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

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Fiscal Year Ended December 31, 2015

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

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)	**(IRS Employer Identification No.)**
20 South Wacker Drive, Chicago, Illinois	**60606**
(Address of Principal Executive Offices)	**(Zip Code)**

Registrant's telephone number, including area code: (312) 930-1000

Securities registered pursuant to Section 12(b) of the Act:

Title Of Each Class	Name Of Each Exchange On Which Registered
Class A Common Stock $0.01 par value	NASDAQ GLOBAL SELECT MARKET

Securities registered pursuant to Section 12(g) of the Act: Class B common stock, Class B-1, $0.01 par value; Class B common stock, Class B-2, $0.01 par value; Class B common stock, Class B-3, $0.01 par value; and Class B common stock, Class B-4, $0.01 par value.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

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 ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, 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 ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

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 definitions of "large accelerated filer," "accelerated filer" and "smaller reporting 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

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

The aggregate market value of the voting stock held by non-affiliates of the registrant as of June 30, 2015, was approximately $31.1 billion (based on the closing price per share of CME Group Inc. Class A common stock on the NASDAQ Global Select Market (NASDAQ) on such date). The number of shares outstanding of each of the registrant's classes of common stock as of February 10, 2016 was as follows: 338,412,729 shares of Class A common stock, $0.01 par value; 625 shares of Class B common stock, Class B-1, $0.01 par value; 813 shares of Class B common stock, Class B-2, $0.01 par value; 1,287 shares of Class B common stock, Class B-3, $0.01 par value; and 413 shares of Class B common stock, Class B-4, $0.01 par value.

DOCUMENTS INCORPORATED BY REFERENCE:

Documents	Form 10-K Reference
Portions of the CME Group Inc.'s Proxy Statement for the 2016 Annual Meeting of Shareholders	Part III

CME GROUP INC.

ANNUAL REPORT ON FORM 10-K

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PART I

Certain Terms

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

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.

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 Annual Report on Form 10-K.

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.

Trademark Information

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

- increasing competition by foreign and domestic entities, including increased competition from new entrants into our markets and consolidation of existing entities;
- our ability to keep pace with rapid technological developments, including our ability to complete the development, implementation and maintenance of the enhanced functionality required by our customers while maintaining reliability and ensuring that such technology is not vulnerable to security risks;
- our ability to continue introducing competitive new products and services on a timely, cost-effective basis, including through our electronic trading capabilities, and our ability to maintain the competitiveness of our existing products and services, 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 expand and offer our products outside the United States;
- changes in domestic and non-U.S. regulations, including the impact of any changes in domestic and foreign 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;
- 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; and
- the unfavorable resolution of material legal proceedings.

For a detailed discussion of these and other factors that might affect our performance, see Item 1A. of this Report beginning on page 14.

ITEM 1. BUSINESS

GENERAL DEVELOPMENT OF BUSINESS

CME Group serves the risk management and investment needs of customers around the globe.

CME was founded in 1898 as a not-for-profit corporation. In 2000, CME demutualized and became a shareholder-owned corporation. As a consequence, we adopted a for-profit approach to our business, including strategic initiatives aimed at optimizing contract volume, efficiency and liquidity. In 2002, Chicago Mercantile Exchange Holdings Inc. (CME Holdings) completed its initial public offering of its Class A common stock, which is listed on the NASDAQ Global Select Market under the symbol “CME.” In 2007, CME Holdings merged with CBOT Holdings, Inc. and was renamed CME Group. In connection with the merger, we acquired the CBOT exchange. CBOT is a leading marketplace for trading agricultural and U.S. Treasury futures as well as options on futures. In 2008, we merged with NYMEX Holdings, Inc. and acquired NYMEX and COMEX. On NYMEX, customers primarily trade energy futures and options contracts, including contracts for crude oil, natural gas, heating oil and gasoline. On COMEX, customers trade metal futures and options contracts, including contracts for gold, silver and copper. We launched CME Clearing Europe in 2011 to expand our European presence and further extend the geographical reach of our clearing services. In 2012, we acquired The Board of Trade of Kansas City, Missouri, Inc. (KCBT) and its hard red winter wheat product line and effective December 2013, KCBT operations were transferred to CBOT. In April 2013, we purchased the non-controlling interest in CME Group Index Services from Dow Jones & Company (Dow Jones) resulting in an increase in our ownership to 27% of the S&P/Dow Jones Indices LLC (S&P/DJI) joint venture with McGraw-Hill, originally established in 2012. In 2013, CME Group began operating CME Ventures LLC (CME Ventures), which makes minority stake investments in early stage technology companies whose innovative products and services may impact CME Group’s business in the longer term. In 2013, we also began offering repository services and now offer global trade repository services in the United States, United Kingdom, Canada and Australia. In April 2014, we launched CME Europe Limited, our U.K. exchange.

Our business has historically been subject to the extensive regulation of the Commodity Futures Trading Commission (CFTC). As a result of our global operations, we are also subject to the rules and regulations of the local jurisdictions in which we conduct business, including the Bank of England, the Financial Conduct Authority (FCA) and the European Securities and Markets Authority (ESMA). Additionally, our U.S. clearing house has been designated as systemically important, which carries with it enhanced regulatory oversight of certain of our risk-management standards, clearing and settlement activities, including additional oversight by the Federal Reserve Bank.

Our principal executive offices are located at 20 South Wacker Drive, Chicago, Illinois 60606, and our telephone number is 312-930-1000.

FINANCIAL INFORMATION ABOUT INDUSTRY SEGMENTS

The company reports the results of its operations as one reporting segment primarily comprised of the CME, CBOT, NYMEX and COMEX exchanges. The remaining operations do not meet the thresholds for reporting separate segment information. Financial information about our reporting segment is hereby incorporated by reference to "Item 6. Selected Financial Data" on page 28 and "Item 8. Financial Statements and Supplementary Data" on page 53.

NARRATIVE DESCRIPTION OF BUSINESS

We offer the widest range of global benchmark products across all major asset classes, based on interest rates, equity indexes, foreign exchange, energy, agricultural commodities and metals. Our products include both exchange-traded and privately negotiated futures and options contracts and swaps. We bring buyers and sellers together through our CME Globex electronic trading platform across the globe and our open outcry trading facilities in Chicago and New York City, and provide hosting, connectivity and customer support for electronic trading through our co-location services. Our CME Direct technology offers side-by-side trading of exchange-listed and privately negotiated markets. We provide clearing and settlement services for exchange-traded contracts, as well as for cleared swaps, and provide regulatory reporting solutions for market participants through our global repository services in the United States, United Kingdom, Canada and Australia. Finally, we offer a wide range of market data services — including live quotes, delayed quotes, market reports and a comprehensive historical data service — and continue to expand into the index services business.

Our Competitive Strengths

We provide innovative ways to manage risk and offer a number of key differentiating elements that set us apart from others in our industry, including:

Highly Liquid Markets — Our listed futures and options markets provide an effective forum for our customers to manage their risk and meet their investment needs relating to our markets. We believe that our customers choose to trade on our centralized market due to its liquidity and price transparency. Market liquidity — or the ability of a market to absorb the execution of large purchases or sales quickly and efficiently, whereby the market recovers quickly following the execution of large orders — is key to attracting customers and contributing to a market's success.

Most Diverse Product Line — Our products provide a means for hedging, speculation and asset allocation relating to the risks associated with, among other things, interest rate sensitive instruments, equity ownership, changes in the value of foreign currency, credit risk and changes in the prices of agricultural, energy and metal commodities. The estimated percentage of clearing and transaction fees revenue contributed by each product line is as follows:

Product Line	2015	2014	2013
Interest rate	31%	33%	29%
Equity	19	19	19
Foreign exchange	7	6	8
Agricultural commodity	15	15	14
Energy	23	21	23
Metal	5	6	7

We believe that the breadth and diversity of our product lines and the variety of their underlying contracts is beneficial to our overall performance. Our asset classes contain products designed to address differing risk management needs, and customers are able to achieve operational and capital efficiencies by accessing our diverse products through our platforms and our clearing houses.

Our products are traded through CME Globex and other electronic trading platforms, our open outcry auction markets in Chicago and New York City, and through privately negotiated transactions that we clear. The estimated percentage of clearing and transaction fees revenue contributed by each trading venue is as follows:

Trading Venue	2015	2014	2013
Electronic	81%	80%	79%
Open outcry(1)	6	6	6
Privately negotiated(2)	13	14	15

(1) In July 2015, we closed most of the futures pits in Chicago and New York. Most open outcry options markets remained open.

(2) Privately negotiated average daily volume includes both traditional block trades, off-exchange trades which were historically categorized as CME ClearPort (now executed as futures block trades), and Exchange for Related Positions (EFRPs).

In addition, our cleared-only CME interest rate swap and CME credit default swap contracts contributed approximately 2% of total revenue in 2013 through 2015.

Our products generate valuable information regarding prices and trading activity. Customers pay a subscription fee for real-time market data and have the choice of receiving their market data either directly from us or through a variety of third-party quote vendors and data providers. We also offer customers detailed historical market data for use in their development and analysis of various trading strategies. The estimated contributions of our market data and information services products, excluding our index market data offerings, based on percentage of total revenue, were 12% in 2015 and 11% in 2014 and 2013.

Safety and Soundness of our Markets — We understand the importance of ensuring that our customers are able to manage and contain their trading risks. As the markets and the economy have evolved, we have worked to adapt our clearing services to meet the needs of our customers. We apply robust risk management standards and enforce and facilitate applicable regulatory customer protection standards for exchange-traded products and cleared swaps. Clearing member firms are continually monitored and examined to assess their outstanding risk, capital adequacy and compliance with customer protection rules and regulations. We utilize a combination of risk management capabilities to assess our clearing firms and their account exposure levels for all asset classes 24 hours a day throughout the trading week. The company operates two clearing houses: CME Clearing (a division of CME) and CME Clearing Europe.

Our integrated clearing function is designed to ensure the safety and soundness of our markets by serving as the counterparty to every trade, becoming the buyer to each seller and the seller to each buyer, and limiting counterparty credit risk. The clearing house is responsible for settling trading accounts, clearing trades, collecting and maintaining performance bond funds, regulating delivery and reporting trading data. CME Clearing marks open positions to market at least twice a day, and requires payment from clearing firms whose positions have lost value and makes payments to clearing firms whose positions have gained value. For select cleared-only markets, positions are marked-to-market daily, with the capacity to mark-to-market more frequently as market conditions warrant. The CME ClearPort front-end system provides access to our flexible clearing services for block transactions and swaps. See "Item 7A. Quantitative and Qualitative Disclosures About Market Risk," beginning on page 48 and "Item 1A. Risk Factors," beginning on page 14, for more information on our financial safeguards package and the associated credit risks related to our clearing services.

Superior Trading Technology and Distribution — We strive to provide the most flexible architecture in terms of bringing new technology, innovations and solutions to the marketplace. Our CME Globex electronic platform is the trading engine for our central limit order book markets, and is available on a global basis nearly 24 hours a day throughout the trading week. The CME Globex platform is accessible through a wide variety of vendor provided and custom built trading systems that benefit from our open application programming interface approach. For the privately negotiated markets, we offer brokers and customers the CME Direct system for arranging, executing, recording and risk-managing trades. CME Direct is a trading and analysis system that also includes CME Messenger for instant-message capabilities and CME Straight-Through Processing for connecting trade information directly with customer order management and risk management systems and is designed to reduce errors and improve efficiency. In 2015, 87% of our contract volume was conducted electronically.

Together, our platforms offer:

- certainty of execution;
- vast capabilities to facilitate complex and demanding trading;
- direct market access;
- fairness, price transparency and anonymity;
- convenience and efficiency; and
- global distribution, including connection through high-speed international telecommunications hubs in key financial centers in Europe, Asia and Latin America, and hosting or global order routing to our global partner exchanges.

We also offer co-location services at our data center facility, which houses our trading match engines for all products traded on the CME Globex electronic trading platform. The service provides the lowest latency connection for our customers. The offering is made available to all customers on equal terms. We derived 2% of our revenues from our co-location business in 2013 through 2015.

Our Strategic Initiatives

The following is a description of our strategic initiatives:

Leading Core Business Innovation and Expanded Product Offerings — We are focused on enhancing our customer relations to allow us to further cross-sell our products, expanding the strength of our existing benchmark products, launching new products and deepening open interest in our core futures and options on futures offerings. During this decade, our key product launches included Ultra-Long Bond Treasury futures and options and most recently the Ultra 10 Year Treasury futures, Weekly Treasury options, numerous Eurodollar mid-curve options, weekly and short-dated agricultural options, end of month equity options, deliverable interest rate swap futures, natural gas basis contacts, new base metal products, S&P Dividend futures and E-mini Russell 1000 futures. During 2015, we also experienced multiple volume records across our core product portfolio, including record average daily volume in options, electronic options and overall volume as well as in our energy and agricultural commodity product lines. In 2015, we introduced additional functionality for equities futures that enable market participants to execute a basis trade relative to the official close for the underlying index for more efficient cash management. We continue to invest in expanded sales and marketing capabilities and tools to broaden customer participation and to simplify the customer experience in order to increase their use of our offerings and reduce their regulatory burdens. Additionally, through CME Ventures, we have made minority investments in nine emerging technology companies whose innovative products or services could, in the long term, have an impact on CME's key business drivers and the broader financial services ecosystem. We also provide the electronic auction platform on which the London Bullion Market Association silver price is calculated in partnership with Thomson Reuters which is responsible for the administration and governance of the benchmark and its distribution.

Globalizing our Company and our Business — We continue to expand and diversify our customer base worldwide and offer customers around the world the most broadly diversified portfolio of benchmark products. We have expanded our international product suite with the launch of a number of regionally specific products, including cocoa, kilo gold, and urea fertilizer futures contracts, which help us appeal to risk management needs unique to a particular geography. We believe we have significant opportunity to expand the participation of our non-U.S. customer base in our markets. We are focused on core growth in global markets because we believe that Asia, Latin America, and other emerging markets will experience superior growth and development of their financial markets as they catch up to the more mature North American and European markets. In addition, we continue to expand our presence in major global financial centers, grow our commodities business outside the United States and penetrate emerging markets, such as China, India, Brazil and Mexico. In 2015, approximately 24% of our electronic volume was transactions customers reported to us as from outside the United States and 50% of our market data revenue is derived from outside the United States.

In order to accelerate our long-term integration in the global economy, CME Group has built out its international infrastructure and strategic relationships. In 2015, we expanded our capability to support physical delivery of locally relevant products in both Europe and Asia. In recent years, we also have extended the geographic reach of our clearing services through CME Clearing Europe, our U.K. clearing house, and initiated trading on CME Europe Limited, our London-based derivatives exchange featuring foreign exchange products and a suite of energy and agriculture products. Additionally, in 2015 we reached an agreement with the China Foreign Exchange Trade System (CFETS) to promote each other's market infrastructure and facilitate the development of offshore RMB denominated products in both the United States and Asia.

Expanding our Customer Base and Enhancing Customer Participation in our Markets — We continue to grow our business by targeting cross asset sales across client segments, driving international sales and generating new client participation across all regions. We have a long history of providing customer value and responsiveness and believe our products and services make us well positioned to help our customers adapt and comply with new regulations, while enabling them to efficiently manage their risks. We have a broad distribution network comprised of a combination of internal and external channels and front-end capabilities. With changing regulatory capital requirements for many of our customers and the need for greater efficiencies, we have added tools to enable customers to build trading and clearing positions in our markets in an efficient manner.

Our customer-centric approach to sales and distribution has resulted in greater customer participation over the past several years, including a gradual increase in the number of firms holding large exposures in futures since the OTC clearing mandates began in 2013.

With the ongoing implementation of regulatory reform, in the United States and in Europe, we expect capital efficiencies and centralized clearing to continue to be important for our global client base.

Extending our Risk Management and Post Trade Offerings and Solutions — We provide a comprehensive multi-asset class clearing solution to the market for maximum operational ease and the capital efficiency that comes with connecting to our clearing houses. Our cleared swaps offerings provide participants the extensive counterparty credit risk reduction and transparency of our clearing services while preserving the prevailing execution processes, technology platforms and business structures currently in use in the marketplace. With clearing houses in both the United States and Europe, we can offer customers the choice of clearing in either location. Our clearing services also offer the ability to optimize collateral and capital efficiencies across their portfolios within the particular clearing house while meeting the heightened regulatory requirements on derivatives. We offer clearing services for interest rate, credit default, foreign exchange and commodity swaps. In 2015, we extended the number of IRS currencies cleared with the launch of our 19th currency, Brazilian Real IRS.

CME Group continues to introduce tools and services to assist customers with portfolio margining. During 2015, more than 40 unique marketplace participants utilized CME Group’s portfolio margining services. In the past two years we have introduced compression via coupon blending as well as CME CORE, an interactive margin calculator that enables clients to optimize their capital by providing insights on margin requirements prior to trading. We introduced multilateral compression for our cleared swap customers through a partnership with TriOptima, an ICAP company, in 2015. Additionally, we have added trade reporting services in the United States, Europe, Canada and Australia.

During 2015, we cleared swap transactions with a notional value of more than $34.5 trillion, and open interest as of December 31, 2015 was $19.2 trillion.

Establishing Ourselves as the Leading Exchange Company Provider of Information Products and Index Services and Enhancing our Intellectual Property Portfolio — We offer a variety of market data services for the futures, equities and the cleared swaps markets. Our joint venture with McGraw-Hill combines the world class capabilities of S&P Indices and Dow Jones Indices. As part of the joint venture, we acquired a long-term, ownership-linked, exclusive license to list futures and options on futures based on the S&P 500 Index and certain other S&P indices. In August, we entered into a licensing agreement with FTSE Russell and launched respective E-mini Russell 1000 futures in September 2015. We also continue to expand our existing intellectual property portfolio for our technology, products and services offerings.

Patents, Trademarks and Licenses

We own the rights to a large number of trademarks, service marks, domain names and trade names in the United States, Europe and other parts of the world. We have registered many of our most important trademarks in the United States and other countries. We hold the rights to a number of patents and have made a number of patent applications. Our patents cover match engine, trader user interface, trading floor support, market data, general technology and clearing house functionalities. We also own the copyright to a variety of materials. Those copyrights, some of which are registered, include printed and on-line publications, websites, advertisements, educational material, graphic presentations and other literature, both textual and electronic. We attempt to protect our intellectual property rights by relying on trademarks, patents, copyrights, database rights, trade secrets, restrictions on disclosure and other methods.

We offer equity index futures and options on key benchmarks, including S&P, NASDAQ, Dow Jones, Nikkei and the FTSE Russell indexes. These products are listed by us subject to license agreements with the applicable owners of the indexes, some of which are exclusive. In connection with our joint venture with McGraw-Hill, we entered into a new license agreement (S&P License Agreement), which superseded our prior licensing arrangements and was assigned to the joint venture. CME's license for the S&P 500 Index will be exclusive for futures and options on futures until one year prior to the termination of the S&P License Agreement, and non-exclusive for the last year. The license for the other S&P stock indexes is generally exclusive for futures and options on futures. The term of the S&P License Agreement will continue until the later of (i) December 31, 2017 or (ii) the date that is one year after the date that CME Group ceases to own at least five percent (accounting for dilution) of the outstanding joint venture interests. Upon the occurrence of certain events, including certain terminations of the joint venture, the term may be extended up to an additional ten years. CBOT has an exclusive license agreement (Dow Jones License Agreement) with CME Group Index Services LLC (CME Indexes) for certain Dow Jones indexes, which has also been assigned to the joint venture. The initial term of the agreement is through June 30, 2026. Following the initial term, the Dow Jones License Agreement shall automatically renew for renewal terms of five years thereafter so long as there is open interest in any of CBOT's or its affiliates' products based on one or more of the Dow Jones licensed indexes. In the event there is no open interest in any such products, then CME Indexes has the ability to terminate the agreement. We also have an exclusive license agreement for certain NASDAQ indexes through 2019. Copies of our S&P, Dow Jones and NASDAQ license arrangements have been filed as material contracts. We pay the applicable third party per trade fees based on contract volume under the terms of these licensing agreements.

We also have a long-term, non-exclusive licensing arrangement with ICE Benchmark Administration for the use of LIBOR to settle several of our interest rate products, including our Eurodollar contract. In August 2015, we entered into an exclusive license agreement with FTSE Russell.

We cannot assure you that we will be able to maintain the exclusivity of our licensing agreements with S&P, Dow Jones, NASDAQ and FTSE Russell or be able to maintain our other existing licensing arrangements beyond the term of the current agreements. In addition, we cannot assure you that others will not succeed in creating stock index futures based on information similar to that which we have obtained by license, or that market participants will not increasingly use other instruments, including securities and options based on the S&P, Dow Jones or NASDAQ indexes, to manage or speculate on U.S. stock risks. Parties also may succeed in offering indexed products that are similar to our licensed products without being required to obtain a license, or in countries that are beyond our jurisdictional reach and/or our licensors.

Working Capital

We generally meet our funding requirements with internally generated funds supplemented from time to time with public debt and commercial paper offerings. For more information on our working capital needs, see "Management's Discussion and Analysis of Operations and Financial Condition—Liquidity and Capital Resources," beginning on page 45, which section is incorporated herein by reference.

Customer Base

Our customer base includes professional traders, financial institutions, institutional and individual investors, major corporations, manufacturers, producers, governments and central banks. Our customers can connect to our CME Globex electronic trading platform from access points across the globe. Customers may be members of one or more of our CME, CBOT, NYMEX or COMEX exchanges. Rights to directly access our markets will depend upon the nature of the customer, such as whether the individual is a member of one of our exchanges or has executed an agreement with us for direct access.

U.S. trading rights and privileges are exchange-specific. Trading on our open outcry trading floors is conducted exclusively by our members. Membership on one of our U.S. futures exchanges also enables a customer to trade specific products at reduced rates and lower fees. Under the terms of the organizational documents of our U.S. exchanges, our members have certain rights that relate primarily to trading right protections, certain trading fee protections and certain membership benefit protections. In 2015, 81% of our contract volume was conducted by our members.

The majority of clearing and transaction fees received from clearing firms represents charges for trades executed and cleared on behalf of their customers. One firm represented 13% of our clearing and transaction fees revenue for 2015. In the event a clearing firm were to withdraw, our experience indicates that the customer portion of the firm's trading activity would likely transfer to another clearing firm of the exchange.

Competition

The industry in which we operate is highly competitive and we expect competition to continue to intensify, especially in light of changes in the financial services industry driven by regulatory reforms such as the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank), European Market Infrastructure Regulation (EMIR), Markets in Financial Instruments Directive II (MiFID II), Capital Requirements Directive IV (CRD IV), Market Abuse Directive, Basel III, and various other laws and regulations.

Please also refer to the discussion below and in the “Risk Factors” section beginning on page 14 for a description of competitive risks and uncertainties.

Competition in our Derivatives Business

We believe competition in the derivatives and securities business is based on a number of factors, including, among others:

- brand and reputation;
- efficient and secure settlement, clearing and support services;
- depth and liquidity of markets;
- breadth of product offerings and rate and quality of new product development and innovative services;
- ability to position and expand upon existing products to address changing market needs;
- efficient and seamless customer experience;
- transparency, reliability and anonymity in transaction processing;
- regulatory environment;
- connectivity, accessibility and distribution;
- technological capability and innovation; and
- transaction costs.

We believe that we compete favorably with respect to these factors. Our deep, liquid markets; diverse product offerings; rate and quality of new product development; and efficient, secure settlement, clearing and support services, distinguish us from others in the industry. We believe that in order to maintain our competitive position, we must continue to expand globally; develop new and innovative products; enhance our technology infrastructure, including its reliability and functionality; maintain liquidity and low transaction costs, and implement customer protections designed to ensure the integrity of our market and the confidence of our customers.

