. 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

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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.

Recent Accounting Pronouncements

Refer to Note 2. Accounting Policies in our notes to the consolidated financial statements for information on new and recently adopted accounting pronouncements that are applicable to us.

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, 2017. Refer to Item 7A. of CME Group’s Annual Report on Form 10-K for the year ended December 31, 2017 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 Securities Exchange Act of 1934, as amended (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 June 30, 2018, 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

See “Legal and Regulatory Matters” in Note 7. Contingencies to the Consolidated Financial Statements for updates to CME Group’s existing legal proceedings disclosure which is incorporated herein by reference. Note 7. Contingencies includes updates to the legal proceedings disclosed in the company’s Annual Report on Form 10-K, filed with the SEC on February 28, 2018.

ITEM 1A. RISK FACTORS

There have been no material updates to the Risk Factors disclosure included in the company’s Annual Report on Form 10-K, filed with the SEC on February 28, 2018. In addition to the other information contained in this Quarterly Report on Form 10-Q, you should carefully consider the factors discussed in our Annual Report on Form 10-K, which are the risks that we believe are material at this time. These risks could materially and adversely affect our business, financial condition and results of operations. These risks and uncertainties are not the only ones facing us. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial may also adversely affect our business in the future.

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

(c) Issuer Purchases of Equity Securities

Period	(a) Total Number of Class A Shares Purchased (1)	(b) Average Price Paid Per Share	(c) Total Number of Class A Shares Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Number (or Approximate Value) that May Yet Be Purchased Under the Plans or Programs (in millions)
April 1 to April 30	260	$ 162.31	—	$ —
May 1 to May 31	563	159.30	—	—
June 1 to June 30	601	169.10	—	—
Total	1,424	$ 163.98	—	

(1) Shares purchased consist of an aggregate of 1,424 shares of Class A common stock surrendered in the second quarter of 2018 to satisfy employees' tax obligations upon the vesting of restricted stock.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

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ITEM 6. EXHIBITS

4.2	Eighth Supplemental Indenture (including the form of 3.750% Notes due 2028), dated as of June 21, 2018, between CME Group Inc. and U.S. Bank National Association (incorporated by reference to Exhibit 4.2 to CME Group Inc.'s Current Report on Form 8-K, filed with the SEC on June 21, 2018).
4.3	Ninth Supplemental Indenture (including the form of 4.150% Notes due 2048), dated as of June 21, 2018, between CME Group Inc. and U.S. Bank National Association (incorporated by reference to Exhibit 4.3 to CME Group Inc.'s Current Report on Form 8-K, filed with the SEC on June 21, 2018).
10.1 (1)	Amended and Restated Agreement, effective as of May 8, 2018, by and between CME Group Inc. and Terrence A. Duffy (incorporated by reference to Exhibit 10.1 to CME Group Inc.'s Current Report on Form 8-K, filed with the SEC on May 9, 2018).
31.1	Section 302 Certification—Terrence A. Duffy
31.2	Section 302 Certification—John W. Pietrowicz
32.1	Section 906 Certification
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
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 or compensatory plan or arrangement.

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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.

	CME Group Inc. (Registrant)	
Dated: August 1, 2018	By:	/s/ John W. Pietrowicz Chief Financial Officer & Senior Managing Director Finance