We compete in a large financial services trading, clearing and settlement marketplace globally. Our competitors include, among other entities, exchanges such as Intercontinental Exchange, Inc. (ICE); the Hong Kong Exchanges and Clearing Limited; and Deutsche Börse AG. Competition in our industry continues to be dynamic and recent developments and alliances may result in a growing number of well-capitalized trading service providers that compete with all or a portion of our business. For example, the development of swap execution facilities and the mandated trading and/or clearing requirement for certain cleared swaps and privately negotiated products may lead to the creation of platforms that promote competitive substitutes for our exchange-traded and privately negotiated products.

Additionally, we face competition from substitute offerings. These substitutes can take the form of swaps contracts identical or similar to our listed futures contracts, or risk-similar products on spot and cash markets, securities exchanges, exchange traded funds and other instruments, and other venues and mechanisms that can serve to offset economic risks.

Competition in our Transaction Processing Business

In addition, we face a number of competitors in our transaction processing and other business services. In the past few years, there has been increased competition in the provision of clearing services and we expect competition to continue to increase in connection with the continued implementation of and compliance with Dodd-Frank.

Our competitors in the clearing services space include, among others, companies such as ICE, LCH.Clearnet Ltd., the Options Clearing Corporation, Depository Trust & Clearing Corporation and Deutsche Börse AG. In light of the implementation of

Dodd-Frank's clearing mandate, the European clearing mandate (starting in 2016) and other reforms of the financial services industry, we believe that other exchanges and infrastructure providers also may undertake to provide clearing services.

We believe competition in the transaction processing and business services market is based on, among other things, the value of providing customers with capital efficiencies; quality and reliability of the services; creditworthiness of the clearing house; timely delivery of the services; reputation; offering breadth; confidentiality of positions and information security protective measures; and the fees charged for the services provided.

Competition in our Market Data Business

Technology companies, market data and information vendors and front-end software vendors also represent actual and potential competitors because they have their own substantial market data distribution capabilities that could serve as alternative means for receiving open market data feeds instead of connecting directly to our exchange. Distributors and consumers of our market data may also use our market data as an input into a product that competes against one of our traded or cleared products. Although we may receive license fees for such products, such fees may not offset the impact of any loss in revenue from our comparable product.

Regulatory Matters

We are primarily subject to the jurisdiction of the regulatory agencies in the United States, the United Kingdom and the European Union. We also are subject to varying levels of regulation by foreign jurisdictions that permit our exchanges and other businesses to offer our products and services to their citizens.

Please also refer to the discussion below and in the “Risk Factors” section beginning on page 14 for a description of regulatory and legislative risks and uncertainties.

Regulation in the United States

Our operation of U.S. futures exchanges and our U.S. clearing house is subject to extensive regulation by the CFTC that requires that our regulated subsidiaries satisfy the requirements of certain core principles relating to the operation and oversight of our markets and our clearing house. The CFTC carries out the regulation of the futures markets and clearing houses in accordance with the provisions of the Commodity Exchange Act as amended by, among others, the Commodity Futures Modernization Act and Dodd-Frank. The CFTC is subject to reauthorization every five years. Following the enactment of Dodd-Frank, the CFTC has moved from a principles-based to a more prescriptive regulatory approach over most aspects of our trading and clearing operations.

Over the past five years, a number of regulations implementing Dodd-Frank were finalized, including rules relating to the implementation of mandatory clearing of certain over-the-counter derivatives, swap reporting, operation of a clearing house, anti-manipulation, large trader reporting, product definitions, the definition of an agricultural commodity and certain provisions of the rules applicable to designated contract markets, swap execution facilities and swap data repositories. We continue to believe the new regulations provide opportunities for our business, which we continue to explore. However, portions of Dodd-Frank remain subject to further rulemaking, and such final regulations could include provisions that negatively impact our business.

Our U.S. clearing house has been designated as a systemically important financial market utility and a systemically important derivatives clearing organization. These designations carry with them additional regulatory oversight of certain of our risk-management standards, clearing and settlement activities by the Federal Reserve Bank and the CFTC.

Our U.S. swap data repository service and swap execution facility are also subject to the requirements of the Commodity Exchange Act and the regulations of the CFTC.

Regulation in the United Kingdom and the European Union

In the United Kingdom our operations are subject to multiple regulators: the Bank of England; the FCA and ESMA. CME Clearing (our U.S. clearing house) is subject to certain conditions and reporting obligations as a result of its recognition by ESMA. In the European Union, we also are subject to several supervisory authorities for financial services, including ESMA. Multiple directives and regulations such as MiFID II and changes to the Markets in Financial Instruments Regulation (MiFIR); the Capital Requirements Regulations IV and the Market Abuse Directive, have been proposed and, in certain circumstances implemented, with provisions similar to those contained in Dodd-Frank.

Key Areas of Focus

We actively monitor and participate in the domestic and international rulemaking processes for our industry, including providing government testimony, commenting on proposed rulemakings and educating our regulators on potential impacts to the marketplace.

Our key areas of focus in the regulatory environment are:

- The formal steps necessary for our U.S. clearing house to be deemed a qualifying central counterparty (QCCP) in relation to an equivalence determination agreement recently entered into between the United States and the European Union regarding central counterparty regulatory frameworks. A failure of our U.S. clearing house to be deemed a QCCP may result in our clearing members and customers based in Europe being subject to more stringent capital requirements thus creating a disincentive to use our markets.

- The adoption and implementation of position limit rules, which could have a significant impact on our commodities business if comparable trading venues in foreign jurisdictions are not subject to equivalent limitations.

- Rules respecting capital charges under Basel III with respect to clearing members of central counterparties. There is a risk that these new standards may impose overly burdensome capital requirements on our clearing members and customers.

- The potential impact of MiFID II and MiFIR on non-E.U. clearing houses with customers based in Europe.

- The potential for further regulation stemming from industry performance disruptions and residual concerns around electronic trading activity and, in particular, "high frequency trading."

- The potential elimination of the 60/40 tax treatment of certain of our futures and options contracts, which would impose a significant increase in tax rates applicable to certain market participants and could result in a decrease in their trading activity.

- The implementation of a transaction tax or user fee in the United States or European Union which could discourage institutions and individuals from using our markets or products or encourage them to trade in another less costly jurisdiction.

- Regulations implementing the core principles for designated contract markets, including any changes to the rules implementing the competitive execution requirements of Core Principle 9. Rules promulgated under this provision may require us to make modifications to the manner in which certain of our contracts trade and/or require that such products be de-listed as futures and re-listed as swaps after a specified compliance period.

- The implementation of legislation in the European Union impacting how benchmark index prices are formed, including new requirements for price submitters, price aggregators and markets that list contracts that reference index prices.

- Concerns that legislators will prohibit or restrict exclusive licenses for benchmark indexes, which might impact the profitability of several of our most popular contracts.

- The implementation of rules resulting in negative treatment of the liquidity profile of U.S. Treasury securities, including as qualifying liquidity resources, or any potential limitation on the use of U.S. Treasury securities as collateral could result in increased costs to us and our clearing firms.

Employees

As of December 31, 2015, we had approximately 2,530 employees. We consider relations with our employees to be good.

Senior Leadership Team and Executive Officers

Set forth below is the company's Senior Leadership Team, including those individuals designated executive officers of the company, as of the date of this filing.

Terrence A. Duffy, 57. Mr. Duffy has served as our Executive Chairman and President since May 2012. Mr. Duffy previously served as our Executive Chairman from 2006 and has been a member of our board of directors since 1995. He also served as President of TDA Trading, Inc. from 1981 to 2002 and has been a member of our CME exchange since 1981. Mr. Duffy has been designated as an executive officer.

Phupinder S. Gill, 55. Mr. Gill has served as our Chief Executive Officer and a member of our board of directors since May 2012. Previously, he served as our President from 2007 to May 2012. Mr. Gill joined us in 1988 and since then has held various positions of increasing responsibility within the organization, including President and Chief Operating Officer, and Managing Director and President of CME Clearing and GFX Corporation. Mr. Gill has been designated as an executive officer. Mr. Gill also serves as a director of First Midwest Bancorp. Inc.

Kathleen M. Cronin, 52. Ms. Cronin has served as our Senior Managing Director, General Counsel and Corporate Secretary since 2003. Previously she served as Corporate Secretary and Acting General Counsel from 2002 through 2003. Prior to joining us, Ms. Cronin was a corporate attorney at Skadden, Arps, Slate, Meagher & Flom LLP from 1989 through 1995 and from 1997 through 2002. Ms. Cronin has been designated as an executive officer. Ms. Cronin also serves as a director of Kemper Corporation.

Sunil Cutinho, 44. Mr. Cutinho has served as President of CME Clearing since September 2014. He joined CME Group in 2002 and since then has held various positions of increasing responsibility within the organization and, most recently served as Managing Director, Deputy Head of CME Clearing from April 2014 through September 2014. Mr. Cutinho has been designated as an executive officer.

Bryan T. Durkin, 55. Mr. Durkin has served as our Senior Managing Director, Chief Commercial Officer since September 2014. He previously served as our Chief Operating Officer since 2007 and also held the title of Managing Director, Products and Services from 2010 to July 2012. Mr. Durkin joined us in connection with the CBOT merger and he previously held a variety of leadership roles with CBOT from 1982 to 2007, most recently as Executive Vice President and Chief Operating Officer. Mr. Durkin also serves as our representative on the board of Bursa Malaysia Derivatives Berhad. Mr. Durkin has been designated as an executive officer.

Julie Holzrichter, 47. Ms. Holzrichter has served as our Senior Managing Director, Chief Operating Officer since September 2014. She previously served as our Senior Managing Director, Global Operations from 2007. Ms. Holzrichter rejoined us in 2006 as our Managing Director, CME Globex Services and Technology Integration. Ms. Holzrichter previously held positions of increasing responsibility in our organization from 1986 to 2003 in trading operations. Ms. Holzrichter has been designated as an executive officer.

William Knottenbelt, 55. Mr. Knottenbelt has served as Senior Managing Director, International since September 2014. He previously served as Senior Managing Director, Europe, Middle East and Africa (EMEA) since February 2014. Previously, Mr. Knottenbelt served as Managing Director, EMEA since joining the company in 2011. Prior to joining CME Group, Mr. Knottenbelt most recently served as Global Head of Futures for the Royal Bank of Scotland (RBS) where he built out the global reach and product offering of RBS futures.

Kevin Kometer, 51. Mr. Kometer has served as Senior Managing Director and Chief Information Officer since 2008. He previously served as Managing Director and Deputy Chief Information Officer from 2007 to 2008. Since joining the company most recently in 1998, he has held senior leadership positions in the Technology Division, including Managing Director, Trading Execution Systems and Director, Advanced Technology. Mr. Kometer was also with the company from 1994 to 1996. Mr. Kometer has been designated as an executive officer.

Hilda Harris Piell, 48. Ms. Piell has served as Senior Managing Director and Chief Human Resources Officer since 2007. Previously she served as Managing Director and Senior Associate General Counsel, as Director and Associate General Counsel and as Associate Director and Assistant General Counsel since joining us in 2000. Ms. Piell has been designated as an executive officer.

John W. Pietrowicz, 51. Mr. Pietrowicz has served as our Chief Financial Officer since December 2014. Previously, Mr. Pietrowicz served as our Senior Managing Director, Business Development and Corporate Finance since 2010. Mr. Pietrowicz joined us in 2003 and since then has held various positions of increasing responsibility, including Managing Director and Deputy Chief Financial Officer from 2009 to 2010 and Managing Director, Corporate Finance and Treasury from 2006 to 2009. Mr. Pietrowicz has been designated as an executive officer. In connection with our investments, Mr. Pietrowicz also serves as a director of Bolsa Mexicana de Valores, S.A.B. de C.V. and of S&P/Dow Jones Indices LLC.

Linda Rich, 52. Ms. Rich has served as our Senior Managing Director, Government Relations and Legislative Affairs since April 2012. Prior to assuming her current role, Ms. Rich served as Managing Director, Government Relations and Legislative Affairs since joining us in 2010. Before joining the company, Ms. Rich served as Senior Vice President, Government Relations for NYSE Euronext. Her background also includes serving as senior counsel to the U.S. House of Representatives Committee on Financial Services and as counsel to the U.S. House of Representatives Committee on Commerce.

Derek Sammann, 48. Mr. Sammann has served as our Senior Managing Director, Commodities and Options Products since September 2014. He previously served as our Senior Managing Director, Financial Products and Services since 2009 and Global Head of Foreign Exchange Products since joining us in 2006. Prior to joining us, Mr. Sammann served as Managing Director, Global Head of FX Options and Structured Products at Calyon Corporate and Investment Bank in London from 1997 to 2006. Mr. Sammann has been designated as an executive officer.

Kimberly S. Taylor, 54. Ms. Taylor has served as our President, Global Operations, Technology & Risk since September 2014. She previously served as President, CME Clearing since 2004 and as Managing Director, Risk Management in the Clearing House Division from 1998 to 2003. Ms. Taylor has held a variety of positions in the clearing house, including Vice President and Senior Director. She joined us in 1989. Ms. Taylor has been designated as an executive officer.

Jack Tobin, 52. Mr. Tobin has served as our Chief Accounting Officer since February 2015. Mr. Tobin most recently served as our Managing Director, Corporate Finance since 2007. Prior to our merger with CBOT Holdings, Mr. Tobin served as the

Director, Corporate Finance for CBOT Holdings, Inc. and CBOT from 2002 to 2007. Prior to joining CBOT, Mr. Tobin served as a principal consultant with PricewaterhouseCoopers from 1997 to 2002. Mr. Tobin is a registered certified public accountant and has been designated as an executive officer.

Sean Tully, 52. Mr. Tully has served as Senior Managing Director, Financial and OTC Products of CME Group since September 2014. He previously served as Senior Managing Director, Interest Rates and OTC Products since February 2014. Previously, he served as Managing Director, Interest Rate and OTC Products since October 2013 and as our Managing Director, Interest Products since joining us in 2011. Before joining the company, Mr. Tully most recently served as Managing Director, Global Head of Fixed Income Trading at WestLB in London. Mr. Tully has been designated as an executive officer.

Julie Winkler, 41. Ms. Winkler has served as Senior Managing Director, Research and Product Development and Index Services of CME Group since 2014. She previously served as Senior Managing Director, Research and Product Development of CME Group since February 2014. Previously, she served as Managing Director, Research and Product Development since 2007. Prior to our merger with CBOT Holdings, Ms. Winkler held positions of increasing responsibility for CBOT Holdings since 1996. Ms. Winkler also serves as a director of S&P/Dow Jones Indices LLC.

Robert Zagotta, 51. Mr. Zagotta has served as Senior Managing Director, Strategy & Execution since September 2014. He previously served as Senior Managing Director, Products and Services of CME Group since 2012. Prior to joining the company, Mr. Zagotta most recently served as Executive Vice President, Business Strategy and Execution for Project Leadership Associates (PLA) from 2007 to 2012, where he worked with CME Group on a number of strategic consulting assignments. Before joining PLA, Mr. Zagotta was CEO and Co-Founder of Fourth Floor Consulting, which was acquired by PLA, and a Senior Manager at PricewaterhouseCoopers. Mr. Zagotta has been designated as an executive officer.

FINANCIAL INFORMATION ABOUT GEOGRAPHIC AREAS

We track trading volume based on the country of origin of the transaction as disclosed to us by the customer. During 2015, 2014 and 2013, we estimate that approximately 24%, 24% and 22% of our electronic trading volume, respectively, were reported to us as originating from outside the United States.

AVAILABLE INFORMATION

Our website is *www.cmegroup.com*. Information made available on our website does not constitute part of this document. We make available on our website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports as soon as reasonably practicable after we electronically file or furnish such materials to the U.S. Securities and Exchange Commission. Our corporate governance materials, including our Corporate Governance Principles, Director Conflict of Interest Policy, Board of Directors Code of Ethics, Categorical Independence Standards, Employee Code of Conduct and the charters for all the standing committees of our board, also may be found on our website. Copies of these materials also are available to shareholders free of charge upon written request to Shareholder Relations, Attention Ms. Beth Hausoul, CME Group Inc., 20 South Wacker Drive, Chicago, Illinois 60606.

ITEM 1A. RISK FACTORS

In addition to the other information contained in this Annual Report on Form 10-K, you should carefully consider the factors discussed below, which are the risks 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.

RISKS RELATING TO OUR INDUSTRY

Our business is subject to the impact of domestic and international market, economic and political conditions that are beyond our control and that could significantly reduce our contract volumes and make our financial results more volatile.

Our revenue is substantially dependent on the contract volume in our markets. Our contract volume is directly affected by domestic and international factors that are beyond our control, including:

- economic, political and geopolitical market conditions;
- legislative and regulatory changes, including any direct or indirect restrictions on or increased costs associated with trading in our markets;
- broad trends in the industry and financial markets;
- changes in price levels, contract volumes and volatility in the derivatives markets and in underlying equity, foreign exchange, interest rate and commodity markets;

- shifts in global or regional demand or supply in commodities underlying our products;
- competition;
- changes in government monetary policies, especially central bank decisions related to quantitative easing;
- availability of capital to our market participants and their appetite for risk-taking;
- levels of assets under management;
- volatile weather patterns, droughts, natural disasters and other catastrophes;
- pandemics affecting our customer base or our ability to operate our markets; and
- consolidation in our customer base and within our industry.

Any one or more of these factors may contribute to reduced activity in our markets. Historically, periods of heightened uncertainty have tended to increase our trading volume due to increased hedging activity and the increased need to manage the risks associated with, or speculate on, volatility in the U.S. equity markets, fluctuations in interest rates and price changes in the foreign exchange, commodity and other markets. However, as evidenced by our past performance, in the period after a material market disturbance, there may persist extreme uncertainties which may lead to decreased volume due to factors such as reduced risk exposure, lower interest rates, central bank asset purchase programs and lack of available capital. The shifts in market trading patterns we experienced as a result of the financial disturbance of 2008 may or may not recur in the future, and our business will be affected by future economic uncertainties which may result in decreased trading volume and a more difficult business environment for us. Material decreases in trading volume would have a material adverse effect on our financial condition and operating results.

We operate in a heavily regulated environment that imposes significant costs and competitive burdens on our business.

We are primarily subject to the jurisdiction of the regulatory agencies in the United States, the United Kingdom and the European Union. We also are subject to varying levels of regulation by foreign jurisdictions that permit our exchanges to offer our products and services to their citizens.

Due to the global financial crisis that began in 2008, the United States and numerous other governments have undertaken reviews of the existing legal framework governing financial markets and have either passed new laws and regulations, or are in the process of debating or enacting new laws and regulations that will impact our business. While certain of these changes may have a positive impact on our business, some of these changes could adversely affect our business, including areas of regulatory focus discussed under "Item 1 – Business – Regulatory Matters" beginning on page 11. Compliance with regulations may require us and our customers to dedicate significant financial and operational resources that could result in some participants leaving our markets or decreasing their trading activity, which would negatively affect our profitability. We have incurred and expect to continue to incur significant additional costs to comply with the extensive regulations that apply to our business. To the extent the regulatory environment following the implementation of Dodd-Frank and other financial reform regulations is less beneficial for us or our customers, our business, financial condition and operating results could be negatively affected.

If we fail to comply with applicable laws, rules or regulations, we may be subject to censure, fines, cease-and-desist orders, suspension of our business, removal of personnel or other sanctions, including revocation of our designations as a contract market and derivatives clearing organization.

Some of our largest clearing firms have indicated their belief that clearing facilities should not be owned or controlled by exchanges and should be operated as utilities and not for profit. These clearing firms have sought, and may seek in the future, legislative or regulatory changes that would, if adopted, enable them to use alternative clearing services for positions established on our exchanges or to freely move open positions among clearing houses in order to take advantage of our liquidity. Even if they are not successful, these factors may cause them to limit the use of our markets.

Our clearing houses seek to offer customers, intermediaries and clearing firms universal access in order to maximize the efficient use of capital, exercise appropriate oversight of value at risk and maintain operating leverage from clearing activities. Our strategic business plan is to operate an efficient and transparent vertically integrated transaction execution, clearing and settlement business for our futures and options on futures business. Some of our clearing firms have expressed the view that clearing firms should control the governance of clearing houses or that clearing houses should be operated as utilities rather than as part of for-profit enterprises. Some of these firms, along with certain industry associations, have sought, and may seek in the future, legislative or regulatory changes to be adopted that would facilitate mechanisms or policies that allow market participants to transfer positions from an exchange-owned clearing house to a clearing house owned and controlled by clearing firms. If these legislative or regulatory changes are adopted, our revenues and profits could be adversely affected.

We face intense competition from other companies, including some of our members. If we are not able to successfully compete, our business, financial condition and operating results will be materially harmed.

The industry in which we operate is highly competitive and we expect competition to continue to intensify, especially in light of the implementation of Dodd-Frank and other reforms of the financial services industry. We believe portions of Dodd-Frank and the corresponding regulations with respect to mandatory clearing and organized trading provide opportunities for our business. However, other portions of Dodd-Frank and the regulatory structure being implemented could negatively impact our business and our ability to compete effectively. We encounter competition in all aspects of our business, including from entities having substantially greater capital and resources, offering a wide range of products and services and in some cases operating under a different and possibly less stringent regulatory regime. We face competition from other futures, securities and securities option exchanges; over-the-counter markets; clearing organizations; consortia formed by our members and large industry participants; swap execution facilities; alternative trade execution facilities; technology firms, including market data distributors and electronic trading system developers, and others. Many of our competitors and potential competitors have greater financial, marketing, technological and personnel resources than we do.

Our competitors may:

- respond more quickly to competitive pressures, including responses based upon their corporate governance structures, which may be more flexible and efficient than our corporate governance structure;
- develop products that are preferred by our customers;
- develop risk transfer products that compete with our products;
- price their products and services more competitively;
- develop and expand their network infrastructure and service offerings more efficiently;
- utilize better, more user-friendly and more reliable technology;
- take greater advantage of acquisitions, alliances and other opportunities;
- more effectively market, promote and sell their products and services;
- better leverage existing relationships with customers and alliance partners or exploit better recognized brand names to market and sell their services; and
- exploit regulatory disparities between traditional, regulated exchanges and alternative markets that benefit from a reduced regulatory burden and lower-cost business model.

If our products, markets and services are not competitive, our business, financial condition and operating results will be materially harmed. A decline in our fees or loss of customers could lower our revenues, which would adversely affect our profitability.

Please see "Item 1 – Business – Competition" beginning on page 10 for additional information on the competitive environment and its potential impact on our business.

Our contract volume, and consequently our revenues and profits, would be adversely affected if we are unable to retain our current customers or attract new customers.

The success of our business depends, in part, on our ability to maintain and increase our contract volume. To do so, we must maintain and expand our product offerings, our customer base and our trade execution and clearing facilities. Our success also depends on our ability to offer competitive prices and services in an increasingly price-sensitive business. For example, in recent years, some of our competitors have engaged in aggressive pricing strategies, such as lowering the fees that they charge for taking liquidity and increasing liquidity payments or rebates. We cannot provide assurances that we will be able to continue to expand our product lines, that we will be able to retain our current customers or attract new customers or that we will not be required to modify our pricing structure to compete effectively. Changes in our pricing structure may result in a decrease in our profit margin. We bill a substantial portion of our clearing and transaction fees 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% of our clearing and transaction fees revenue for 2015. Should a clearing firm withdraw, our experience indicates that the customer portion of the firm's trading activity would likely transfer to another clearing firm of the exchange. However, there is the possibility we would lose a portion of the customer business. Additionally, from time to time, certain customers may represent a significant portion of the open interest in our individual product lines or contracts. If we fail to maintain our contract volume; expand our product offerings or execution facilities; or lose a substantial number of our current customers, or a subset of customers representing a significant percentage of contract volume in a particular product line; or are unable to attract new customers, our business and revenues will be adversely affected. Furthermore, declines in contract volume due to loss of customers may negatively impact market liquidity, which could lead to further loss of contract volume.

As a financial services provider, we are subject to significant litigation risk and potential commodity and securities law liability.

Many aspects of our business involve substantial litigation risks. While we generally are protected by our rules limiting liability for system failures and certain forms of negligence and by statutory limits on private causes of actions in cases where we have not behaved in bad faith, we could be exposed to substantial liability under federal and state laws and court decisions, as well as rules and regulations promulgated and/or direct actions brought by the SEC and the CFTC. These risks include, among others, potential liability from disputes over terms of a trade, the claim that a system failure or delay caused monetary losses to a customer, that we entered into an unauthorized transaction, that we provided materially false or misleading statements in connection with a transaction or that we failed to effectively fulfill our regulatory oversight responsibilities. Dissatisfied customers frequently make claims regarding quality of trade execution, improperly settled trades, mismanagement or even fraud against their service providers. We may become subject to these claims as a result of failures or malfunctions of our systems and services we provide. We could incur significant legal expenses defending claims, even those without merit. In addition, an adverse resolution of any future lawsuit or claim against us could have a material adverse effect on our business and our reputation.

Our role in the global marketplace places us at greater risk than other public companies for a cyber-attack and other cyber security risks. Our technology, our people and those of our third-party service providers may be vulnerable to cybersecurity threats, which could result in wrongful use of our information or cause interruptions in our operations that cause us to lose customers and contract volume, and result in substantial liabilities. We also could be required to incur significant expense to protect our systems and/or investigate any alleged attack.

We regard the secure transmission of confidential information and the ability to continuously transact and clear on our electronic trading platforms as critical elements of our operations. Our technology, our people and those of our third-party service providers and our customers may be vulnerable to targeted attacks, unauthorized access, fraud, computer viruses, denial of service attacks, terrorism, firewall or encryption failures and other security problems. Criminal groups and nation-state actors have targeted the financial services industry and our role in the global marketplace places us at greater risk than other public companies for a cyber-attack and other information security threats. From time to time, we experienced cyber security events including malware infections, directed “phishing” attacks against our employees, web attacks and other information technology incidents that are typical for a financial services company of our size. Additionally, in 2013, we were the victim of a cyber intrusion. Although we maintain sophisticated systems, teams and processes to prevent such incidents, and took significant actions to address this incident, we learned that certain customer information was compromised. We incurred expenses of $16.0 million related to our response to the 2013 event. Although we maintain sophisticated systems, teams and processes to prevent, detect and recover from these events, incidents attributable to cyber-attack could result in substantial costs and liability to us and diversions of our resources, may distract the attention of management from the ongoing operation of our business and could result in regulatory penalties or the imposition of burdensome obligations by the regulators.

Additionally, our role as a leading derivatives marketplace and the operation of our CME Globex electronic trading platform may place us at greater risk for misappropriation of our intellectual property, and persons who circumvent security measures could wrongfully use or steal our information or cause interruptions or malfunctions in our operations. In the past, we have been the victim of trade secret theft by an employee.

As part of our global information security program, we employ resources to monitor and protect our environment and infrastructure against such cyber-attacks and the potential misappropriation of our intellectual property assets. However, these measures may prove insufficient depending upon the attack or threat posed, which could result in system failures and delays, loss of customers and lower contract volume, and negatively affect our competitive advantage and result in substantial costs and liabilities.

We may be at greater risk from terrorism than other companies.

We may be more likely than other companies to be a direct target of, or an indirect casualty of, attacks by terrorists or terrorist organizations. It is impossible to accurately predict the likelihood or impact of any terrorist attack on the derivatives industry generally or on our business. While we have implemented significant physical security protection measures, business continuity plans and established backup sites, in the event of an attack or a threat of an attack, these security measures and contingency plans may be inadequate to prevent significant disruptions in our business, technology or access to the infrastructure necessary to maintain our business. Such attack may result in the closure of our trading and clearing facilities or render our backup data and recovery systems inoperable. Damage to our facilities due to terrorist attacks may be significantly in excess of any amount of insurance received, or we may not be able to insure against such damage at a reasonable price or at all. The threat of terrorist attacks may also negatively affect our ability to attract and retain employees. Any of these events could have a material adverse effect on our business, financial condition and operating results.

RISKS RELATING TO OUR BUSINESS

The success of our markets depends on our ability to complete development of, successfully implement and maintain the electronic trading systems that have the functionality, performance, reliability and speed required by our customers.

The success of our business depends in large part on our ability to create interactive electronic marketplaces, in a wide range of derivatives products, that have the required functionality, performance, capacity, reliability and speed to attract and retain customers. A significant portion of our overall volume is generated through electronic trading on our CME Globex electronic platform.

We must continue to enhance our electronic trading platform to remain competitive. As a result, we will continue to be subject to risks, expenses and uncertainties encountered in the rapidly evolving market for electronic transaction services. These risks include our failure or inability to:

- provide reliable and cost-effective services to our customers;
- develop, in a timely manner, the required functionality to support electronic trading in our key products in a manner that is competitive with the functionality supported by other electronic markets;
- maintain the competitiveness of our fee structure;
- attract independent software vendors to write front-end software that will effectively access our electronic trading system and automated order routing system;
- respond to technological developments or service offerings by competitors; and
- generate sufficient revenue to justify the substantial capital investment we have made and will continue to make to enhance our electronic trading platform.

If we do not successfully enhance our electronic trading systems, if we are unable to develop them to include other products and markets or if they do not have the required functionality, performance, capacity, reliability and speed desired by our customers, our ability to successfully compete and our revenues and profits will be adversely affected.

Additionally, we rely on our customers' ability to have the necessary back office functionality to support our new products and our trading and clearing functionality. To the extent our customers are not prepared and/or lack the resources or infrastructure, the success of our new initiatives may be compromised.

If we experience systems failures or capacity constraints, our ability to conduct our operations and execute our business strategy could be materially harmed and we could be subjected to significant costs and liabilities.

We are heavily dependent on the capacity, reliability and security of the computer and communications systems and software supporting our operations. We receive and/or process a large portion of our trade orders through electronic means, such as through public and private communications networks. Our systems, or those of our third-party providers, may fail or operate slowly, causing one or more of the following to occur:

- unanticipated disruptions in service to our customers;
- slower response times;
- delays in our customers' trade execution;
- failed settlement of trades;
- incomplete or inaccurate accounting, recording or processing of trades;
- financial losses;
- security breaches;
- litigation or other customer claims;
- loss of customers; and
- regulatory sanctions.

We cannot assure you that we will not experience systems failures from power or telecommunications failure, acts of God, war or terrorism, human error, natural disasters, fire, sabotage, hardware or software malfunctions or defects, computer viruses, acts of vandalism or similar occurrences. If any of our systems do not operate properly, are compromised or are disabled, including as a result of system failure, employee or customer error or misuse of our systems, we could suffer financial loss, liability to customers, regulatory intervention or reputational damage that could affect demand by current and potential users of our market.

From time to time, we have experienced system errors and failures that have resulted in some customers being unable to connect to our electronic trading platform, or that resulted in erroneous reporting, such as transactions that were not authorized by any customer or reporting of filled orders as canceled. Such errors may result in CME Group being liable or in our voluntary assumption of financial liability. We cannot assure you that if we experience system errors or failures in the future that they will not have a material adverse impact on our business. Any such system failures that cause an interruption in service or decrease our responsiveness could impair our reputation, damage our brand name or have a material adverse effect on our business, financial condition and operating results.

Our status as a CFTC registrant generally requires that our trade execution and communications systems be able to handle anticipated present and future peak contract volume. Heavy use of our computer systems during peak trading times or at times of unusual market volatility could cause our systems to operate slowly or even to fail for periods of time. We constantly monitor system loads and performance, and regularly implement system upgrades to handle estimated increases in contract volume. However, we cannot assure you that our estimates of future contract volume and order messaging traffic will be accurate or that our systems will always be able to accommodate actual contract volume and order messaging traffic without failure or degradation of performance. Increased CME Globex contract volume and order messaging traffic may result in connectivity problems or erroneous reports that may affect users of the platform. System failure or degradation could lead our customers to file formal complaints with industry regulatory organizations, to file lawsuits against us or to cease doing business with us, or could lead the CFTC or other regulators to initiate inquiries or proceedings for failure to comply with applicable laws and regulations.

We will need to continue to upgrade, expand and increase the capacity of our systems as our business grows and we execute our business strategy. Our goal is to design our systems to handle two times our peak historical transactions in our highest volume products. As volumes of transactions grow, the ability of our systems to meet this goal on an ongoing basis depends on our ability to increase our system capacity on a timely basis while maintaining system reliability. Although many of our systems are designed to accommodate additional volume and products and services without redesign or replacement, we will need to continue to make significant investments in additional hardware and software to accommodate the increases in volume of transactions and order transaction traffic and to provide processing services to third parties. If we cannot increase the capacity and capabilities of our systems to accommodate an increasing volume of transactions and to execute our business strategy, our ability to maintain or expand our businesses would be adversely affected.

We, as well as many of our customers, depend on third-party suppliers and service providers for a number of services that are important. An interruption or cessation of an important supply or service by any third party could have a material adverse effect on our business, including revenues derived from our customers' trading activity.

We depend on a number of suppliers, such as banking, clearing and settlement organizations, telephone companies, on-line service providers, data processors, and software and hardware vendors, for elements of our trading, clearing and other systems, as well as communications and networking equipment, computer hardware and software and related support and maintenance.

Many of our customers rely on third parties, such as independent software vendors, to provide them with front-end systems to access our CME Globex platform and other back office systems for their trade processing and risk management needs. While these service providers have undertaken to keep current with our enhancements and changes to our interfaces and functionality, we cannot guarantee that they will continue to make the necessary monetary and time investments to keep up with our changes.

To the extent any of our service providers or the organizations that provide services to our customers in connection with their trading activities cease to provide these services in an efficient, cost-effective manner or fail to adequately expand their services to meet our needs and the needs of our customers, we could experience decreased contract volume, lower revenues and higher costs.

Our clearing house operations expose us to substantial credit risk of our third party clearing firms and, consequently, a diminishment in their financial resources could adversely affect us.

Our clearing house operations expose us to counterparties with differing risk profiles. We routinely guarantee transactions submitted by our clearing firms with counterparties in the financial industry, including brokers and dealers, commercial banks, investment banks, mutual and hedge funds, and other institutional customers. We could be adversely impacted by the financial distress or failure of one or more of our clearing firms.

As part of our growth initiatives, we have expanded our clearing services to swaps in addition to standard futures and options on futures products. The process for setting margins and establishing other financial safeguards for cleared swaps differs from our historical practices. Although we believe that we have carefully analyzed the process for setting margins and establishing financial safeguards for cleared swaps, there is no guarantee that our procedures will adequately protect the clearing house in the event of a clearing member default during extreme market conditions.

A substantial part of our working capital may be at risk if a clearing firm defaults on its obligations to the clearing house and its margin and guaranty fund deposits are insufficient to meet its obligations. Although we have policies and procedures to help ensure that our clearing firms can satisfy their obligations, these policies and procedures may not succeed in detecting problems or preventing defaults. We also have in place various measures intended to enable us to cure any default and maintain liquidity. However, we cannot assure you that these measures will be sufficient to protect market participants from a default or that we will not be adversely affected in the event of a significant default. In addition, we have established a fund (currently up to $98 million) to provide payments, up to certain maximum levels, to qualified family farmers, ranchers and other agricultural industry participants who use our products and who suffer losses to their segregated account balances if their clearing firm member becomes insolvent.

The required capital and posted collateral of our clearing firms may lose value given the volatility of the market.

To become a clearing member, a firm must meet certain minimum capital requirements and must deposit collateral to meet performance bond and guaranty fund requirements. We accept a variety of collateral to satisfy these requirements, including cash, regulated money market mutual funds, U.S. Treasury securities, U.S. Government Agency securities, letters of credit, gold, equities and foreign sovereign debt, and subject them to established haircuts based on the type of collateral and maturity. There is no guarantee the collateral will maintain its value. To the extent a clearing firm is not compliant with capital, margin or guaranty fund requirements, it would be required to promptly come into compliance by adding capital or collateral, decreasing its proprietary trading activity and/or transferring customer accounts to another clearing firm. These actions could result in a decrease in trading activity in our products.

Intellectual property rights licensed from third party price reporting agencies form the basis for many of our products from which we derive a significant portion of our volume and revenue. Regulatory scrutiny into such benchmarks could have a negative impact on our ability to offer such products.

We are significantly dependent on the contract volume of products which are based on intellectual property rights of indexes derived from third-party price reporting agencies, including our benchmark Eurodollar contract, which is based on LIBOR. To comply with CFTC core principles, we must be able to demonstrate that our products may not be readily subject to manipulation. Our inability to offer products based on these indexes could have a negative impact on our contract volume and revenues.

Our market data revenues may be reduced by decreased demand, poor overall economic conditions or a significant change in how market participants trade and use market data.

We sell our market data to individuals, trading institutions and other organizations that use our information services to participate in our markets and/or monitor general economic conditions. Revenues from our market data and information services represented 12% and 11% of our total revenues during the years ended December 31, 2015 and 2014, respectively. A decrease in overall contract volume may lead to a decreased demand for our market data. For example, in both 2015 and 2014, we experienced a decrease in the average number of market data devices due to the continued economic uncertainty, continued high unemployment levels in the financial services sector and aggressive cost cutting initiatives at customer firms and the continued impact of legacy incentive programs tied to trading terminals. In 2014, we implemented a series of policy changes and price increases effective over 2014 and 2015. We cannot guarantee that the changes or increased cost to our customers will not result in a reduction of the total number of paid subscriptions as users review their business needs for our services.

We may have difficulty executing our growth strategy and maintaining our growth effectively.

We continue to focus on strategic initiatives to grow our business, including our efforts to serve the over-the-counter markets and to distribute our products and services on a global basis. There is no guarantee that our efforts will be successful. Continued growth will require additional investment in personnel, facilities, information technology infrastructure and financial and management systems and controls and may place a significant strain on our management and resources. For example, if we encounter limited resources, we may be required to increase our expenses to obtain the necessary resources, defer existing initiatives or not pursue certain opportunities. We may not be successful in implementing all of the processes that are necessary to support our growth organically or, as described below, through acquisitions, other investments or strategic alliances. Unless our growth results in an increase in our revenues that is proportionate to the increase in our costs associated with our growth, our future profitability could be adversely affected, and we may have to incur significant expenditures to address the additional operational and control requirements as a result of our growth.

There is no guarantee that our cleared swaps initiatives will be successful.

Our goal is to provide a comprehensive multi-asset class clearing solution to the marketplace for maximum operational ease and the capital efficiency that comes with connecting to our clearing houses. We offer clearing services for cleared swaps, including interest rate, credit default, foreign exchange and commodity swaps. Our strategy also includes extending our services into other asset classes, as well as enhancing our CME ClearPort functionality to support additional products. While we believe the implementation of Dodd-Frank creates new opportunities for us to expand our offerings, the current regulatory environment for trading and clearing these products remains uncertain. We cannot be certain that we will be able to operate profitably under the new legislation. Also, numerous capital changes and provisions in Basel III may result in uncleared, bilaterally executed derivatives being less expensive than cleared derivatives. In addition, a number of market participants and exchanges have developed competing platforms and products, including new swap execution facilities. We cannot be certain that we will be able to compete effectively or that our initiatives will be successful.

We intend to continue to explore acquisitions, other investments and strategic alliances. We may not be successful in identifying opportunities or in integrating the acquired businesses. Any such transaction may not produce the results we anticipate, which could adversely affect our business and our stock price.

We intend to continue to explore and pursue acquisitions and other strategic opportunities to strengthen our business and grow our company. We may make acquisitions or investments or enter into strategic partnerships, joint ventures and other alliances. The market for such transactions is highly competitive, especially in light of the increasing consolidation in our industry. As a result, we may be unable to identify strategic opportunities or we may be unable to negotiate or finance future transactions on terms favorable to us, which could impact our ability to identify growth opportunities. We may finance future transactions by issuing additional equity and/or debt. The issuance of additional equity in connection with any future transaction could be substantially dilutive to our existing shareholders. The issuance of additional debt could increase our leverage substantially. The process of integration also may produce unforeseen regulatory and operating difficulties and expenditures and may divert the attention of management from the ongoing operation of our business. To the extent we enter into joint ventures and alliances, we may experience difficulties in the development and expansion of the business of any newly formed ventures, in the exercise of influence over the activities of any ventures in which we do not have a controlling interest, as well as encounter potential conflicts with our joint venture or alliance partners. We may not realize the anticipated growth and other benefits from our growth initiatives and investments we have made or will make in the future, which may have an adverse impact on our financial condition and operating results. We also may be required to take an impairment charge in our financial statements relating to our acquisitions and/or investments, which could negatively affect our stock price.

Expansion of our global operations involves special challenges that we may not be able to meet, which could adversely affect our financial results.

We plan to continue to expand our global operations, including through CME Clearing Europe, CME Europe and our global repository services; directly placing order entry terminals with customers outside the United States; and by relying on distribution systems established by our current and future strategic alliance partners. We face certain risks inherent in doing business in international markets, particularly in the regulated derivatives exchange business. These risks include:

- becoming subject to extensive regulations and oversight;
- difficulties in staffing and managing foreign operations;
- general economic and political conditions in the countries from which our markets are accessed, which may have an adverse effect on our volume from those countries; and
- potentially adverse tax consequences.

We cannot assure you that we will be successful in marketing our products and services in international markets. We also may experience difficulty in managing our international operations because of, among other things, competitive conditions overseas, management of foreign exchange risk, established domestic markets, language and cultural differences and economic or political instability. Any of these factors could have a material adverse effect on the success of our international operations and, consequently, on our business, financial condition and operating results.

Our compliance and risk management programs might not be effective and may result in outcomes that could adversely affect our reputation, financial condition and operating results.

In the normal course of our business, we discuss matters with our regulators raised during regulatory examinations, or we may otherwise become subject to their inquiry and oversight. The CFTC has broad enforcement powers to censure, fine, issue cease-and-desist orders, prohibit us from engaging in some of our businesses or suspend or revoke our designation as a contract market or the registration of any of our officers or employees who violate applicable laws or regulations. Our ability to comply with applicable laws and rules is largely dependent on our establishment and maintenance of compliance, review and reporting systems, as well as our ability to attract and retain qualified compliance and other risk management personnel. We face the risk of significant intervention by regulatory authorities, including extensive examination and surveillance activity. In the case of alleged non-compliance with applicable laws or regulations, we could be subject to investigations and judicial or administrative proceedings that may result in substantial penalties or civil lawsuits, including by customers, for damages, which could be significant. Any of these outcomes may adversely affect our reputation, financial condition and operating results. In extreme cases, these outcomes could adversely affect our ability to conduct our business. 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. Based on our review of the allegations, we believe that we have strong factual and legal defenses to the claim.

Our policies and procedures to identify, monitor and manage our risks may not be fully effective. Some of our risk management methods depend upon evaluation of information regarding markets, customers or other matters that are publicly available or otherwise accessible by us. That information may not in all cases be accurate, complete, up-to-date or properly evaluated. Management of operational, financial, legal, regulatory and strategic risk requires, among other things, policies and procedures to record properly and verify a large number of transactions and events. We cannot assure you that our policies and procedures will always be effective or that we will always be successful in monitoring or evaluating the risks to which we are or may be exposed.

We could be harmed by misconduct or errors that are difficult to detect and deter.

There have been a number of highly publicized cases involving fraud or other misconduct by employees of financial services firms in recent years. Misconduct by our employees and agents could include hiding unauthorized activities from us, improper or unauthorized activities on behalf of customers or improper use or unauthorized disclosure of confidential information. Misconduct could subject us to financial losses or regulatory sanctions and seriously harm our reputation. It is not always possible to deter misconduct, and the precautions we take to prevent and detect this activity may not be effective in all cases. Our employees and agents also may commit errors that could subject us to financial claims for negligence, as well as regulatory actions, or result in our voluntary assumption of financial liability.

We may not be able to protect our intellectual property rights, which may materially harm our business.

We own the rights to a large number of trademarks, service marks, domain names and trade names in the United States, Europe and other parts of the world. We have registered many of our most important trademarks in the United States and other countries. We hold the rights to a number of patents and have made a number of patent applications. Our patents cover match engine, trader user interface, trading floor support, market data, general technology and clearing house functionalities. We attempt to protect our intellectual property rights by relying on trademarks, copyright, database rights, trade secrets, restrictions on disclosure and other methods. Notwithstanding the precautions we take to protect our intellectual property rights, it is possible that third parties may copy or otherwise obtain and use our proprietary technology without authorization or otherwise infringe on our rights. For example, in 2012 a former employee of CME Group pled guilty to theft of our trade secrets. In addition, in the future, we may have to rely on litigation to enforce our intellectual property rights, protect our trade secrets, determine the validity and scope of the proprietary rights of others or defend against claims of infringement or invalidity. Any such litigation, whether successful or unsuccessful, could result in substantial costs to us and diversions of our resources, either of which could adversely affect our business.

Any infringement by us on patent rights of others could result in litigation and adversely affect our ability to continue to provide, or increase the cost of providing, our products and services.

Patents of third parties may have an important bearing on our ability to offer certain of our products and services. Our competitors as well as other companies and individuals may obtain, and may be expected to obtain in the future, patents related to the types of products and services we offer or plan to offer. We cannot assure you that we are or will be aware of all patents containing claims that may pose a risk of infringement by our products and services. In addition, some patent applications in the United States are confidential until a patent is issued and, therefore, we cannot evaluate the extent to which our products and services may be covered or asserted to be covered by claims contained in pending patent applications. These claims of infringement are not uncommon in our industry.

In general, if one or more of our products or services were to infringe on patents held by others, we may be required to stop developing or marketing the products or services, to obtain licenses to develop and market the services from the holders of the patents or to redesign the products or services in such a way as to avoid infringing on the patent claims. We cannot assess the extent to which we may be required in the future to obtain licenses with respect to patents held by others, whether such licenses would be available or, if available, whether we would be able to obtain such licenses on commercially reasonable terms. If we were unable to obtain such licenses, we may not be able to redesign our products or services to avoid infringement, which could materially adversely affect our business, financial condition and operating results.

RISKS RELATING TO AN INVESTMENT IN OUR CLASS A COMMON STOCK

Our indebtedness could adversely affect our financial condition and operations and prevent us from fulfilling our debt service obligations. We might still be able to incur more debt, intensifying these risks.

As of December 31, 2015, we had approximately $2.2 billion of total indebtedness and we had excess borrowing capacity for general corporate purposes under our existing facilities of approximately $2.3 billion.

Our indebtedness could have important consequences. For example, our indebtedness may:

- require us to dedicate a significant portion of our cash flow from operations to payments on our debt, thereby reducing the availability of cash flows to fund capital expenditures, to pursue acquisitions or investments, to pay dividends and for general corporate purposes;
- increase our vulnerability to general adverse economic conditions;
- limit our flexibility in planning for, or reacting to, changes in or challenges relating to our business and industry; and
- place us at a competitive disadvantage against any less leveraged competitors.

The occurrence of any one of these events could have a material adverse effect on our business, financial condition, results of operations, prospects and ability to satisfy our debt service obligations. In addition, the agreements governing our outstanding indebtedness do not significantly limit our ability to incur additional indebtedness, which could increase the risks described above to the extent that we incur additional debt. Our U.S. exchanges and clearing house also are required to maintain capital as defined by the CFTC.

Any reduction in our credit rating could increase the cost of our funding from the capital markets.

Our long-term debt is currently rated investment grade by two of the major rating agencies. These rating agencies regularly evaluate us. Their ratings of our long-term debt are based on a number of factors, including our financial strength as well as factors not entirely within our control, such as conditions affecting the financial services industry generally. In light of the difficulties in the financial services industry and the financial markets over the last few years, there can be no assurance that we will maintain our current ratings. In the past, we have experienced ratings downgrades. Our failure to maintain our ratings could adversely affect the cost and other terms upon which we are able to obtain funding, and increase our cost of capital. Additionally, if our ratings are downgraded below investment grade due to a change of control, we are required to make an offer to repurchase all of our fixed-rate notes at a price equal to 101% of the principal amount, plus accrued and unpaid interest.

Our operations of, and investments in, businesses outside of the United States subject us to currency risk.

Since we conduct business outside of the United States, primarily in the United Kingdom, portions of our revenues and expenses are denominated in U.S. dollars and pounds sterling. Because our consolidated financial statements are presented in U.S. dollars, we must translate non-U.S. dollar denominated revenues, income and expenses, as well as assets and liabilities, into U.S. dollars at exchange rates in effect during or at the end of each reporting period. Therefore, increases or decreases in the value of the U.S. dollar against the other currencies may affect our operating income and the value of balance sheet items denominated in foreign currencies.

Additionally, we have invested in businesses outside of the United States, including our investment in BM&FBOVESPA which had a fair value of $199.1 million as of December 31, 2015. A decrease in value of the currencies in the foreign jurisdictions where we have investments would decrease the value of our investments and may have a negative impact on our financial statements.

Our average rate per contract is subject to fluctuation due to a number of factors. As a result, you will not be able to rely on our average rate per contract in any particular period as an indication of our future average rate per contract.

Our average rate per contract, which impacts our operating results, is subject to fluctuation due to shifts in the mix of 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. In addition, our members and participants in our various incentive programs generally are charged lower fees than our non-member customers. Variation in each of these factors is difficult to predict and will have an impact on our average rate per contract in the particular period. Because of this fluctuation, you may not be able to rely on our average rate per contract in any particular period as an indication of our future average rate per contract. If we fail to meet securities analysts' expectations regarding our operating results, the price of our Class A common stock could decline substantially.

Our cost structure is largely fixed. If our revenues decline and we are unable to reduce our costs, our profitability will be adversely affected.

Our cost structure is largely fixed. We base our cost structure on historical and expected levels of demand for our products and services. If demand for our products and services and our resulting revenues decline, we may not be able to adjust our cost structure on a timely basis. In that event, our profitability would be adversely affected.

Thirteen of our board members own trading rights or are officers or directors of firms that own trading rights on our exchanges. As members, these individuals may have interests that differ from or conflict with those of shareholders who are not also members. Our dependence on the trading and clearing activities of our members, combined with the CME members' rights to elect six directors, may enable them to exert substantial influence over the operation of our business.

Thirteen of our directors own or are officers or directors of firms that own trading rights on our exchanges. We are dependent on the revenues from the trading and clearing activities of our members. In 2015, 81% of our contract volume was derived from our members. This dependence may give them substantial influence over how we operate our business.

Many of our members and clearing firms derive a substantial portion of their income from their trading or clearing activities on or through our exchanges. In addition, trading rights on our exchanges have substantial independent value. The amount of income that members derive from their trading, brokering and clearing activities and the value of their trading rights are, in part, dependent on the fees they are charged to trade, broker, clear and access our markets, and the rules and structure of our markets. As a result, members may not have the same economic interests as holders of our Class A common stock. In addition, our members may have differing interests among themselves depending on the roles they serve in our markets, their methods of trading and the products they trade. Consequently, members may advocate that we enhance and protect their clearing and trading opportunities and the value of their trading privileges over their investment in our Class A common stock, if any.

Our members have been granted special rights, which protect their trading privileges, require that we maintain open outcry trading until volumes are not significant and, in the case of our Class B shareholders, provide them with special board representation.

Under the terms of the organizational documents of our exchanges, our members have certain rights that relate primarily to trading right protections, certain trading fee protections and certain membership benefit protections. Additionally, our Class B shareholders, who are members of our CME exchange, also are entitled to elect six directors to our board even if their Class A share ownership interest is very small or non-existent. In connection with these rights, our ability to take certain actions that we may deem to be in the best interests of the company and its shareholders, including actions relating to certain pricing decisions, may be limited by the rights of our members.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

Our global headquarters are located in Chicago, Illinois, at 20 South Wacker Drive. The following is a description of our key locations and facilities.

Location	Primary Use	Owned/Leased	Lease Expiration	Approximate Size (in square feet)[1]
20 South Wacker Drive Chicago, Illinois	Global headquarters and office space	Leased	2022[2]	490,000
141 West Jackson Chicago, Illinois	Chicago trading floor and office space	Leased	2027[3]	150,000
333 S. LaSalle Chicago, Illinois	Chicago trading floor and office space	Owned	N/A	300,000
550 West Washington Chicago, Illinois	Office space	Leased	2023	250,000
One North End New York, New York	New York trading floor, office space and business continuity	Leased	2028[4]	240,000
One New Change London	Office space	Leased	2026	58,000
Annex Data Center Chicagoland area	Business continuity	Leased	2019	100,000
Data Center 3 Chicagoland area	Business continuity and co-location	Owned	N/A	430,000

(1) Size represents the amount of space leased or owned by us unless otherwise noted.
(2) The initial lease expires in 2022 with two consecutive options to extend the term for seven and ten years, respectively.
(3) The initial lease expires in 2027 and contains options to extend the term and expand the premises.
(4) The initial lease expires in 2028 and contains options to extend the term and expand the premises. In 2019, the premises will be reduced to 225,000 square feet.

We also lease other office space around the world and have also partnered with major global telecommunications carriers in connection with our telecommunications hubs whereby we place data cabinets within the carriers' existing secured data centers. We believe our facilities are adequate for our current operations and that additional space can be obtained if needed.

ITEM 3. LEGAL PROCEEDINGS

See "Legal and Regulatory Matters" in Note 13. Contingencies to the Consolidated Financial Statements beginning on page 77 for CME Group's legal proceedings disclosure which is incorporated herein by reference.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Class A Common Stock

Our Class A common stock is currently listed on NASDAQ under the ticker symbol "CME." As of February 10, 2016, there were approximately 2,860 holders of record of our Class A common stock.

The following table sets forth the high and low sales prices per share of our Class A common stock on a quarterly basis, as reported on NASDAQ.

2015		High		Low	2014		High		Low
First Quarter	$	95.49	$	80.57	First Quarter	$	79.20	$	72.34
Second Quarter		94.84		84.80	Second Quarter		72.66		66.95
Third Quarter		95.78		85.13	Third Quarter		82.96		70.13
Fourth Quarter		96.13		84.22	Fourth Quarter		92.91		78.26

Class B Common Stock

Our Class B common stock is not listed on a national securities exchange or traded in an organized over-the-counter market. Each class of our Class B common stock is associated with a membership in a specific division of our CME exchange. CME's rules provide exchange members with trading rights and the ability to use or lease these trading rights. Each share of our Class B common stock can be transferred only in connection with the transfer of the associated trading rights.

Class B shares and the associated trading rights are bought and sold or leased through our membership department. Although our Class B shareholders have special voting rights, because our Class B shares have the same equitable interest in our earnings and the same dividend payments as our Class A shares, we expect that the market price of our Class B common stock, if reported separately from the associated trading rights, would be primarily determined by the value of our Class A common stock. As of February 10, 2016, there were approximately 1,600 holders of record of our Class B common stock.

Dividends

The following table sets forth the dividends we paid on our Class A and Class B common stock in the last two years:

Record Date		Dividend per Share	Record Date		Dividend per Share
March 10, 2015	$	0.50	March 10, 2014	$	0.47
June 10, 2015		0.50	June 10, 2014		0.47
September 10, 2015		0.50	September 10, 2014		0.47
December 10, 2015		0.50	December 10, 2014		0.47
December 28, 2015		2.90	December 29, 2014		2.00

We intend to continue to pay a regular quarterly dividend to our shareholders according to our annual dividend policy, which is set at between 50% and 60% of the prior year's cash earnings. The decision to declare a dividend and the amount of the dividend, however, remains within the discretion of our board of directors and may be affected by various factors, including our future earnings, financial condition, capital requirements, levels of indebtedness and other considerations our board of directors deems relevant. On February 3, 2016, the board of directors declared a regular quarterly dividend of $0.60 per share. The dividend will be payable on March 28, 2016, to shareholders of record on March 10, 2016. Assuming no changes in the number of shares outstanding, the total first quarter dividend payment will be approximately $202.0 million. The board of directors also declared an additional, annual variable dividend of $2.90 per share on December 9, 2015, paid on January 12, 2016, to the shareholders of record on December 28, 2015. In general, the amount of the annual variable dividend will be determined at the end of each year, and the level will increase or decrease from year to year based on operating results, potential merger and acquisition activity, and other forms of capital return including regular dividends and share buybacks during the prior year.

The indentures governing our fixed rate notes, our 364-day clearing house credit facility for $7.0 billion and our $2.3 billion multi-currency revolving senior credit facility 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, which could indirectly affect the ability to pay dividends.

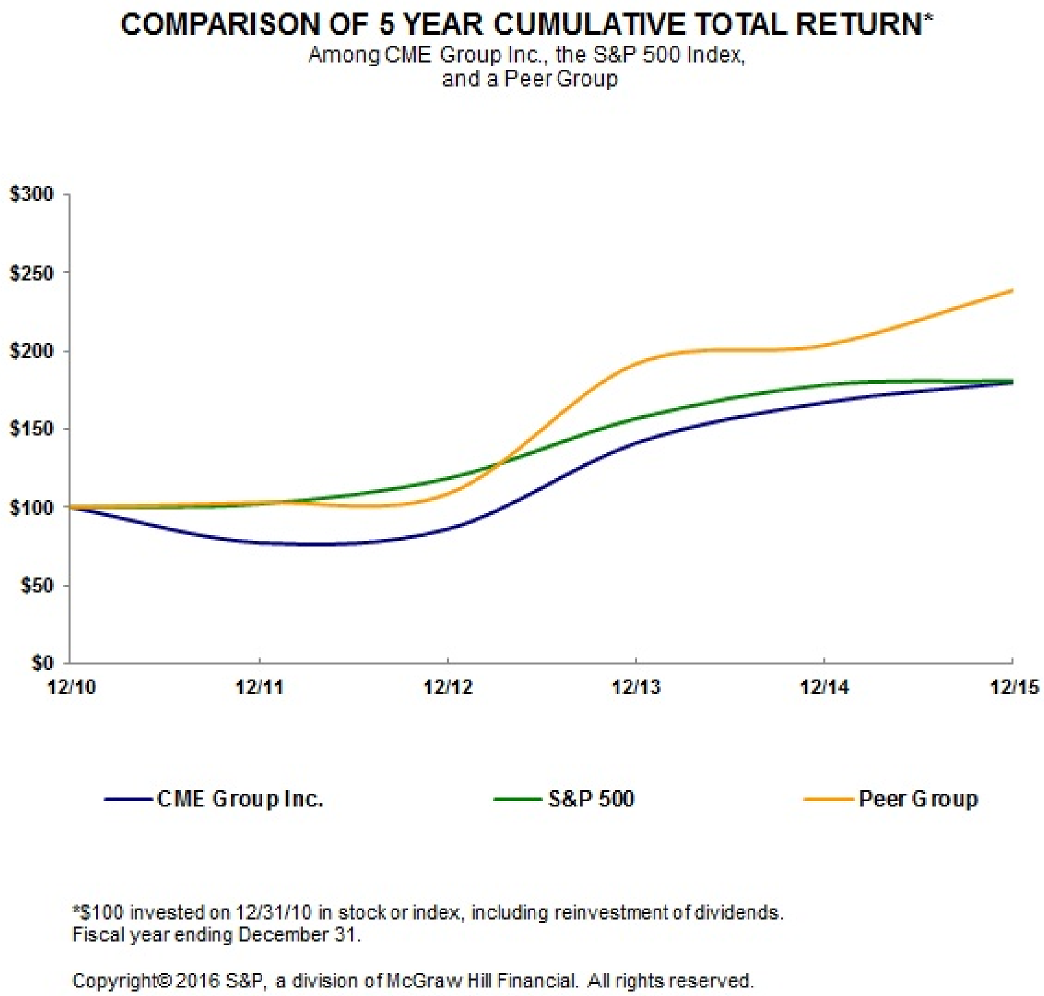
For example, under our senior credit facility, we are required to remain in compliance with a consolidated net worth test, defined as our consolidated shareholders' equity as of December 31, 2014 after giving effect to actual share repurchases made and special dividends paid (including annual variable dividends), but only up to the amount of such repurchases and dividends publicly announced and made or paid after December 31, 2014 (and in no event greater than $2.0 billion in the aggregate for such repurchases and dividends during the term of the agreement), multiplied by 0.65. In addition, our 364-day clearing house credit facility contains a requirement that CME remain in compliance with a consolidated tangible net worth test, defined as consolidated shareholder's equity less intangible assets (as defined in the agreement), of not less than $800.0 million.

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, including CME, in order to provide a portion of the funds which it uses to pay dividends to its shareholders.

CME Group and its subsidiaries are also required to comply with restrictions contained in the general corporation laws of their state of incorporation which could also limit its (or their) ability to declare and pay dividends.

PERFORMANCE GRAPH

The following graph and table compares the cumulative five-year total return provided to shareholders on our Class A common stock relative to the cumulative total returns of the S&P 500 index and our customized peer group. The peer group includes CBOE Holdings, Inc., IntercontinentalExchange Group, Inc. and Nasdaq, Inc. An investment of $100 (with reinvestment of all dividends) is assumed to have been made in our Class A common stock, in the peer group and the S&P 500 index on December 31, 2010, and its relative performance is tracked through December 31, 2015.



The stock price performance included in this graph is not necessarily indicative of future stock price performance.

	2011	2012	2013	2014	2015
CME Group Inc.	$ 77.32	$ 86.07	$ 141.17	$ 167.02	$ 179.84
S&P 500	102.11	118.45	156.82	178.29	180.75
Peer Group	102.98	108.59	191.79	203.60	238.90

Unregistered Sales of Equity Securities

During the past three years there have not been any unregistered sales by the company of equity securities.

Issuer Purchases of Equity Securities

Period	(a) Total Number of Shares (or Units) Purchased(1)	(b) Average Price Paid Per Share (or Unit)	(c) Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs (in millions)
October 1 to October 31	1,279	$ 93.78	—	$ —
November 1 to November 30	29	97.18	—	—
December 1 to December 31	772	95.31	—	—
Total	2,080		—	

(1) Shares purchased consist of an aggregate of 2,080 shares of Class A common stock surrendered to satisfy employee tax obligations upon the vesting of restricted stock.

ITEM 6. SELECTED FINANCIAL DATA

On March 18, 2010, the Board of Trade of the City of Chicago, Inc. (CBOT) acquired a 90% ownership interest in CME Group Index Services LLC (Index Services), a business venture with Dow Jones & Company (Dow Jones). In June 2012, the company contributed certain Dow Jones Index assets and liabilities (DJI asset group) owned by Index Services to S&P/Dow Jones Indices LLC (S&P/DJI), a new business venture with The McGraw-Hill Companies Inc. (McGraw), and acquired a 24.4% interest in S&P/DJI. As part of the transaction with McGraw, the company also sold Credit Market Analysis Ltd. (CMA) to McGraw. CBOT acquired The Board of Trade of Kansas City, Missouri, Inc. (KCBT), on November 30, 2012. In April 2013, the company acquired the remaining 10% non-controlling interest in Index Services. As a result of the purchase of the non-controlling interest, the company's interest in S&P/DJI increased to 27%.

The following data includes the financial results of CMA through June 30, 2012 and the financial results of KCBT beginning November 30, 2012. Assets and liabilities contributed or sold as part of the transaction with McGraw are excluded from the following data beginning on June 30, 2012, while the financial results of the company's 24.4% interest in S&P/DJI are included in the following data beginning on June 30, 2012. The financial results of the company's increased ownership interest in S&P/DJI to 27% interest are included as of April 2013.

	Year Ended or At December 31				
(in millions, except per share data)	2015	2014	2013	2012	2011
Income Statement Data:					
Total revenues	$ 3,326.8	$ 3,112.5	$ 2,936.3	$ 2,914.6	$ 3,280.6
Operating income	1,988.7	1,768.4	1,637.0	1,692.0	2,021.1
Non-operating income (expense)	(31.9)	3.0	(36.0)	1.4	(84.6)
Income before income taxes	1,956.8	1,771.4	1,601.0	1,693.4	1,936.5
Net income attributable to CME Group	1,247.0	1,127.1	976.8	896.3	1,812.3
Earnings per common share attributable to CME Group:					
Basic	$ 3.71	$ 3.37	$ 2.94	$ 2.71	$ 5.45
Diluted	3.69	3.35	2.92	2.70	5.43
Cash dividends per share	4.90	3.88	4.40	3.70	1.12
Balance Sheet Data:					
Total assets	$ 67,371.5	$ 72,241.5	$ 54,277.8	$ 38,863.2	$ 40,758.7
Short-term debt	—	—	749.9	749.7	—
Long-term debt	2,241.4	2,107.9	2,107.2	2,106.8	2,106.8
CME Group Shareholders' equity	20,551.8	20,923.5	21,154.8	21,419.1	21,552.0

The following table presents key statistical information on the volume of contracts traded, expressed in round turn trades, and notional value of contracts traded. Average daily volume for KCBT products is included in volume data beginning January 1, 2013. All amounts exclude our credit default swaps and interest rate swaps contracts.

	Year Ended or At December 31				
(in thousands, except notional value)	**2015**	**2014**	**2013**	**2012**	**2011**
Average Daily Volume:					
Product Lines:					
Interest rate	6,720	7,009	5,903	4,834	6,030
Equity	2,792	2,764	2,642	2,560	3,238
Foreign exchange	872	803	886	845	922
Agricultural commodity	1,265	1,120	1,053	1,140	1,087
Energy	1,970	1,630	1,676	1,692	1,775
Metal	344	337	386	352	387
Total Average Daily Volume	13,963	13,663	12,546	11,423	13,439
Method of Trade:					
Electronic	12,185	11,805	10,826	9,739	11,350
Open outcry	1,139	1,176	1,040	1,045	1,398
Privately negotiated	639	682	680	639	691
Total Average Daily Volume	13,963	13,663	12,546	11,423	13,439
Other Data:					
Total Notional Value (in trillions)	1,167	1,161	925	806	1,068
Total Contract Volume (round turn trades)	3,532,521	3,443,051	3,161,477	2,890,036	3,386,716
Open Interest at Year End (contracts)	91,369	93,644	83,726	69,894	78,318

ITEM 7. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

INTRODUCTION

Management’s Discussion and Analysis of Financial Condition and Results of Operations is organized as follows:

- **Executive Summary**: Includes an overview of our business; current economic, competitive and regulatory trends relevant to our business; our current business strategy and our primary sources of operating and non-operating revenues and expenses.
- **Critical Accounting Policies**: Provides an explanation of accounting policies which may have a significant impact on our financial results and the estimates, assumptions and risks associated with those policies.
- **Recent Accounting Pronouncements**: Includes an evaluation of recent accounting pronouncements and the potential impact of their future adoption on our financial results.
- **Results of Operations**: Includes an analysis of our 2015, 2014 and 2013 financial results and a discussion of any known events or trends which are likely to impact future results.
- **Liquidity and Capital Resources**: Includes a discussion of our future cash requirements, capital resources, significant planned expenditures and financing arrangements.

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

OVERVIEW

Business Overview

CME Group, a Delaware stock corporation, is the holding company for CME, CBOT, NYMEX, COMEX and their respective subsidiaries as well as CMECE and CME Europe. The holding company structure is designed to provide strategic and operational flexibility. CME Group's Class A common stock is listed on the NASDAQ Global Select Market (NASDAQ) under the ticker symbol “CME.”

Our exchange consists of designated contract markets for the trading of futures and options on futures contracts. We also clear futures, options on futures and swaps contracts through our two clearing houses: CME Clearing, which is a division of CME, and CMECE. Futures contracts, options on futures contracts and swaps contracts provide investors with vehicles for protecting against, and potentially profiting from, price changes in financial instruments and physical commodities.

We are a global exchange with customer access available virtually all over the world. Our customers consist of professional traders, financial institutions, individual and institutional investors, major corporations, manufacturers, producers and governments. Customers include both members of the exchange and non-members.

We offer our customers the opportunity to trade futures contracts and options on futures contracts on a range of products including those based on interest rates, equities, foreign exchange, agricultural commodities, energy and metals. We also clear swaps contracts on a range of products including those based on interest rates, credit default, foreign exchange, agricultural commodities, energy and metals.

Our products provide a means for hedging, speculating and allocating assets. We identify new products by monitoring economic trends and their impact on the risk management and speculative needs of our existing and prospective customers.

Most of our products are available for trading through our electronic trading platform and our open outcry trading floors. These execution facilities offer our customers immediate trade execution and price transparency. In addition, trades can be executed through privately negotiated transactions that are cleared and settled through our CME and CMECE clearing houses.

Our clearing houses clear, settle and guarantee futures and options contracts traded through our exchange, in addition to cleared swaps products. Our clearing houses' performance guarantee is an important function of our business. Because of this guarantee, our customers do not need to evaluate the credit of each potential counterparty or limit themselves to a selected set of counterparties. This flexibility increases the potential liquidity available for each trade. Additionally, the substitution of our clearing houses as the counterparty to every transaction allows our customers to establish a position with one party and offset the position with another party. This contract offsetting process provides our customers with flexibility in establishing and adjusting positions and provides for collateral and margining efficiencies.

In addition, CME serves as a swap execution facility, which is a regulated platform for swap trading, and serves as a swap data repository, which provides public data on swap transactions and stores confidential swap data for regulatory purposes.

Business Trends

Economic Environment. Our customers continue to use our markets as an effective and transparent means to manage risk and meet their investment needs despite economic uncertainty and volatility. Trading activity in our centralized markets has fluctuated due to the ongoing uncertainty in the financial markets caused by the United States and European credit crises, fluctuations in the availability of credit, variations in the amount of assets under management as well as the Federal Reserve Bank's recent zero interest rate policy and quantitative easing. Trading activity in our energy and agricultural product lines have fluctuated due to ongoing price volatility within those markets. We continue to maintain high quality and diverse products as well as various clearing and market data services which support our customers in any economic environment.

Competitive Environment. Our industry is competitive and we continue to encounter competition in all aspects of our business. We expect competition to continue to intensify, especially in light of recent regulatory reforms in the financial services industry. Competition is influenced by our reputation, the efficiency and security of our services, depth and liquidity of our markets, breadth of product offerings including rate and quality of new product development, our ability to position and expand upon existing products, transparency, reliability and anonymity of transaction processing, the regulatory environment, efficient and innovative technology and connectivity as well as transaction costs. We believe we are very well situated with respect to these factors. We now face competition from other futures, securities and securities option exchanges; over-the-counter markets; clearing organizations; swap execution facilities; alternative trade execution facilities; technology firms, including market data distributors and electronic trading system developers, and others. As markets continue to evolve, we will continue to adapt our trading technology and clearing services to meet the needs of our customers.

Regulatory Environment. Exchange-traded derivatives have historically been subject to extensive regulation. As a result of the widespread difficulties across the economy over recent years, various domestic and foreign governments have undertaken reviews of the existing legal framework governing financial markets and have either passed new laws and regulations or are in the process of enacting new laws and regulations that will apply to our business. Compliance with regulations may require us and our customers to dedicate significant financial and operational resources which could adversely affect our profitability.

Our U.S. futures exchanges and our clearing house are subject to extensive regulation by the Commodity Futures Trading Commission (CFTC), which carries out the regulation of the futures markets in accordance with the provisions of the Commodity Exchange Act, the Commodity Futures Modernization Act and the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank). Over the last five years, a number of regulations to implement Dodd-Frank were finalized. While we believe that the new regulations will provide opportunities for our business, the new regulations remain subject to additional rulemaking by various regulators. Our U.S. clearing house has been designated by the CFTC as a systemically important derivatives clearing organization, which imposes various new procedural and substantive requirements. Our U.S. swap data repository service and swap execution facility are also subject to the requirements of the Commodity Exchange Act and the regulations of the CFTC. We have incurred and expect to continue to incur significant additional costs to comply with the provisions of Dodd-Frank and any new regulations.

As a global company with operations and locations around the world, we are also subject to laws and regulations in foreign locations where we do business. The financial services industry in Europe has recently undergone regulatory reform and a re-organization of its regulatory framework. Our European operations are now overseen by several regulators, including the Bank of England, the Financial Conduct Authority (FCA) and the European Securities Market Authority (ESMA). We have incurred and expect to continue to incur significant additional costs to comply with the new regulations in Europe.

Business Strategy

Our strategy focuses on leveraging our benchmark products, enhancing our customer relations, expanding our customer base, advancing our clearing and trading technologies and deriving benefits from our integrated clearing houses as well as our scalable infrastructure. We focus specifically on opportunities created by increased market awareness and acceptance of derivatives, increased price volatility, technological advances and the increasing need for counterparty risk mitigation and clearing services. This strategy allows us to continue to develop into a more broadly diversified financial exchange that provides trading and clearing solutions across a wide range of products and asset classes. We believe that we can build on our competitive strengths by executing on the following initiatives:

- Lead core business innovation and expand product offerings by continuing to enhance our customer relations to allow us to further cross-sell our products, expand on the strength of our existing benchmark products, launch new products and deepen open interest in our core futures offerings;
- Globalize our company and business by expanding and diversifying our customer base worldwide, offering customers around the world the most broadly diversified portfolio of benchmark products and increasing our presence in major international financial centers. We have also extended our European presence through CMECE and CME Europe as well as our Asian presence;

- Expand our customer base and enhance our customer participation in our market by targeting cross asset sales, driving international sales and generating new client participation across the world;
- Extend our risk management and post trade offerings and solutions by providing a comprehensive multi-asset class clearing solution to the market for maximum operational ease. Our cleared swaps offerings provide participants the extensive counterparty credit risk reduction and transparency of our clearing services while preserving the prevailing execution processes, technology platforms and business structures currently in use in the marketplace; and
- Establish ourselves as the leading exchange company provider of information products and index services and enhance our intellectual property portfolio. Our business venture with McGraw positions us well to serve global institutional and retail customers and allows us to continue to be innovative with product development and co-branding across asset classes.

Revenues

Clearing and transaction fees. A majority of our revenue is derived from clearing and transaction fees, which include electronic trading fees, surcharges for privately negotiated transactions and other volume-related charges for exchange-traded and cleared swaps contracts. Because clearing and transaction fees are assessed on a per-contract or notional value basis, revenues and profitability fluctuate with changes in contract volume. In addition to the business trends noted earlier, our contract volume, and consequently our revenues, tend to increase during periods of economic and geopolitical uncertainty as our customers seek to manage their exposure to, or speculate on, the market volatility resulting from that uncertainty.

While volume has the most significant impact on our clearing and transaction fees revenue, there are four other factors that also influence this source of revenues:

- rate structure;
- product mix;
- venue, and
- the percentage of trades executed by customers who are members compared with non-member customers.

Rate structure. Customers benefit from volume discounts and limits on fees as part of our effort to increase liquidity in certain products. We offer various incentive programs to promote trading and clearing in various products and geographic locations. We may periodically change fees, volume discounts, fee limits and member discounts, perhaps significantly, based on our review of operations and the business environment.

Product mix. We offer exchange-traded futures and options on futures contracts as well as cleared-only swap contracts on a wide-ranging set of products based on interest rates, credit default, equities, foreign exchange, agricultural commodities, energy and metals. Rates are varied by product in order to optimize revenue on existing products and to encourage contract volume upon introduction of new products.

Venue. Our exchange is an international marketplace that brings together buyers and sellers mainly through our electronic trading as well as through open outcry trading and privately negotiated transactions. Any customer who is guaranteed by a clearing firm and who agrees to be bound by our exchange rules is able to obtain direct access to our electronic platforms. Open outcry trading is conducted exclusively by our members, who may execute trades on behalf of customers or for themselves.

Typically, customers submitting trades through our electronic platforms are charged fees for using the platforms in addition to the fees assessed on all transactions executed on our exchange. Customers entering into privately negotiated transactions also incur additional charges beyond the fees assessed on other transactions. Privately negotiated transactions include block trades, which are large transactions that are executed between selected parties off the public auction market on CME Globex or the trading floor. Privately negotiated transactions also include volume submitted through CME ClearPort and Exchange for Related Positions (EFRPs).

Member/non-member mix. Generally, member customers are charged lower fees than our non-member customers. Holding all other factors constant, revenue decreases if the percentage of trades executed by members increases, and increases if the percentage of non-member trades increases.

Other sources. Revenue is also derived from other sources including market data and information services, access and communication fees and various services related to our exchange and building operations.

Market data and information services. We receive market data and information services revenue from the dissemination of our market data to subscribers. Subscribers can obtain access to our market data services either directly or through third-party distributors.

Our service offerings include access to real-time, delayed and end-of-day quotations, trade and summary market data for our products and other data sources. Users of our basic service receive real-time quotes and pay a flat monthly fee for each screen, or device, displaying our market data. Alternatively, customers can subscribe to market data provided on a limited group of products. The fee for this service is also a flat rate per month.

Pricing for our market data services is based on the value of the service provided, our cost structure for the service and the price of comparable services offered by our competitors. Increases or decreases in our market data and information services revenue are influenced by changes in our price structure for existing market data offerings, introduction of new market data services and changes in the number of devices in use. General economic factors that affect the financial services industry, which constitutes our primary customer base, also influence revenue from our market data services.

Access and communication fees. Access and communication fees are charges to members and clearing firms that utilize our various telecommunications networks and communications services. Our communication services include our co-location program as well as the connectivity charges to customers of the CME Globex platform. Access fee revenue varies depending on the type of connection provided to customers.

Other revenues. Other revenues include fees for administrating our Interest Earning Facility (IEF) program, trade order routing through agreements from various strategic relationships and other services to members and clearing firms. We offer clearing firms the opportunity to invest cash performance bonds in our various IEF offerings. These clearing firms receive interest income, and we receive a fee based on total funds on deposit.

To further diversify the range of services we offer, we have entered into processing and development agreements with other exchanges and service organizations. For example, we have an agreement with BM&FBOVESPA S.A (BM&FBOVESPA) where we have developed a new multi-asset class electronic trading platform for their customers. We recognized revenue under this agreement as services were provided and when developed technology was delivered.

In addition, other revenues include trading gains and losses generated by GFX Corporation (GFX), our wholly-owned subsidiary that trades futures contracts in a fully hedged book to enhance liquidity in our electronic markets for certain products.

Expenses

The majority of our expenses do not vary directly with changes in our contract volume. However, licensing and other fee agreements can vary directly with certain equity, energy and swap volumes as well as the majority of our employee bonuses vary directly with overall contract volume.

Compensation and benefits. Compensation and benefits expense is our most significant expense and includes employee wages, bonuses, stock-based compensation, benefits and employer taxes. Changes in this expense are driven by fluctuations in the number of employees, increases in wages as a result of inflation or labor market conditions, changes in rates for employer taxes and other cost increases affecting benefit plans. In addition, this expense is affected by the composition of our work force. The expense associated with our bonus and stock-based compensation plans can also have a significant impact on this expense category.

The bonus component of our compensation and benefits expense is based on our financial performance. Under the performance criteria of our annual incentive plans, the bonus funded under the plans is based on achieving certain financial performance targets established by the compensation committee of our board of directors. The compensation committee has discretion to make equitable adjustments to the cash earnings performance calculation to reflect effects of unplanned operating results or capital expenditures to meet intermediate- to long-term growth opportunities.

Stock-based compensation is a non-cash expense related to stock options, restricted stock and performance share grants. Stock-based compensation varies depending on the quantity and fair value of awards granted. The fair value of restricted stock awards and other performance share grants is based on either the share price on the date of the grant or a model of expected future stock prices. The fair value of options is derived using the Black-Scholes model with assumptions about our dividend yield, the expected volatility of our stock price based on an analysis of implied and historical volatility, the risk-free interest rate and the expected life of the options granted.

Professional fees and outside services. This expense includes fees for consulting services received on strategic and technology initiatives, temporary labor as well as legal and accounting fees. This expense may fluctuate as a result of changes in services required to complete initiatives and legal proceedings.

Depreciation and amortization. Depreciation and amortization expense results from the depreciation of long-lived assets such as buildings, leasehold improvements, furniture, fixtures and equipment. This expense also includes the amortization of purchased and internally developed software.

Other expenses. We incur amortization of intangible assets and additional ongoing expenses for communications, technology support services and various other activities necessary to support our operations.

- Communications expense includes costs for network connections for our electronic platforms and some market data customers; telecommunications costs of our exchange, and fees paid for access to external market data. This expense may be impacted by growth in electronic contract volume, our capacity requirements and changes in the number of telecommunications hubs and connections which allow customers outside the United States to access our electronic platforms directly.
- Technology support services expense consists of costs related to maintenance of the hardware and software required to support our technology. Our technology support services costs are driven by system capacity, functionality and redundancy requirements.
- Amortization of purchased intangibles includes amortization of intangible assets obtained in our mergers with CBOT Holdings, Inc. and NYMEX Holdings, Inc. as well as other asset and business acquisitions. Intangible assets subject to amortization consist primarily of clearing firm, market data and other customer relationships.
- Occupancy and building operations expense consists of costs related to leased and owned property including rent, maintenance, real estate taxes, utilities and other related costs. We have significant operations located in Chicago, New York, and the United Kingdom as well as other smaller offices located throughout the world.
- Licensing and other fee agreements expense includes license fees paid as a result of contract volume in equity index products. This expense also includes royalty fees and broker rebates on energy and metals products as well as revenue sharing on cleared swaps contracts and some new product launches. This expense fluctuates with changes in contract volumes as well as changes in fee structures.
- Other expenses include marketing and travel-related expenses as well as general and administrative costs. Marketing, advertising and public relations expense includes media, print and other advertising costs, as well as costs associated with our product promotion. Other expenses also include litigation and customer settlements, impairment charges on operating assets, gains and losses on disposals of operating assets, contingent consideration and foreign currency transaction gains and losses resulting from changes in exchange rates on certain foreign deposits.

Non-Operating Income and Expenses

Income and expenses incurred through activities outside of our core operations are considered non-operating. These activities include non-core investing and financing activities.

- Investment income includes dividend income from our strategic equity investments; gains and losses on trading securities in our non-qualified deferred compensation plans; short-term investment of clearing firms' cash performance bonds and guaranty fund contributions as well as excess operating cash and interest income and realized gains and losses from our marketable securities. Investment income is influenced by the amount of dividends distributed by our strategic investments, the availability of funds generated by operations, market interest rates and changes in the levels of cash performance bonds deposited by clearing firms.

- Interest and other borrowing costs include charges associated with various short-term and long-term funding facilities, including commitment fees on line of credit agreements.
- Equity in net earnings (losses) of unconsolidated subsidiaries includes income and losses from our investments in S&P/DJI, Dubai Mercantile Exchange and Bursa Malaysia Derivatives Berhad.
- Other income (expense) includes other various income and expenses outside our core operations.

CRITICAL ACCOUNTING POLICIES

The notes to our consolidated financial statements include disclosure of our significant accounting policies. In establishing these policies within the framework of accounting principles generally accepted in the United States, management must make certain assessments, estimates and choices that will result in the application of these principles in a manner that appropriately reflects our financial condition and results of operations. Critical accounting policies are those policies that we believe present the most complex or subjective measurements and have the most potential to affect our financial position and operating results. While all decisions regarding accounting price policies are important, there are certain accounting policies that we consider to be critical. These critical policies, which are presented in detail in the notes to our consolidated financial statements, relate to the valuation of financial instruments, goodwill and intangible assets, revenue recognition, income taxes and internal use software costs.

Valuation of financial instruments. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, or an exit price. We have categorized financial instruments measured at fair value into the following three-level fair value hierarchy based upon the level of judgment associated with the inputs used to measure the fair value:

- Level 1—Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date. Assets and liabilities carried at level 1 fair value generally include U.S. Treasury securities and investments in publicly-traded mutual funds with quoted market prices.
- Level 2—Inputs are either directly or indirectly observable and corroborated by market data or are based on quoted prices in markets that are not active. Assets and liabilities carried at level 2 fair value generally include asset-backed securities and certain derivatives.
- Level 3—Inputs are unobservable and reflect management's best estimate of what market participants would use in pricing the asset or liability. Assets and liabilities carried at level 3 fair value generally include assets and liabilities with inputs that require management's judgment.

For further discussion regarding the fair value of financial assets and liabilities, see note 19 in the notes to the consolidated financial statements.

Goodwill and intangible assets. We review goodwill for impairment on an annual basis and whenever events or circumstances indicate that its carrying value may not be recoverable. Goodwill may be tested quantitatively for impairment by comparing the carrying value of a reporting unit to its estimated fair value. Estimating the fair value of a reporting unit involves the use of valuation techniques that rely on significant estimates and assumptions. These estimates and assumptions may include forecasted revenue growth rates; forecasted operating margins; risk-adjusted discount rates; forecasted economic and market conditions, and industry multiples. We base our fair value estimates on assumptions we believe to be reasonable given the information that is available to us at the time of our assessment; however, actual future results may differ significantly from those estimates. Under certain favorable circumstances, goodwill may be reviewed qualitatively for indications of impairment without utilizing valuation techniques to estimate fair value. The qualitative assessment of goodwill may rely on significant assumptions about forecasts of revenue growth, operating margins and economic conditions as well as overall market and industry-specific trends.

We also review indefinite-lived intangible assets on an annual basis or more frequently when events and circumstances indicate that their carrying values may not be recoverable. Indefinite-lived intangible assets may be tested quantitatively for impairment by comparing their carrying values to their estimated fair values. Estimating the fair value of indefinite-lived intangible assets involves the use of valuation techniques that rely on significant estimates and assumptions. These estimates and assumptions may include forecasted revenue growth rates, forecasted allocations of expense and risk-adjusted discount rates. We base our fair value estimates on assumptions we believe to be reasonable given the information that is available to us at the time of our assessment; however, actual future results may differ significantly from those estimates. Similar to goodwill, under certain favorable circumstances, indefinite-lived intangible assets may be reviewed qualitatively for indications of impairment without utilizing valuation techniques to estimate fair value. The qualitative assessment of indefinite-lived intangibles assets may rely on significant assumptions about forecasts of revenue growth, operating margins and economic conditions as well as overall market and industry-specific trends.

Intangible assets subject to amortization are also assessed for impairment when indicated by a change in economic or operational circumstances. The impairment assessment of these assets requires management to first compare the book value of the amortizing asset to undiscounted cash flows. If the book value exceeds the undiscounted cash flows, management is then required to estimate the fair value of the assets and record an impairment loss for the excess of the carrying value over the fair value.

Revenue recognition. A significant portion of our revenue is derived from the clearing and transaction fees we assess on each contract executed through our trading venues and cleared through our clearing houses. Clearing and transaction fees are recognized as revenue when a buy and sell order are matched and when the trade is cleared. On occasion, the customer's exchange trading privileges may not be properly entered by the clearing firm and incorrect fees are charged for the transactions in the affected accounts. When this information is corrected within the time period allowed by the exchange, a fee adjustment is provided to the clearing firm. An accrual is established for estimated fee adjustments to reflect corrections to customer exchange trading privileges. The accrual is based on the historical pattern of adjustments processed as well as specific adjustment requests.

Income taxes. Calculation of the income tax provision includes an estimate of the income taxes that will be paid for the current year as well as an estimate of income tax liabilities or benefits deferred into future years. Deferred tax assets are reviewed to determine if they will be realized in future periods. To the extent it is determined that some deferred tax assets may not be fully realized, the assets are reduced to their realizable value by a valuation allowance. The calculation of our tax provision involves uncertainty in the application of complex tax regulations. We recognize potential liabilities for anticipated tax audit issues in the United States and other applicable foreign tax jurisdictions using a more-likely-than-not recognition threshold based on the technical merits of the tax position taken or expected to be taken. If payment of these amounts varies from our estimate, our income tax provision would be reduced or increased at the time that determination is made. This determination may not be known for several years. Past tax audits have not resulted in tax adjustments that would result in a material change to the income tax provision in the year the audit was completed. The effective tax rate, defined as the income tax provision as a percentage of income before income taxes, will vary from year to year based on changes in tax jurisdictions, tax rates and regulations. In addition, the effective tax rate will vary with changes to income that are not subject to income tax and changes in expenses or losses that are not deductible, such as the utilization of foreign net operating losses.

Internal use software costs. Certain internal and external costs that are incurred in connection with developing or obtaining computer software for internal use are capitalized. Software development costs incurred during the planning or maintenance stages of a software project are expensed as incurred, while costs incurred during the application development stage are capitalized and are amortized over the estimated useful life of the software, generally three years. Amortization of capitalized costs begins only when the software becomes ready for its intended use.

RECENT ACCOUNTING PRONOUNCEMENTS

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 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 new standard was intended to become effective in the first annual period beginning after December 15, 2016, but in August 2015, FASB extended the deadline by one year. This guidance may be adopted using one of two transition methods, which we are still evaluating along with the impact of the new standard on our consolidated financial statements.

In April 2015, the FASB issued a standards update that changes the presentation of debt issuance costs. The update requires entities to present debt issuance costs related to a recognized debt liability as a deduction from the carrying value of the debt liability. The update, which applies retrospectively upon adoption, is effective for reporting periods beginning after December 15, 2015. Early adoption is allowed. Adoption of the update will change the presentation of debt issuance costs and the carrying value of debt in our consolidated balance sheets. Adoption of the update is considered a change in accounting policy and will be disclosed accordingly. We believe the change in presentation will be immaterial to our consolidated financial statements.

In November 2015, the FASB issued a standards update that simplifies the classification of deferred tax assets and liabilities. The update eliminates the current requirement for entities to present deferred tax liabilities and assets as current and non-current in a classified balance sheet. Instead, entities will now be required to classify all deferred tax assets, along with valuation allowances and deferred tax liabilities as non-current. Entities are still required to offset deferred tax assets and liabilities for each taxpaying component within a tax jurisdiction. The new guidance is effective for financial statements issued for reporting periods beginning after December 15, 2016, but earlier adoption is permitted as of the beginning of an interim or annual reporting period. The update may be adopted on either a prospective or retrospective basis. We are in the process of evaluating the impact of this new guidance on our consolidated financial statements.

In January 2016, the FASB issued a standards update that will change how entities measure certain equity investments. It does not change the guidance for classifying and measuring investments in debt securities and loans. 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 classified today as available for sale in other comprehensive income. The update is effective for reporting periods beginning after December 15, 2017. Early adoption is permitted. We are in the process of evaluating the impact of this update on our consolidated financial statements.

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. We are in the process of evaluating the impact of this update on our consolidated financial statements.

RESULTS OF OPERATIONS

Financial Highlights

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

(dollars in millions, except per share data)	2015	2014	2013	Year-over-Year Change 2015-2014	Year-over-Year Change 2014-2013
Total revenues	$ 3,326.8	$ 3,112.5	$ 2,936.3	7%	6%
Total expenses	1,338.1	1,344.1	1,299.3	—	3
Operating margin	60%	57%	56%		
Non-operating income (expense)	$ (31.9)	$ 3.0	$ (36.0)	n.m.	n.m.
Effective tax rate	36%	36%	39%		
Net income attributable to CME Group	$ 1,247.0	$ 1,127.1	$ 976.8	11	15
Diluted earnings per common share attributable to CME Group	3.69	3.35	2.92	10	15
Cash flows from operating activities	1,515.3	1,291.4	1,280.5	17	1

n.m. not meaningful

Revenues

(dollars in millions)	2015	2014	2013	Year-over-Year Change 2015-2014	Year-over-Year Change 2014-2013
Clearing and transaction fees	$ 2,783.9	$ 2,616.3	$ 2,460.4	6%	6 %
Market data and information services	399.4	356.3	315.4	12	13
Access and communication fees	86.1	82.7	83.2	4	(1)
Other	57.4	57.2	77.3	—	(26)
Total Revenues	$ 3,326.8	$ 3,112.5	$ 2,936.3	7	6

Clearing and Transaction Fees

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 houses 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 credit default swaps and interest rate swaps. The credit default swaps and interest rate swaps are discussed in a later section.

	2015	2014	2013	Year-over-Year Change 2015-2014	Year-over-Year Change 2014-2013
Total contract volume (in millions)	3,532.5	3,443.1	3,161.5	3%	9 %
Clearing and transaction fees (in millions)	$ 2,716.9	$ 2,556.7	$ 2,427.6	6	5
Average rate per contract	0.769	0.743	0.768	4	(3)

We estimate the following increases (decreases) in clearing and transaction fees based on change in total contract volume and change in average rate per contract during 2015 compared with 2014, and during 2014 compared with 2013.

(in millions)	Year-over-Year Change 2015-2014	Year-over-Year Change 2014-2013
Increases due to change in total contract volume	$ 68.8	$ 209.1
Increase (decrease) due to change in average rate per contract	91.4	(80.0)
Net increases in clearing and transaction fees	$ 160.2	$ 129.1

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 factors, the regulatory environment and market competition.

				Year-over-Year Change	
(amounts in thousands)	**2015**	**2014**	**2013**	**2015-2014**	**2014-2013**
Average Daily Volume by Product Line:					
Interest rate	6,720	7,009	5,903	(4)%	19 %
Equity	2,792	2,764	2,642	1	5
Foreign exchange	872	803	886	9	(9)
Agricultural commodity	1,265	1,120	1,053	13	6
Energy	1,970	1,630	1,676	21	(3)
Metal	344	337	386	2	(13)
Aggregate average daily volume	13,963	13,663	12,546	2	9
Average Daily Volume by Venue:					
Electronic	12,185	11,805	10,826	3	9
Open outcry	1,139	1,176	1,040	(3)	13
Privately negotiated	639	682	680	(6)	—
Aggregate average daily volume	13,963	13,663	12,546	2	9
Electronic Volume as a Percentage of Total Volume	87%	86%	86%		

Overall futures and options contract volume increased in 2015 compared with 2014, primarily driven by an increase in energy contract volume. The fall in crude oil prices that began in the fourth quarter of 2014 continued through 2015 and resulted in several periods of high volatility. This was heavily influenced by the increase in global crude oil supplies, which have outpaced demand.

Following higher contract volumes in 2014 led by geopolitical concerns in Russia and Ukraine and falling soybean prices, agricultural commodity contract volume continued to increase in 2015. Large amounts of rain due to changing weather patterns caused by El Niño during 2015 created concerns over planting delays for agricultural commodity products in the United States. We believe this resulted in increases in price volatility across the sector, which has led to increases in overall agricultural commodity contract volumes.

In 2015 when compared with 2014, overall interest rate contract volume decreased following significant volumes in 2014. Interest rate contract volume in 2014 reached a historical high as improved macroeconomic indicators led to changing expectations regarding near-term Federal Reserve actions. This historical high has also contributed to overall increase in volumes in 2014 compared with 2013.

Interest Rate Products

The following table summarizes average daily contract volume for our key interest rate products. Eurodollar front 8 contracts include contracts expiring within two years. Eurodollar back 32 contracts include contracts expiring within three to ten years.

				Year-over-Year Change	
(amounts in thousands)	**2015**	**2014**	**2013**	**2015-2014**	**2014-2013**
Eurodollar futures and options:					
Front 8 futures	1,580	1,580	1,159	— %	36 %
Back 32 futures	724	1,052	885	(31)	19
Options	963	860	595	12	44
U.S. Treasury futures and options:					
10-Year	1,613	1,704	1,619	(5)	5
5-Year	830	884	791	(6)	12
Treasury bond	355	426	457	(17)	(7)
2-Year	338	295	237	15	24

Overall interest rate contract volume decreased in 2015 when compared with 2014 primarily due to a decline in longer-dated interest rate contract volume. As market participants anticipated a potential change in interest rates in the near term in 2015, we believe they shifted their focus from Back 32 Eurodollar futures and longer-dated U.S. Treasury futures and options to shorter- term products, including the 2-year U.S. Treasury futures and options. While interest rate volatility remained high in early 2015, changes in macroeconomic factors and a shift from the first quarter's expectations regarding the Federal Reserve interest rate policy change lowered interest rate volatility throughout the remainder of 2015.

In 2014 when compared with 2013, overall interest rate volumes increased due to higher volumes for U.S. Treasury contracts and Eurodollar futures and options contracts, particularly with short-term contracts. We believe the growth was a result of increased volatility driven by changing expectations regarding near-term Federal Reserve actions. In addition, we believe the growth in Eurodollar options volume was attributable to increased sales efforts. Despite overall increases in interest rate volumes, Treasury bond volumes decreased in 2014 compared with 2013. U.S. Treasury volumes were high in the first half of 2013 due to short periods of high volatility created by the Federal Reserve's activities with respect to its quantitative easing program.

Equity Products

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

				Year-over-Year Change	
(amounts in thousands)	**2015**	**2014**	**2013**	**2015-2014**	**2014-2013**
E-mini S&P 500 futures and options	2,200	2,146	2,119	3 %	1%
E-mini NASDAQ 100 futures and options	272	312	239	(13)	30

Overall equity contract volume remained flat in 2015 when compared with 2014 because volatility, as measured by the CBOE Volatility Index, remained high in both periods. Global economic events, led by a deceleration of the Chinese economy in the second half of 2015, resulted in high market volatility in 2015. In 2014, high volatility resulted from geopolitical events in Russia, Ukraine and the Middle East. The E-mini NASDAQ contract volume did not benefit from macro-level events or increased general market volatility to the same extent as the E-mini S&P 500 because the E-mini NASDAQ contract generally hedges different market risks.

We believe the increase in overall equity contract volume in 2014 when compared with 2013 resulted from geopolitical events in Russia and Ukraine as well as the Middle East that led to periods of relatively high volatility in the second half of 2014. We believe the increase in volume was also due to a more gradual increase in broad market volatility during the second half of 2014 caused by uncertainty surrounding interest rates and other geopolitical uncertainty. The increase in the E-mini NASDAQ contract volume was due to market participants shifting attention to the NASDAQ-100 index, which had slightly higher volatility than the S&P 500 throughout most of the year.

Foreign Exchange Products

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

(amounts in thousands)	2015	2014	2013	Year-over-Year Change 2015-2014	Year-over-Year Change 2014-2013
Euro	307	237	269	29 %	(12)%
Japanese yen	154	164	184	(6)	(11)
British pound	106	111	123	(5)	(10)
Australian dollar	98	96	111	2	(13)
Canadian dollar	74	65	74	13	(11)

Foreign exchange contract volume increased in 2015 when compared with 2014 primarily due to an increase in Euro contract volume cause by quantitative easing and debt concerns in Europe, global economic uncertainty, geopolitical events as well as a strengthening U.S. dollar throughout 2015. We believe these factors led to increases in exchange rate volatility.

In 2014 when compared with 2013, the overall decrease in foreign exchange contract volume was attributable to a decrease in exchange rate volatility across all major currencies. We believe subdued expectations regarding interest rate changes across European countries and Japan led to a decrease in exchange rate volatility throughout these regions. Additionally, we believe allegations regarding possible collusion by certain foreign exchange market participants in other marketplaces had a continued negative impact on overall global foreign exchange product trading during 2014. Despite the overall decline in volume for the year, volume did improve during the second half of 2014 largely due to volatility created by global economic uncertainty and geopolitical risk.

Agricultural Commodity Products

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

(amounts in thousands)	2015	2014	2013	Year-over-Year Change 2015-2014	Year-over-Year Change 2014-2013
Corn	415	355	343	17%	4%
Soybean	284	263	243	8	8
Wheat	183	152	139	21	9
Soybean Oil	123	101	100	21	1

Agricultural commodity product volume increased in 2015 when compared with 2014 due to changes in weather patterns caused by El Niño. An increase in rainfall across the United States during 2015 resulted in concerns over planting delays, which we believe led to an increase in volatility within the agricultural commodity markets.

In 2014 when compared with 2013, agricultural commodity contract volume increased due to higher wheat contract volume in 2014, which we believe was caused by geopolitical concerns in Russia and Ukraine. Substantial increases in the production of corn and soybeans in 2014 encouraged hedgers to more aggressively seek protection against falling prices, which we believe resulted in an increase in volume.

Energy Products

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

(amounts in thousands)	2015	2014	2013	Year-over-Year Change 2015-2014	Year-over-Year Change 2014-2013
WTI crude oil	994	730	739	36%	(1)%
Natural gas	468	457	522	2	(13)
Refined products	328	294	294	12	—
Brent crude oil	108	81	46	34	77

Overall energy contract volume increased in 2015 when compared with 2014 largely due to an increase in crude oil contract volume caused by higher volatility. We believe the increase in crude oil volatility resulted from a continuing shift in crude oil supply that began in the fourth quarter of 2014. Additionally, refined products and natural gas contract volumes increased largely due to higher price volatility in the underlying markets.

Total energy contract volume decreased slightly in 2014 when compared with 2013 due to a decline in natural gas contract volume, which we believe was attributable to low overall price levels resulting from increasing U.S. energy production. Crude oil volume increased in 2014, particularly in the fourth quarter, due to a shift in supply and demand, which resulted in high volatility within the oil markets.

Metal Products

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

				Year-over-Year Change	
(amounts in thousands)	**2015**	**2014**	**2013**	**2015-2014**	**2014-2013**
Gold	197	196	232	1 %	(16)%
Copper	67	58	68	16	(15)
Silver	58	62	66	(6)	(5)

Metal contract volume remained flat in 2015 compared with 2014. We believe that demand was stagnant due to lower economic growth rates in Asia resulted in reduced volatility throughout 2014 and 2015.

Overall metal contract volume decreased in 2014 when compared with 2013 due to lower price volatility. Prices remained stable due to a strengthening U.S. dollar and the expectation of an increase in U.S. interest rates. In addition, we believe demand for gold continued to slow due to lower economic growth rates in India and China, which are both large consumers of gold.

Average Rate per Contract

The average rate per contract increased in 2015 when compared with 2014 due to a shift in relative mix of product volume. Energy and agricultural commodity contract volumes, when measured as a percentage of total volume, collectively increased by 3 percentage points in 2015, while interest rate contract volume decreased by 3 percentage points. Energy and agricultural commodity contracts have a higher average rate per contract compared with interest rates. In addition, price increases implemented in February 2015 resulted in a 2% increase in the average rate per contract in 2015 when compared with 2014.

In 2014 when compared with 2013, the average rate per contract decreased due to a shift in the relative mix of product volume. Interest rate contract volume, when measured as a percentage of total volume, increased by 4 percentage points in 2014, while all other product lines decreased. Interest rate contracts have a lower average rate per contract compared with other product lines. In addition, an increase in incentives and discounts on our energy contracts also resulted in a decrease in the average rate per contract in 2014 when compared with 2013.

Cleared-only Swap Contracts

Clearing and transaction fees as presented on the consolidated statements of income include revenues for our cleared-only interest rate swap and credit default swap contracts. In 2015, 2014, and 2013, clearing and transaction fees generated from these contracts were $67.0 million, $59.5 million and $32.3 million, respectively. The increases in revenues were largely attributable to increased sales efforts centered around customer education. The increase in revenue in 2014 when compared with 2013 was also attributable to an increase in CME interest rate swap contract volume resulting from the over-the-counter clearing mandate required to be implemented in 2013 by Dodd-Frank.

Concentration of Revenue

We bill a substantial portion of our clearing and transaction fees 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% of our clearing and transaction fees revenue in 2015 and one firm represented 12% of our clearing and transaction fees revenue in 2014. One firm represented 11% and another firm represented 10% of our clearing and transaction fees revenue in 2013. 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 an ongoing loss of revenue received from or through a particular clearing firm.

Other Sources of Revenue

Market data and information services.

The increase in market data and information services revenues in 2015 when compared with 2014 was attributable to the reduction of fee waivers for certain existing customers beginning in 2015. The increase in market data and information services revenues in 2014 when compared with 2013 was attributable to a $15 fee increase per device for basic real-time market data services at the beginning of 2014. The increase was partially offset by cost-cutting initiatives at customer firms as well as continued utilization of a legacy incentive program.

The two largest resellers of our market data represented, in aggregate, 43%, 44% and 52% of our market data and information services revenue in 2015, 2014 and 2013, respectively. Despite this concentration, we consider exposure to significant risk of revenue loss to be minimal. In the event that one of these vendors no longer subscribes to our market data, we believe the majority of that vendor's customers would likely subscribe to our market data through another reseller. Additionally, several of our largest institutional customers that utilize services from our two largest resellers report usage and remit payment of their fees directly to us.

Other revenue. In 2014, we recognized $1.9 million in fees earned under our technology agreement with BM&FBOVESPA compared with $8.7 million in 2013. In addition, we sold the NYMEX building in the fourth quarter of 2013, which resulted in a decrease in rental income in 2014 when compared with 2013. In 2013, we also recognized $5.1 million of insurance proceeds related to Hurricane Sandy. These events contributed to the decrease in other revenues in 2014 when compared with 2013.

Expenses

				Year-over-Year Change	
(dollars in millions)	**2015**	**2014**	**2013**	**2015-2014**	**2014-2013**
Compensation and benefits	$ 553.7	$ 552.1	$ 518.9	— %	6 %
Communications	27.8	32.0	35.3	(13)	(9)
Technology support services	64.5	58.2	53.6	11	9
Professional fees and outside services	122.8	129.0	130.3	(5)	(1)
Amortization of purchased intangibles	99.4	100.6	103.0	(1)	(2)
Depreciation and amortization	129.2	132.6	135.1	(3)	(2)
Occupancy and building operations	92.5	96.8	78.3	(4)	24
Licensing and other fee agreements	123.8	114.2	97.9	8	17
Other	124.4	128.6	146.9	(3)	(12)
Total Expenses	$ 1,338.1	$ 1,344.1	$ 1,299.3	—	3

2015 Compared With 2014

Operating expenses decreased by $6.0 million in 2015 when compared with 2014. The following table shows the estimated impact of key factors resulting in the net decrease in operating expenses.

(dollars in millions)	**Year-Over-Year Change**	**Change as a Percentage of 2014 Expenses**
Salaries, benefits and employer taxes	$ (16.2)	(1)%
Merger and acquisition costs	(8.3)	(1)
Data center depreciation	(7.9)	(1)
Bonus expense	9.5	1
License and other fee agreements	9.6	1
Real estate taxes and fees	10.0	1
MF Global bankruptcy claim	14.5	1
Other expenses, net	(17.2)	(1)
Total	$ (6.0)	— %

Overall operating expenses decreased in 2015 when compared with 2014 due to the following reasons:

- Compensation and benefits expense decreased as a result of a decline in average headcount largely related to the reorganizations announced in the fourth quarter of 2014 and the third quarter of 2015 as well as the partial closing of the trading floor in the second quarter of 2015.

- In 2014, we recognized professional fees and other expenses associated with our proposed transaction with GFI Group Inc. (GFI Group). The agreement with GFI Group was terminated in January 2015.

- Depreciation expense decreased due to the acceleration of depreciation expense related to certain data center assets in 2014 as a result of the data center consolidation project.

The decrease in overall operating expenses in 2015 when compared with 2014 were partially offset by the following increases:

- Bonus expense increased due to performance relative to our 2015 cash earnings target when compared with 2014 performance relative to our 2014 cash earnings target.
- An increase in licensing and other fee sharing agreements expense resulted from higher expenses related to revenue sharing agreements for certain equity and energy contracts as well as higher revenues for interest rate swap products.
- In 2015, we recognized additional real estate taxes and fees related to the transfer of the ownership of the NYMEX building.
- In 2014, we recognized our claim from the MF Global bankruptcy filing, which occurred in the fourth quarter of 2011. This was recognized as a reduction of other expenses in 2014.

Overall operating expenses also decreased in 2015 due to ongoing efforts towards overall expense reductions.

2014 Compared With 2013

Operating expenses increased by $44.8 million in 2014 when compared with 2013. The following table shows the estimated impact of key factors resulting in the net increase in operating expenses.

(dollars in millions)	Year-Over-Year Change	Change as a Percentage of 2013 Expenses
Salaries, benefits and employer taxes	$ 23.5	2 %
Foreign currency exchange rate fluctuations	20.8	2
Reorganization costs and voluntary exit incentive plan	18.2	1
License and other fee agreements	16.3	1
Merger and acquisition costs	11.0	1
MF Global bankruptcy claim	(14.5)	(1)
Security breach	(16.0)	(1)
Loss on sale of NYMEX building, net of additional occupancy expenses	(19.5)	(2)
Other expenses, net	5.0	—
Total	$ 44.8	3 %

Operating expenses increased in 2014 when compared with 2013 due to the following reasons:

- Compensation and benefits expense increased as a result of increases in average headcount related to efforts to expand our product offerings and geographic reach as well as to meet additional regulatory requirements. The overall increase in average headcount was partially offset by a global workforce reduction of approximately 150 positions as part of a reorganization in October 2014. Expenses also increased due to annual salary increases and rising healthcare costs.
- In 2014, we recognized a net loss within other expenses of $15.4 million due to an unfavorable change in exchange rates on foreign cash balances, compared with a net gain of $5.4 million in 2013. 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. We expect to continue to incur gains and losses from exchange rate fluctuations as long as we maintain those cash balances.
- Severance and other costs related to the reorganization in October 2014 were recognized in the fourth quarter of 2014. Additionally, compensation and benefits expenses increased due to our voluntary exit incentive plan in the second quarter of 2014.
- An increase in licensing and other fee agreements expense resulted from higher volumes for certain equity contracts as well as higher revenues for interest rate swap products.
- We recognized professional fees and other expenses related to our proposed transaction with GFI Group.

Increases in overall operating expenses in 2014 when compared with 2013 were partially offset by the following decreases:

- In the second quarter of 2014, we recognized the settlement of our claim in the MF Global bankruptcy filing as a reduction to other expenses.
- A decrease in expenses from legal and other consulting services related to a security breach in 2013 partially offset the increase in overall expenses in 2014.

- In November 2013, CME Group sold and leased back its building in New York. The sale resulted in a loss on disposal of building assets, a write-off of lease-related intangible assets and other transaction-related costs included within other expenses in 2013. The impact from the loss as well as depreciation, occupancy and amortization of intangible expenses recognized in 2013 was partially offset by higher occupancy expenses in 2014 associated with the new building lease.

Non-Operating Income (Expense)

				Year-over-Year Change	
(dollars in millions)	**2015**	**2014**	**2013**	**2015-2014**	**2014-2013**
Investment income	$ 30.1	$ 35.8	$ 44.9	(16)%	(20)%
Gains (losses) on derivative investments	(1.8)	—	—	n.m.	—
Interest and other borrowing costs	(117.4)	(119.4)	(151.4)	(2)	(21)
Equity in net earnings (losses) of unconsolidated subsidiaries	100.0	84.8	70.5	18	20
Other income (expense)	(42.8)	1.8	—	n.m.	n.m.
Total Non-Operating	$ (31.9)	$ 3.0	$ (36.0)	n.m.	n.m.

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n.m. not meaningful

Investment income. In 2015 when compared with 2014, the overall decrease in investment income was largely due to a net loss of $8.5 million on the sale of approximately 41.0 million shares of our investment in BM&FBOVESPA during 2015. This loss was partially offset by an increase in earnings from cash performance bond and guaranty fund contributions as a result of larger collateral balances held.

The overall decrease in investment income in 2014 when compared with 2013 was largely due to a decrease in dividend income and a reduced gain on marketable securities related to our non-qualified deferred compensation plan. Gains and losses from securities in the non-qualified deferred compensation plan are offset by an equal amount of compensation and benefits expense. The overall decrease was partially offset by an increase in earnings from cash performance bond and guaranty fund contributions that were reinvested. The increase in cash performance bond and guaranty fund contributions was due to an increase in open interest as well as a shift in clearing firm collateral preferences towards cash.

Interest and other borrowing costs. The following table shows the weighted average borrowings outstanding, weighted average effective yield and average cost of borrowing for the periods presented:

				Year-over-Year Change	
(dollars in millions)	**2015**	**2014**	**2013**	**2015-2014**	**2014-2013**
Weighted average borrowings outstanding (in millions)	$ 2,330.6	$ 2,206.3	$ 2,781.3	$ 124.3	$ (575.0)
Weighted average effective yield	3.72%	4.22%	4.68%	(0.50)%	(0.46)%
Average cost of borrowing (1)	3.91	4.40	4.85	(0.49)	(0.45)

(1) Average cost of borrowings includes interest, the effective portion of interest rate hedges, discount accretion and debt issuance costs. Commitment fees on line of credit agreements are not included in the average cost of borrowings.

In February 2014, we repaid the $750.0 million 5.75% notes due February 2014, and in April 2015, we repurchased the $612.5 million 4.40% notes due March 2018. In March 2015, we issued $750.0 million 3.0% notes due March 2025. These transactions contributed to decreases in weighted average effective yield and average cost of borrowings from 2013 through 2015. The weighted average borrowings outstanding increased slightly in 2015 when compared with 2014 due to the replacement of the $612.5 million 4.40% notes with the $750.0 million 3.0% notes in early 2015. The weighted average borrowings outstanding decreased in 2014 when compared with 2013 due to the repayment of the $750.0 million 5.75% notes in February 2014.

Equity in net earnings (losses) of unconsolidated subsidiaries. Higher income generated from our S&P/DJI business venture contributed to increases in equity in net earnings (losses) of unconsolidated subsidiaries from 2013 through 2015.

Other income (expense). In April 2015, we repurchased the $612.5 million 4.40% notes due 2018 and paid a call premium of $60.5 million. As a result of the transaction, we recognized debt prepayment costs of $61.8 million, including the call premium, as other non-operating income (expense). In the first quarter of 2015, we received a termination fee of $22.5 million, net of the portion paid to outside advisers, related to our proposed acquisition of GFI Group, which also was classified as other non-operating income (expense).

Income Tax Provision

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

	2015	2014	2013	Year-over-Year Change 2015-2014	Year-over-Year Change 2014-2013
Year ended December 31	36.3%	36.4%	38.9%	(0.1)%	(2.5)%

The effective tax rate in 2015 was relatively flat compared with the effective tax rate in 2014 because the deferred income tax benefit resulting from remeasurement of the deferred income tax balances in 2015 related to changes in state and local apportionment factors and enacted state and local law changes was comparable to similar benefits arising from audit settlements and remeasurement of deferred income tax balances in 2014.

In 2014 when compared with 2013, the overall effective tax rate decreased due to lower deferred income tax expense related to changes in estimates of state and local apportionment factors as well as benefits related to settlements from state and local audits. We also continued to recognize a benefit for the domestic productions activity deduction in 2014. However, the benefits for the domestic production activities recognized in 2014 were lower than the benefits recognized in 2013 because the benefits recognized in 2013 included the impact of refunds claimed for 2008 through 2013.

LIQUIDITY AND CAPITAL RESOURCES

Cash Requirements

We have historically met our funding requirements with cash generated by our ongoing operations. While our cost structure is fixed in the short term, our sources of operating cash are largely dependent on contract trading volume levels. We believe that our existing cash, cash equivalents, marketable securities and cash generated from operations will be sufficient to cover our working capital needs, capital expenditures and other commitments. However, it is possible that we may need to raise additional funds to finance our activities through issuances of commercial paper, future public debt offerings or by direct borrowings from financial institutions through our committed revolving credit facilities.

Cash will also be required for operating leases and non-cancellable purchase obligations as well as other obligations reflected as long-term liabilities in our consolidated balance sheet at December 31, 2015. These were as follows:

(in millions)	Operating Leases	Purchase Obligations	Debt Obligations	Other Long-Term Liabilities	Total(1)
Year					
2016	$ 50.2	$ 10.7	$ 84.7	$ 44.1	$ 189.7
2017-2018	89.4	19.9	169.6	—	278.9
2019-2020	86.9	2.1	169.5	—	258.5
Thereafter	182.8	1.4	3,310.5	—	3,494.7
Total	$ 409.3	$ 34.1	$ 3,734.3	$ 44.1	$ 4,221.8

(1) The liability for gross unrecognized income tax benefits, including interest and penalties, of $226.4 million for uncertain tax positions are not included in the table due to uncertainty about the date of their settlement.

Operating leases include rent payments for office space in Chicago, New York and other smaller offices in the United States and in various foreign countries. The operating lease for our headquarters in Chicago expires in November 2022. Annual minimum rental payments under this lease range from $11.9 million to $13.5 million. We also maintain operating leases for additional office spaces in Chicago, which expire in November 2023 and April 2027. Annual minimum rental payments under these leases range from $5.5 million to $6.2 million and $3.2 million to $4.3 million, respectively. The operating lease for our office space in New York expires in December 2028. Annual minimum rental payments under this lease range from $13.1 million to $14.5 million.

Purchase obligations include minimum payments due under agreements to advertising, licensing, hardware, software and maintenance as well as telecommunication services. Debt obligations include repayment of principal and interest associated with the debt obligations. Other long-term liabilities include funding obligations for other post-retirement benefit plans.

Future capital expenditures for technology are anticipated as we continue to support our growth through increased system capacity, performance improvements as well as improvements to some of our office spaces. Each year, capital expenditures are incurred for improvements to and expansion of our offices, remote data centers, telecommunications network and other operating equipment. In 2016, we expect capital expenditures to total approximately $115.0 million to $120.0 million. We continue to monitor our capital needs and may revise our forecasted expenditures as necessary in the future.

We intend to continue to pay a regular quarterly dividend to our shareholders, which is set at between 50% to 60% of the prior year's cash earnings. The decision to pay a dividend and the amount of the dividend, however, remains within the discretion of our board of directors and may be affected by various factors, including our earnings, financial condition, capital requirements, levels of indebtedness and other considerations our board of directors deems relevant. CME Group is also required to comply with restrictions contained in the general corporation laws of its state of incorporation, which could also limit its ability to declare and pay dividends. On February 3, 2016, the board of directors declared a regular quarterly dividend of $0.60 per share. The dividend will be payable on March 28, 2016 to shareholders of record on March 10, 2016. Assuming no changes in the number of shares outstanding, the first quarter dividend payment will total approximately $202.0 million. The board of directors also declared an additional, annual variable dividend of $2.90 per share on December 9, 2015 paid on January 12, 2016 to the shareholders of record on December 28, 2015. In general, the amount of the annual variable dividend will be determined by the end of each year, and the level will increase or decrease from year to year based on operating results, potential merger and acquisition activity and other forms of capital return including regular dividends and share buybacks during the prior year.

Sources and Uses of Cash

The following is a summary of cash flows from operating, investing and financing activities.

				Year-over-Year Change	
(dollars in millions)	**2015**	**2014**	**2013**	**2015-2014**	**2014-2013**
Net cash provided by operating activities	$ 1,515.3	$ 1,291.4	$ 1,280.5	17 %	1%
Net cash provided by (used in) investing activities	17.9	(199.1)	190.5	n.m.	n.m.
Net cash used in financing activities	(1,206.7)	(2,195.9)	(606.0)	(45)	n.m.

n.m. not meaningful

Operating activities

Net cash provided by operating activities increased in 2015 when compared with 2014 largely due to increases in clearing and transaction fees and market data revenues in 2015.

Net cash provided by operating activities remained relatively flat in 2014 when compared with 2013. An increase in cash provided by operating activities due to increased volume was offset by a decrease in net cash provided by operating activities resulting from higher payments of accrued expenses in 2014 when compared with 2013. We paid a higher bonus in 2014 when compared with the bonus payment in 2013. Additionally, we had higher payments in 2014 for legal and other consulting services, primarily related to remediation efforts for an information security breach that occurred in 2013.

Investing activities

The increase in cash provided by investing activities in 2015 when compared with 2014 was due to proceeds from the sale of BM&FBOVESPA shares in 2015. This increase was partially offset by additional investments in business ventures in 2014.

The increase in cash used in investing activities in 2014 when compared with 2013 was largely due to proceeds from the sale of a building in New York and the settlement of a derivative contract related to our debt offering in 2013. In addition, there were additional investments in business ventures in 2014, which contributed to the increase in cash used in investing activities in 2014 when compared with 2013.

Financing activities

The decrease in cash used in financing activities in 2015 when compared with 2014 was largely due to the proceeds received from the issuance of the $750.0 million fixed rate notes in March 2015.

Cash used in financing activities was higher in 2014 when compared with 2013. The increase in cash used was attributable to an increase in cash dividends of $0.9 billion in 2014 when compared with 2013. The annual variable dividend from 2013 operations was paid in the first quarter of 2014. The annual variable dividend from 2012 operations was paid in the fourth quarter of 2012 instead of the first quarter of 2013 due to uncertainty surrounding dividend income tax treatment beginning in 2013. The increase in cash used was also due to the repayment of the fixed rate notes due February 2014.

Debt Instruments

The following table summarizes our debt outstanding as of December 31, 2015:

(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 September 2043, stated rate of 5.30% (3)	750.0

(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 on the notes 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 on the notes 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%.

We maintain a $2.3 billion multi-currency revolving senior credit facility with various financial institutions, which matures in March 2020. The proceeds from this facility can be used for general corporate purposes, which includes providing liquidity for our clearing houses 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 December 31, 2014, 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. CME clearing firm guaranty fund contributions received in the form of cash or U.S. Treasury securities as well as the performance bond assets of a defaulting firm can be used to collateralize the facility. At December 31, 2015, guaranty funds available to collateralize the facility totaled $6.4 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 December 31, 2015, we have excess borrowing capacity for general corporate purposes of approximately $2.3 billion under our multi-currency revolving senior credit facilities.

At December 31, 2015, we were in compliance with the various covenant requirements of all our debt facilities.

CME Group, as a holding company, has no operations of its own. Instead, it relies on dividends declared and paid to it by its subsidiaries in order to provide a portion of 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 letters of credit. At December 31, 2015, we had pledged letters of credit totaling $610.0 million.

The following table summarizes our credit ratings as of December 31, 2015:

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.

Off-Balance Sheet Arrangements

As of December 31, 2015, we did not have any off-balance sheet arrangements as defined by the regulations of the Securities and Exchange Commission.

Liquidity and Cash Management

Cash and cash equivalents totaled $1.7 billion at December 31, 2015 and $1.4 billion at December 31, 2014. 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 or U.S. government agency securities. 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.

Our practice is to have our pension plan 100% funded at each year end on a projected benefit obligation basis, while also satisfying any minimum required contribution and obtaining the maximum tax deduction. Based on our actuarial projections, we estimate that an $11.7 million contribution in 2016 will allow us to meet our funding goal. However, the amount of the actual contribution is contingent on the actual rate of return on our plan assets during 2016 and the December 31, 2016 discount rate.

Regulatory Requirements

CME is regulated by the U.S. Commodity Futures Trading Commission (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 DCO under Title VIII of Dodd-Frank. As a result, CME must comply with the requirements for financial resources and liquidity resources. CME is in compliance with all DCO financial requirements.

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

ITEM 7A. 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.

Interest Rate Risk

Debt outstanding at December 31, 2015 consisted of fixed-rate borrowings of $2.2 billion. Changes in interest rates impact the fair values of fixed-rate debt, but do not impact earnings or cash flows. We did not have any variable-rate borrowings at December 31, 2015.

Credit Risk

Our clearing houses act as the counterparties to all trades consummated on our exchanges as well as through third-party exchanges and swaps markets for which we provide clearing services. As a result, we are exposed to significant credit risk of third parties, including clearing firms. We are also exposed, indirectly, to the credit risk of customers of our clearing firms. These parties may default on their obligations due to bankruptcy, lack of liquidity, operational failure or other reasons.

In order to ensure performance, we establish and monitor financial requirements for our clearing firms. We set minimum performance bond requirements for exchange-traded and swaps products, including interest rate swaps and credit default swaps. For CME and CMECE clearing firms, we establish performance bond requirements to cover at least 99% of expected price changes for a given product within a given historical period with further quantitative and qualitative considerations based on market risk. We establish haircuts applied to collateral deposited to meet performance bond requirements to cover at least 99% of expected price changes and foreign currency changes for a given asset within a given historical period with further quantitative and qualitative considerations. Haircuts vary depending on the type of collateral and maturity. We mark-to-market open positions of CME and CMECE clearing firms at least once a day (twice a day for futures and options contracts) and require payment from clearing firms whose positions have lost value and make payments to clearing firms whose positions have gained value. We have the capability to mark-to-market more frequently as market conditions warrant. These practices allow our clearing houses to quickly identify any clearing firms that may not be able to satisfy the financial obligations resulting from changes in the prices of their open positions before those financial obligations become exceptionally large and jeopardize the ability of our clearing houses to ensure performance of their open positions.

Although we have policies and procedures to help ensure that our clearing firms can satisfy their obligations, these policies and procedures may not succeed in detecting problems or preventing defaults. We also have in place various measures intended to enable us to cover any default and maintain liquidity.

Despite our safeguards, we cannot assure you that these measures will be sufficient to protect us from a default or that we will not be materially and adversely affected in the event of a significant default.

CME Clearing

We maintain three separate financial safeguard packages for CME Clearing member firms:

- a financial safeguard package for all futures and options contracts other than cleared interest rate swap and credit default swap contracts (base package);
- a financial safeguard package for cleared interest rate swap contracts; and
- a financial safeguard package for cleared credit default swap contracts.

In the unlikely event of a payment default by a clearing firm, we would first apply assets of the defaulting clearing firm to satisfy its payment obligation. These assets include the defaulting firm's guaranty fund contributions, performance bonds and any other available assets, such as assets required for membership and any associated trading rights. In addition, we would make a demand for payment pursuant to any applicable guarantee provided to us by the parent company of the clearing firm. Thereafter, if the payment default remains unsatisfied, we would use our corporate contributions designated for the respective financial safeguard package. We would then use guaranty fund contributions of other clearing firms within the respective financial safeguard package and funds collected through an assessment against solvent clearing firms within the respective financial safeguard package to satisfy the deficit.

We maintain a $7.0 billion 364-day multi-currency line of credit with a consortium of domestic and international banks to be used in certain situations by CME Clearing. We have the option to request an increase in the line from $7.0 billion to $10.0 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 of the collateral) or in the event of a temporary disruption with the payments systems that would delay payment of settlement variation between us and our clearing firms. The credit agreement requires us to pledge certain assets to the line of credit custodian prior to drawing on the line of credit. Pledged assets may include clearing firm guaranty fund deposits held by us in the form of cash or U.S. Treasury securities. Performance bond collateral of a defaulting clearing firm may also be used to secure a draw on the line. In addition to the 364-day multi-currency line of credit, we also have the option to use our $2.3 billion multi-currency revolving senior credit facility to provide liquidity for our clearing houses in the unlikely event of default.

At December 31, 2015, aggregate performance bond deposits for clearing firms for all three CME financial safeguard packages was $128.1 billion, including $33.5 billion of cash performance bond deposits and $2.6 billion of letters of credit. A defaulting firm's performance bond deposits can be used in the event of default of that clearing firm.

The following shows the available assets at December 31, 2015 in the event of a payment default by a clearing firm for the base financial safeguard package after first utilizing the defaulting firm's available assets:

(in millions)	CME Clearing Available Assets
Designated corporate contributions for futures and options[1]	$ 100.0
Guaranty fund contributions[2]	2,866.2
Minimum assessment powers[3]	7,882.1
Minimum Total Assets Available for Default[4]	$ 10,848.3

(1) CME Clearing designates $100.0 million of corporate contributions to satisfy a clearing firm default in the event that the defaulting clearing firm's guaranty contributions and performance bonds do not satisfy the deficit.
(2) Guaranty fund contributions of clearing firms include guaranty fund contributions required of clearing firms, but do not include any excess deposits held by us at the direction of clearing firms.
(3) In the event of a clearing firm default, if a loss continues to exist after the utilization of the assets of the defaulted firm, our designated corporate contribution and the non-defaulting clearing firms' guaranty fund contributions, we would assess all non-defaulting clearing members as provided in the rules governing the guaranty fund. We would assess a minimum of 275% of their existing guaranty fund requirements up to a maximum of 550% of their existing guaranty fund requirements as provided in the rules.
(4) Represents the aggregate minimum resources available to satisfy any obligations not met by a defaulting firm subsequent to the liquidation of the defaulting firm's performance bond collateral.

The following shows the available assets for the interest rate swap financial safeguard package at December 31, 2015 in the event of a payment default by a clearing firm that clears interest rate swap contracts, after first utilizing the defaulting firm's available assets:

(in millions)	CME Clearing Available Assets
Designated corporate contributions for interest rate swap contracts[1]	$ 150.0
Guaranty fund contributions[2]	2,915.9
Minimum assessment powers[3]	1,494.5
Minimum Total Assets Available for Default[4]	$ 4,560.4

(1) CME Clearing designates $150.0 million of corporate contributions to satisfy a clearing firm default in the event that the defaulting clearing firm's guaranty contributions and performance bonds do not satisfy the deficit.
(2) Guaranty fund contributions of clearing firms for interest rate swap contracts include guaranty fund contributions required of those clearing firms.
(3) In the event of a clearing firm default, if a loss continues to exist after the utilization of the assets of the defaulted firm, our corporate contribution and the non-defaulting firms' guaranty fund contributions, we would assess all non-defaulting clearing members as provided in the rules governing the interest rate swap guaranty fund.
(4) Represents the aggregate minimum resources available to satisfy any obligations not met by a defaulting firm subsequent to the liquidation of the defaulting firm's performance bond collateral.

The following shows the available assets for the credit default swap financial safeguard package at December 31, 2015 in the event of a payment default by a clearing firm that clears credit default swap contracts, after first utilizing the defaulting firm's available assets:

(in millions)	CME Clearing Available Assets
Designated corporate contributions for credit default swap contracts[1]	$ 50.0
Guaranty fund contributions[2]	650.0
Minimum assessment powers[3]	101.1
Minimum Total Assets Available for Default[4]	$ 801.1

(1) CME Clearing designates corporate contributions to satisfy a clearing firm default in the event that the defaulting clearing firm's guaranty contributions and performance bonds do not satisfy the deficit. The working capital contributed by us would be equal to the greater of $50.0 million and 5% of the credit default swap guaranty fund, up to a maximum of $100.0 million.
(2) Guaranty fund contributions of clearing firms for credit default swap contracts include guaranty fund contributions required of those clearing firms.

(3) In the event of a clearing firm default, if a loss continues to exist after the utilization of the assets of the defaulted firm, our corporate contribution and the non-defaulting firms' guaranty fund contributions, we would assess all non-defaulting clearing members as provided in the rules governing the credit default swap guaranty fund.

(4) Represents the aggregate minimum resources available to satisfy any obligations not met by a defaulting firm subsequent to the liquidation of the defaulting firm's performance bond collateral.

CMECE

We maintain two separate financial safeguard packages for CMECE Clearing member firms:

- a financial safeguard package for CMECE commodity and foreign exchange clearing firms and
- a financial safeguard package for CMECE interest rate swap clearing firms.

Under the financial safeguard package for CMECE commodity and foreign exchange clearing firms, we would first apply assets of the defaulting clearing firm to satisfy its payment obligations in the unlikely event of default by a CMECE clearing firm. These assets include the defaulting firm's performance bonds and guaranty fund contributions. Thereafter, if the default remains unsatisfied after first applying assets of the defaulting clearing firm to satisfy its payment obligation, we would use guaranty fund contributions of $52.0 million from CMECE funds. Clearing firms' contributions to the commodity and foreign exchange guaranty fund totaled $10.6 million at December 31, 2015. Once clearing firms fully contribute to the guaranty fund, we would use at least $20.0 million of CMECE funds in addition to the clearing firms' guaranty fund contributions in the event of a default of a commodity or foreign exchange clearing firm.

We also maintain a financial safeguard package for CMECE interest rate swap clearing firms. In the unlikely event of default by a CMECE clearing firm, we would first apply assets of the defaulting clearing firm to satisfy its payment obligations. These assets include the defaulting firm's performance bonds and guaranty fund contributions. If the default remains unsatisfied, we would apply guaranty fund contributions of $48.2 million that will be contributed by CMECE. The interest rate swap clearing firms' contributions to the interest rate swap guaranty fund totaled $94.9 million at December 31, 2015.

Aggregate cash performance bond deposits for CMECE clearing firms for the commodity and foreign exchange clearing firms and interest rate swap clearing firms were $55.6 million at December 31, 2015. There were no non-cash performance bonds on deposit at December 31, 2015.

Foreign Currency Exchange Rate Risk

Foreign Currency Transaction Risk

We have foreign currency transaction risk related to changes in exchange rates on British pound cash balances held at subsidiaries with a U.S. dollar functional currency. Gains and losses on foreign currency transactions result when subsidiaries with a U.S. dollar functional currency hold cash as well as certain other assets and liabilities denominated in foreign currencies. During 2015, the exchange rate between the British pound and the U.S. dollar fluctuated from a high of $1.59 per pound to a low of $1.46 per pound. Aggregate transaction gains (losses) for 2015, 2014 and 2013 were $(11.3) million, $(15.4) million and $5.4 million, respectively. We expect the foreign currency gain/loss to continue to fluctuate as long as we continue to hold cash as well as certain assets and liabilities at those subsidiaries.

Foreign Currency Translation Risk

We have foreign currency translation risk related to the translation of our foreign subsidiaries' assets and liabilities from their respective functional currencies to the U.S. dollar at each reporting date. Fluctuations in exchange rates may impact the amount of assets and liabilities we report in our consolidated balance sheets. The financial statements of certain of our foreign subsidiaries are denominated in various currencies and are translated into U.S. dollars using a current exchange rate. Gains and losses resulting from this translation are recognized as a foreign currency translation adjustment within accumulated other comprehensive income, which is a component of shareholders' equity and comprehensive income. Aggregate translation gains (losses), net of tax, for 2015, 2014 and 2013 were $(6.6) million, $(3.1) million and $(0.5) million, respectively.

Foreign Currency Risk Related to Equity Investments

We are also exposed to foreign currency exchange rate risk related to certain equity investments as discussed in the Equity Price Risk section below.

Foreign Currency Exchange Risk Related to Customer Collateral

A portion of performance bond deposits is denominated in foreign currency. We mark-to-market all deposits daily and require payment from clearing firms whose collateral has lost value due to changes in foreign currency rates and price. Therefore, our exposure to foreign currency risk related to performance bond deposits is considered minimal and is not expected to be material to our financial condition or operating results.

Equity Price Risk

We hold certain investments in equity securities for strategic purposes. Publicly-traded equity investments are recorded at their fair value and are based on quoted market prices. Fair values are subject to fluctuation and, consequently, the amount realized in the subsequent sale of an investment may differ significantly from its current reported value. Fluctuations in the market price of a security may result from perceived changes in the underlying economic characteristics of the issuer, the relative price of alternative investments and general market conditions.

The table below summarizes equity investments that are subject to equity price fluctuations at December 31, 2015. Equity investments are included in other assets in our consolidated balance sheets.

(in millions)	Cost Basis	Fair Value	Carrying Value	Unrealized Gain (Loss), Net of Tax
BM&FBOVESPA S.A. [1]	$ 258.4	$ 199.1	$ 199.1	$ (91.7)
Bolsa Mexicana de Valores, S.A.B. de C.V.	17.3	15.5	15.5	(2.9)

(1) Substantially all of the difference between the cost basis and fair value of the investment as of December 31, 2015 represents previous changes in foreign currency exchange rates that are suspended in accumulated other comprehensive income and released into current operations as the investment is sold.

We do not currently hedge against equity price risk. Equity investments are assessed for other-than-temporary impairment on a quarterly basis.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

CME GROUP INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

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

	December 31,	
	2015	**2014**
Assets		
Current Assets:		
Cash and cash equivalents	$ 1,692.6	$ 1,366.1
Marketable securities	72.5	74.7
Accounts receivable, net of allowance of $1.9 and $1.2	357.8	341.2
Other current assets (includes $32.0 and $37.0 in restricted cash)	228.6	196.5
Performance bonds and guaranty fund contributions	35,553.0	40,566.8
Total current assets	37,904.5	42,545.3
Property, net	491.7	508.9
Intangible assets—trading products	17,175.3	17,175.3
Intangible assets—other, net	2,537.9	2,637.4
Goodwill	7,569.0	7,569.0
Other assets (includes $70.5 and $72.4 in restricted cash)	1,693.1	1,805.6
Total Assets	$ 67,371.5	$ 72,241.5
Liabilities and Equity		
Current Liabilities:		
Accounts payable	$ 28.7	$ 36.9
Other current liabilities	1,242.8	927.5
Performance bonds and guaranty fund contributions	35,553.0	40,566.8
Total current liabilities	36,824.5	41,531.2
Long-term debt	2,241.4	2,107.9
Deferred income tax liabilities, net	7,358.3	7,302.7
Other liabilities	395.5	376.2
Total Liabilities	46,819.7	51,318.0
Shareholders' Equity:		
Preferred stock, $0.01 par value, 10,000 shares authorized as of December 31, 2015 and 2014; none issued	—	—
Class A common stock, $0.01 par value, 1,000,000 shares authorized as of December 31, 2015 and 2014, 336,938 and 335,452 shares issued and outstanding as of December 31, 2015 and 2013, respectively	3.4	3.4
Class B common stock, $0.01 par value, 3 shares authorized, issued and outstanding as of December 31, 2015 and 2014	—	—
Additional paid-in capital	17,721.6	17,596.6
Retained earnings	2,907.6	3,317.3
Accumulated other comprehensive income (loss)	(80.8)	6.2
Total shareholders' equity	20,551.8	20,923.5
Total Liabilities and Equity	$ 67,371.5	$ 72,241.5

See accompanying notes to consolidated financial statements.

CME GROUP INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF INCOME

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

	Year Ended December 31, 2015	2014	2013
Revenues			
Clearing and transaction fees	$ 2,783.9	$ 2,616.3	$ 2,460.4
Market data and information services	399.4	356.3	315.4
Access and communication fees	86.1	82.7	83.2
Other	57.4	57.2	77.3
Total Revenues	3,326.8	3,112.5	2,936.3
Expenses			
Compensation and benefits	553.7	552.1	518.9
Communications	27.8	32.0	35.3
Technology support services	64.5	58.2	53.6
Professional fees and outside services	122.8	129.0	130.3
Amortization of purchased intangibles	99.4	100.6	103.0
Depreciation and amortization	129.2	132.6	135.1
Occupancy and building operations	92.5	96.8	78.3
Licensing and other fee agreements	123.8	114.2	97.9
Other	124.4	128.6	146.9
Total Expenses	1,338.1	1,344.1	1,299.3
Operating Income	1,988.7	1,768.4	1,637.0
Non-Operating Income (Expense)			
Investment income	30.1	35.8	44.9
Gains (losses) on derivative investments	(1.8)	—	—
Interest and other borrowing costs	(117.4)	(119.4)	(151.4)
Equity in net earnings (losses) of unconsolidated subsidiaries	100.0	84.8	70.5
Other non-operating income (expense)	(42.8)	1.8	—
Total Non-Operating	(31.9)	3.0	(36.0)
Income before Income Taxes	1,956.8	1,771.4	1,601.0
Income tax provision	709.8	644.5	622.9
Net Income	1,247.0	1,126.9	978.1
Less: net income (loss) attributable to non-controlling interests	—	(0.2)	1.3
Net Income Attributable to CME Group	$ 1,247.0	$ 1,127.1	$ 976.8
Earnings per Common Share Attributable to CME Group:			
Basic	$ 3.71	$ 3.37	$ 2.94
Diluted	3.69	3.35	2.92
Weighted Average Number of Common Shares:			
Basic	336,224	334,409	332,678
Diluted	337,894	336,063	334,398

See accompanying notes to consolidated financial statements.

CME GROUP INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(in millions)

	Year Ended December 31,		
	2015	2014	2013
Net income	$ 1,247.0	$ 1,126.9	$ 978.1
Other comprehensive income, net of tax:			
Investment securities:			
Net unrealized holding gains (losses) arising during the period	(78.0)	(116.6)	(221.0)
Reclassification of gains (losses) on sale included in investment income	8.5	—	(0.7)
Income tax benefit (expense)	(2.6)	(5.2)	63.9
Investment securities, net	(72.1)	(121.8)	(157.8)
Defined benefit plans:			
Net change in defined benefit plans arising during the period	(11.2)	(30.0)	28.4
Amortization of net actuarial (gains) losses and prior service costs included in compensation and benefits expense	2.7	0.3	3.2
Income tax benefit (expense)	3.2	11.2	(12.0)
Defined benefit plans, net	(5.3)	(18.5)	19.6
Derivative investments:			
Net unrealized holding gains (losses) arising during the period	(4.7)	(2.3)	128.8
Ineffectiveness on cash flow hedges	1.8	—	—
Amortization of effective portion of net (gains) losses on cash flow hedges included in interest expense	(1.2)	(1.5)	1.6
Income tax benefit (expense)	1.1	1.4	(49.0)
Derivative investments, net	(3.0)	(2.4)	81.4
Foreign currency translation:			
Foreign currency translation adjustments	(10.6)	(5.2)	(0.8)
Income tax benefit (expense)	4.0	2.1	0.3
Foreign currency translation, net	(6.6)	(3.1)	(0.5)
Other comprehensive loss, net of tax	(87.0)	(145.8)	(57.3)
Comprehensive income	1,160.0	981.1	920.8
Less: comprehensive income attributable to non-controlling interests	—	(0.2)	1.3
Comprehensive Income Attributable to CME Group	$ 1,160.0	$ 981.3	$ 919.5

See accompanying notes to consolidated financial statements.

CME GROUP INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF EQUITY

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

	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 CME Group Shareholders' Equity	Non-controlling Interest	Total Shareholders' Equity
Balance at December 31, 2012	331,832	3	$ 17,216.4	$ 3,993.4	$ 209.3	$ 21,419.1	$ 5.8	$ 21,424.9
Net income attributable to CME Group and non-controlling interest				976.8		976.8	(0.1)	976.7
Other comprehensive income attributable to CME Group					(57.3)	(57.3)		(57.3)
Dividends on common stock of $4.40 per share				(1,475.6)		(1,475.6)		(1,475.6)
Tax effect and gain related to purchase of non-controlling interest			167.9			167.9		167.9
Exercise of stock options	1,532		73.7			73.7		73.7
Excess tax benefits from option exercises and restricted stock vesting			6.8			6.8		6.8
Vesting of issued restricted Class A common stock	442		(14.4)			(14.4)		(14.4)
Shares issued to Board of Directors	27		2.1			2.1		2.1
Shares issued under Employee Stock Purchase Plan	19		1.3			1.3		1.3
Stock-based compensation			54.4			54.4		54.4
Balance at December 31, 2013	333,852	3	$ 17,508.2	$ 3,494.6	$ 152.0	$ 21,154.8	$ 5.7	$ 21,160.5

See accompanying notes to consolidated financial statements.

CME GROUP INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF EQUITY (continued)
(dollars in millions, except per share data; shares in thousands)

	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 CME Group Shareholders' Equity	Non-controlling Interest	Total Shareholders' Equity
Balance at December 31, 2013	333,852	3	$ 17,508.2	$ 3,494.6	$ 152.0	$ 21,154.8	$ 5.7	$ 21,160.5
Net income attributable to CME Group and non-controlling interest				1,127.1		1,127.1	(0.2)	1,126.9
Other comprehensive income attributable to CME Group					(145.8)	(145.8)		(145.8)
Dividends on common stock of $3.88 per share				(1,304.4)		(1,304.4)		(1,304.4)
Tax effect and gain related to purchase of non-controlling interests			(7.8)			(7.8)	(5.5)	(13.3)
Exercise of stock options	1,031		53.3			53.3		53.3
Excess tax benefits from option exercises and restricted stock vesting			4.0			4.0		4.0
Vesting of issued restricted Class A common stock	511		(16.7)			(16.7)		(16.7)
Shares issued to Board of Directors	34		2.4			2.4		2.4
Shares issued under Employee Stock Purchase Plan	24		1.8			1.8		1.8
Stock-based compensation			54.8			54.8		54.8
Balance at December 31, 2014	335,452	3	$ 17,600.0	$ 3,317.3	$ 6.2	$ 20,923.5	$ —	$ 20,923.5

See accompanying notes to consolidated financial statements.

CME GROUP INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF EQUITY (continued)
(dollars in millions, except per share data; shares in thousands)

	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, 2014	335,452	3	$ 17,600.0	$ 3,317.3	$ 6.2	$ 20,923.5
Net income attributable to CME Group and non-controlling interest				1,247.0		1,247.0
Other comprehensive income attributable to CME Group					(87.0)	(87.0)
Dividends on common stock of $4.90 per share				(1,656.7)		(1,656.7)
Tax effect related to prior year purchase of non-controlling interest			9.3			9.3
Exercise of stock options	984		64.0			64.0
Excess tax benefits from option exercises and restricted stock vesting			3.8			3.8
Vesting of issued restricted Class A common stock	456		(17.2)			(17.2)
Shares issued to Board of Directors	26		2.4			2.4
Shares issued under Employee Stock Purchase Plan	20		1.9			1.9
Stock-based compensation			60.8			60.8
Balance at December 31, 2015	336,938	3	$ 17,725.0	$ 2,907.6	$ (80.8)	$ 20,551.8

See accompanying notes to consolidated financial statements.

CME GROUP INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions)

	Year Ended December 31,		
	2015	**2014**	**2013**
Cash Flows from Operating Activities			
Net income	$ 1,247.0	$ 1,126.9	$ 978.1
Adjustments to reconcile net income to net cash provided by operating activities:			
Stock-based compensation	60.8	54.8	54.4
Amortization of purchased intangibles	99.4	100.6	103.0
Depreciation and amortization	129.2	132.6	135.1
Loss on sale of BM&FBOVESPA shares	8.5	—	—
Debt prepayment costs	61.8	—	—
Loss on sale of NYMEX building property	—	—	27.1
Undistributed earnings, net of losses, of unconsolidated subsidiaries	(5.1)	(8.6)	(2.0)
Deferred income taxes	63.3	78.9	(6.0)
Change in:			
Accounts receivable	(17.3)	(38.5)	(35.5)
Other current assets	(12.7)	3.7	(2.6)
Other assets	(4.0)	(11.5)	0.6
Accounts payable	(8.2)	0.7	(5.5)
Income taxes payable	(82.1)	(105.6)	(9.3)
Other current liabilities	(21.1)	(46.1)	42.5
Other liabilities	(9.8)	(2.8)	(5.5)
Other	5.6	6.3	6.1
Net Cash Provided by Operating Activities	1,515.3	1,291.4	1,280.5
Cash Flows from Investing Activities			
Proceeds from maturities and sales of available-for-sale marketable securities	38.3	37.5	36.5
Purchases of available-for-sale marketable securities	(35.3)	(38.3)	(36.6)
Purchases of property, net	(114.2)	(140.7)	(125.6)
Proceeds from sale of building properties	—	7.9	192.4
Investments in business ventures	(16.7)	(65.5)	(4.0)
Proceeds from sale of BM&FBOVESPA shares	138.8	—	—
Settlement of derivative related to debt issuance	7.0	—	127.8
Net Cash Provided by (Used in) Investing Activities	17.9	(199.1)	190.5

See accompanying notes to consolidated financial statements.

CME GROUP INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS (continued)
(in millions)

	Year Ended December 31,		
	2015	2014	2013
Cash Flows from Financing Activities			
Proceeds from other borrowings, net of issuance costs	743.7	—	748.7
Repayment of other borrowings	(673.0)	(750.0)	(750.0)
Cash dividends	(1,343.4)	(1,496.8)	(599.1)
Proceeds from exercise of stock options	64.0	53.3	73.7
Purchase of non-controlling interest	—	(4.7)	(80.0)
Excess tax benefits related to employee option exercises and restricted stock vesting	7.1	4.0	6.8
Settlement of contingent consideration	(7.0)	(3.6)	(7.3)
Other	1.9	1.9	1.2
Net Cash Used in Financing Activities	(1,206.7)	(2,195.9)	(606.0)
Net change in cash and cash equivalents	326.5	(1,103.6)	865.0
Cash and cash equivalents, beginning of period	1,366.1	2,469.7	1,604.7
Cash and Cash Equivalents, End of Period	$ 1,692.6	$ 1,366.1	$ 2,469.7
Supplemental Disclosure of Cash Flow Information			
Income taxes paid	$ 716.6	$ 641.5	$ 612.2
Interest paid	89.1	111.4	133.4
Non-cash financing activities:			
Declaration of annual variable dividend, payable in January 2016, January 2015 and January 2014	977.1	670.9	868.0

See accompanying notes to consolidated financial statements.

CME GROUP INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. ORGANIZATION AND BUSINESS

Chicago Mercantile Exchange Inc. (CME), the Board of Trade of the City of Chicago, Inc. (CBOT), New York Mercantile Exchange, Inc. (NYMEX) and Commodity Exchange, Inc. (COMEX), wholly-owned subsidiaries of CME Group Inc. (CME Group), are designated contract markets for the trading of futures and options on futures contracts. CME, CBOT, NYMEX, COMEX, CME Clearing Europe Limited (CMECE) and CME Europe Limited (CME Europe) and their subsidiaries are referred to collectively as “the exchange” in the notes to the consolidated financial statements. CME Group and its subsidiaries are referred to collectively as “the company” in the notes to the consolidated financial statements.

CME Group offers a wide range of products for trading and/or clearing, including those based on interest rates, credit default, equities, foreign exchange, agricultural commodities, energy and metals. Trades are executed through CME Group's electronic trading platforms, open outcry and privately negotiated transactions. Through its clearing houses, CME Group offers clearing, settlement and guarantees for all products cleared through the exchange.

CBOT acquired The Board of Trade of Kansas City, Missouri, Inc. (KCBT) and its subsidiaries, the Kansas City Board of Trade Clearing Corporation (KCBTCC) and the Board of Trade Investment Company (BOTIC), on November 30, 2012. KCBT maintained a 51% controlling interest in BOTIC, resulting in a nonredeemable non-controlling interest included in the company's consolidated statements of equity. In April 2013, KCBTCC was integrated into our U.S. clearing operations. As of December 2013, KCBT was no longer regulated as a designated contract market and its operations were transferred to CBOT. The company purchased the non-controlling interest in BOTIC in June 2014.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation. The accompanying consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States and include the accounts of the company and its majority-owned subsidiaries. All intercompany transactions and balances have been eliminated.

Use of Estimates. The preparation of consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts and the disclosure of contingent amounts in the consolidated financial statements and accompanying notes. Estimates are based on historical experience, where applicable, and assumptions management believes are reasonable under the circumstances. Due to the inherent uncertainty involved with estimates, actual results may differ.

Cash and Cash Equivalents. Cash and cash equivalents consist of cash and highly liquid investments with a maturity of three months or less at the time of purchase.

Financial Investments. The company maintains short-term and long-term investments, classified as available-for-sale or trading securities. Available-for-sale investments are carried at their fair value, with unrealized gains and losses, net of deferred income taxes, reported as a component of accumulated other comprehensive income. Trading securities held in connection with non-qualified deferred compensation plans are recorded at fair value, with net realized and unrealized gains and losses and dividend income reported as investment income. Also, the company maintains long-term investments accounted for under the cost method and equity method, depending upon the degree of influence over the investee as held by the company.

The company reviews its investments to determine whether a decline in fair value below the cost basis is other-than-temporary. If events and circumstances indicate that a decline in the value of the assets has occurred and is deemed to be other-than-temporary, the carrying value of the investments is reduced to its fair value and a corresponding impairment is charged to earnings.

Fair Value of Financial Instruments. The company uses a three-level classification hierarchy of fair value measurements that establishes the quality of inputs used to measure fair value. The fair value of a financial instrument is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value of financial instruments is determined using various techniques that involve some level of estimation and judgment, the degree of which is dependent on the price transparency and the complexity of the instruments.

Derivative Investments. The company uses derivative instruments, designated as cash flow hedges, to limit exposure to changes in interest rates. Derivatives are recorded at fair value in the consolidated balance sheets. The effective portion of the changes in the fair value of cash flow hedges is deferred in accumulated other comprehensive income. Any realized gains and losses from effective hedges are classified as interest expense in the consolidated statements of income, and any ineffective or excluded portion of a hedge is recognized in earnings immediately.

Accounts Receivable. Accounts receivable are comprised of trade receivables and unbilled revenue including clearing and transaction fees and market data and information services revenue. All accounts receivable are stated at cost. Exposure to losses on receivables for clearing and transaction fees and other amounts owed by clearing firms is dependent on each clearing firm's financial condition and the memberships that collateralize fees owed to the exchange. The exchange retains the right to liquidate exchange memberships to satisfy a clearing firm's receivable. The allowance for doubtful accounts is calculated based on historical losses and management's assessment of probable future collections.

Performance Bonds and Guaranty Fund Contributions. Performance bonds and guaranty fund contributions held for clearing firms may be in the form of cash, securities or other non-cash deposits.

Performance bonds and guaranty fund contributions received in the form of cash held by CME and CMECE may be invested in U.S. government securities and certain foreign government securities acquired through and held by a bank or broker-dealer subsidiary of a bank, reverse repurchase agreements secured with highly rated government securities, money market funds or through CME's Interest Earning Facility (IEF) program. Any interest earned on CME investments accrues to CME and is included in investment income in the consolidated statements of income. CME and CMECE may distribute any interest earned on CME and CMECE investments to the clearing firms at their discretion. Because CME and CMECE have control of the cash collateral and the benefits and risks of ownership accrue to CME and CMECE, cash performance bonds and guaranty fund contributions are reflected in the consolidated balance sheets. Performance bonds and guaranty fund contributions assets on the consolidated balance sheets also include U.S. Treasury securities with maturity dates of 90 days or less. U.S. Treasury securities are purchased by CME, at its discretion, using cash collateral.

Securities and other non-cash deposits may include U.S. Treasury securities, U.S. government agency securities, Eurobonds, corporate bonds, other foreign government securities and gold bullion. Securities and other non-cash deposits are held in safekeeping by a custodian bank. Interest and gains or losses on securities deposited to satisfy performance bond and guaranty fund requirements accrue to the clearing firm. Because the benefits and risks of ownership accrue to the clearing firm, non-cash performance bonds and guaranty fund contributions are not reflected in the consolidated balance sheets.

Cash contributed by CMECE to its guaranty funds is classified as restricted cash and is included in other current assets and other assets in the consolidated balance sheets.

Property, Equipment and Leasehold Improvements. Property, equipment and leasehold improvements are stated at cost, less accumulated depreciation and amortization. Depreciation and amortization are calculated using the straight-line method, generally over two to thirty-nine years. Property and equipment are depreciated over their estimated useful lives. Leasehold improvements are amortized over the shorter of the remaining term of the respective lease to which they relate or the remaining useful life of the leasehold improvement. Land is reported at cost. Internal and external costs incurred in developing or obtaining computer software for internal use are capitalized and amortized on a straight-line basis over the estimated useful life of the software, generally two to four years.

Operating Leases. All leases in which the company is the tenant are accounted for as operating leases. Landlord allowances are recorded as a reduction to rent expense on a straight-line basis over the term of the lease.

Goodwill and Other Intangible Assets. Goodwill represents the excess of the purchase price over the fair value of the net assets acquired in a business combination. The company reviews goodwill and indefinite-lived intangible assets for impairment at least annually and whenever events or circumstances indicate that their carrying values may not be recoverable. The company may test goodwill quantitatively for impairment by comparing the carrying value of a reporting unit to its estimated fair value. Estimating the fair value of a reporting unit involves significant judgments inherent in the analysis including estimating the amount and timing of future cash flows and the selection of appropriate discount rates and long-term growth rate assumptions. Changes in these estimates and assumptions could materially affect the determination of fair value of the reporting unit. If the carrying amount exceeds fair value, impairment is recorded. In certain circumstances, goodwill may be reviewed qualitatively for indications of impairment without utilizing valuation techniques to estimate fair value.

The company evaluates the recoverability of indefinite-lived intangible assets by comparing the estimated fair value of the intangible asset to its carrying value. If the indefinite-lived intangible asset carrying value exceeds its fair value, an impairment loss is recognized in an amount equal to that excess. Estimating the fair value of indefinite-lived intangible assets involves the use of valuation techniques that rely on significant estimates and assumptions including forecasted revenue growth rates, forecasted allocations of expense and risk-adjusted discount rates. Changes in these estimates and assumptions could materially affect the determination of fair value for indefinite-lived intangible assets. In certain circumstances, indefinite-lived intangible assets may be reviewed qualitatively for indications of impairment without utilizing valuation techniques to estimate fair value.

Intangible assets subject to amortization are also assessed for impairment when indicated by a change in economic or operational circumstances. The impairment assessment of these assets requires management to first compare the book value of the amortizing asset to undiscounted cash flows. If the book value exceeds the undiscounted cash flows, management is then required to estimate the fair value of the assets and record an impairment loss for the excess of the carrying value over the fair value.

Business Combinations. The company accounts for business combinations using the acquisition method. The method requires the acquirer to recognize the assets acquired, liabilities assumed, and any non-controlling interest in the acquiree at the acquisition date, measured at their fair values as of that date. The company may use independent valuation services to assist in determining the estimated fair values.

Employee Benefit Plans. The company recognizes the funded status of defined benefit postretirement plans in its consolidated balance sheets. Changes in that funded status are recognized in the year of change in other comprehensive income (loss). Plan assets and obligations are measured at year end. The company recognizes future changes in actuarial gains and losses and prior service costs in the year in which the changes occur through other comprehensive income (loss).

Foreign Currency Translation. Foreign currency denominated assets and liabilities are re-measured into the functional currency using period-end exchange rates. Gains and losses from foreign currency transactions are included in other expense in the accompanying consolidated statements of income. When the functional currency differs from the reporting currency, revenues and expenses of foreign subsidiaries are translated from their functional currencies into U.S. dollars using weighted-average exchange rates while their assets and liabilities are translated into U.S. dollars using period-end exchange rates. Gains and losses resulting from foreign currency translations are included in accumulated other comprehensive income (loss) within shareholders' equity.

Revenue Recognition. Revenue recognition policies for specific sources of revenue are discussed below.

Clearing and Transaction Fees. Clearing and transaction fees include per-contract charges for trade execution, clearing, trading on the company's electronic trading platform and other fees. Fees are charged at various rates based on the product traded, the method of trade, the exchange trading privileges of the customer making the trade and the type of contract. Clearing and transaction fees are recognized as revenue when a buy and sell order are matched and the trade is cleared. Therefore, unfilled or canceled buy and sell orders have no impact on revenue. On occasion, the customer's exchange trading privileges may not be properly entered by the clearing firm and incorrect fees are charged for the transactions. When this information is corrected within the time period allowed by the exchange, a fee adjustment is provided to the clearing firm. A reserve is established for estimated fee adjustments to reflect corrections to customer exchange trading privileges. The reserve is based on the historical pattern of adjustments processed as well as specific adjustment requests. The company believes the allowances are adequate to cover estimated adjustments.

Market Data and Information Services. Market data and information services represent revenue earned for the dissemination of market information. Revenues are accrued each month based on the number of devices reported by vendors. The exchange conducts periodic examinations of the number of devices reported and assesses additional fees as necessary. On occasion, customers will pay for services in a lump sum payment; however, revenue is recognized as services are provided.

Access and Communication Fees. Access fees are the connectivity charges to customers of the company's electronic trading platform that are also used by market data vendors and customers. The fees include co-location fees, access fees for the electronic trading platform, line charges and hardware rental charges and can vary depending on the type of connection provided. An additional installation fee may be charged depending on the type of service requested and a disconnection fee may also be charged if certain conditions are met. Revenue is generally recognized monthly as the service is provided.

Communication fees consist of equipment rental and usage charges to customers and firms that utilize various telecommunications hubs located internationally as well as networks and services in the Chicago and New York City facilities. Revenue is billed and recognized on a monthly basis.

Other Revenues. Other revenues include processing services revenue, which is revenue generated from various strategic relationships, as well as management fees earned under the IEF programs. For processing services revenue and IEF revenue, revenue is recognized as services are provided.

Concentration of Revenue. One firm represented 13% of the company's clearing and transaction fees revenue in 2015 and one firm represented 12% of the company's clearing and transaction fees revenue in 2014. One firm represented 11% and one firm represented 10% of the company's clearing and transaction fees revenue in 2013. Should a clearing firm withdraw from the exchange, management believes that the customer portion of that firm's trading activity would likely transfer to another clearing firm. Therefore, management does not believe that the company is exposed to significant risk from the ongoing loss of revenue received from a particular clearing firm.

The two largest resellers of market data represented approximately 43% of market data and information services revenue in 2015, 44% in 2014, and 52% in 2013. Should one of these vendors no longer subscribe to the company's market data, management believes that the majority of that firm's customers would likely subscribe to the market data through another reseller. Therefore, management does not believe that the company is exposed to significant risk from a loss of revenue received from any particular market data reseller.

Share-Based Payments. The company accounts for share-based payments at fair value, which is based on the grant date price of the equity awards issued. The company recognizes expense relating to stock-based compensation on an accelerated basis. As a result, the expense associated with each vesting date within a stock grant is recognized over the period of time that each portion of that grant vests. The company estimates expected forfeitures of stock grants.

Marketing Costs. Marketing costs are incurred for the production and communication of advertising as well as other marketing activities. These costs are expensed when incurred, except for costs related to the production of broadcast advertising, which are expensed when the first broadcast occurs.

Income Taxes. Deferred income taxes arise from temporary differences between the tax basis and book basis of assets and liabilities. A valuation allowance is recognized if it is anticipated that some or all of a deferred tax asset may not be realized. The company accounts for uncertainty in income taxes recognized in its consolidated financial statements by using a more-likely-than-not recognition threshold based on the technical merits of the tax position taken or expected to be taken. The company classifies interest and penalties related to uncertain tax positions in income tax expense.

Segment Reporting. The company reports the results of its operations as one operating segment primarily comprised of CME, CBOT, NYMEX and COMEX. The remaining operations do not meet the thresholds for reporting separate segment information.

3. MARKETABLE SECURITIES

Available-for-Sale Securities. Certain marketable securities have been classified as available-for-sale. The amortized cost and fair value of these securities at December 31 were as follows:

	2015		2014	
(in millions)	Amortized Cost	Fair Value	Amortized Cost	Fair Value
U.S. Treasury securities	$ 16.1	$ 16.2	$ 19.1	$ 19.1
Asset-backed security	0.7	0.3	0.7	0.4
Equity securities	0.1	0.1	0.1	0.1
Total	$ 16.9	$ 16.6	$ 19.9	$ 19.6

Net unrealized gains (losses) on marketable securities classified as available-for-sale are reported as a component of other comprehensive income (loss) and included in the accompanying consolidated statements of comprehensive income and consolidated statements of equity.

The fair value and gross unrealized losses of the asset-backed security were $0.3 million and $0.4 million, respectively, at December 31, 2015. The asset-backed security was in an unrealized loss position for more than 12 months at December 31, 2015 and was deemed not to be other-than-temporarily impaired. The company does not intend to sell and is not required to sell this asset-backed security prior to maturity.

The amortized cost and fair value of the U.S. Treasury securities and asset-backed security at December 31, 2015, by contractual maturity, were as follows:

(in millions)	Amortized Cost	Fair Value
Maturity of one year or less	$ 16.1	$ 16.2
Maturity between one and five years	—	—
Maturity between five and ten years	—	—
Maturity greater than ten years	0.7	0.3
Total	$ 16.8	$ 16.5

Trading Securities. The company maintains additional investments in a diverse portfolio of mutual funds related to its non-qualified deferred compensation plans (note 11). The fair value of these securities was $55.9 million and $55.1 million at December 31, 2015 and 2014, respectively.

4. PERFORMANCE BONDS AND GUARANTY FUND CONTRIBUTIONS

The company operates two clearing houses: CME Clearing (a division of CME) and CMECE. The clearing houses clear and guarantee the settlement of contracts traded in their respective markets. In their guarantor roles, the clearing houses have precisely equal and offsetting claims to and from clearing firms on opposite sides of each contract, standing as an intermediary on every contract cleared. Clearing firm positions in the United States are held according to Commodity and Futures Trading Commission (CFTC) regulatory account segregation standards. To the extent that funds are not otherwise available to satisfy an obligation under the applicable contract, the clearing houses bear counterparty credit risk in the event that future market movements create conditions that could lead to clearing firms failing to meet their obligations to the clearing houses. The clearing houses reduce the exposure through risk management programs that include initial and ongoing financial standards for designation as a clearing firm, performance bond requirements, daily mark-to-market, mandatory guaranty fund contributions and intra-day monitoring.

Each CME clearing firm is required to deposit and maintain balances in the form of cash, U.S. government securities, certain foreign government securities, bank letters of credit or other approved investments to satisfy performance bond and guaranty fund requirements. Clearing firms that clear through CMECE are required to deposit and maintain collateral in the form of cash, certain U.S. and foreign government securities or other approved investments to satisfy performance bond and guaranty fund requirements. All non-cash deposits are marked-to-market and haircut on a daily basis. Securities deposited by the clearing firms are not reflected in the consolidated financial statements and the clearing houses do not earn any interest on these deposits. These balances may fluctuate significantly over time due to investment choices available to clearing firms and changes in the amount of contributions required.

In addition, the rules and regulations of CBOT require that collateral be provided for delivery of physical commodities, maintenance of capital requirements and deposits on pending arbitration matters. To satisfy these requirements, clearing firms that have accounts that trade certain CBOT products have deposited cash, U.S. Treasury securities or letters of credit.

The clearing houses mark-to-market open positions at least once a day (twice a day for futures and options contracts), and require payment from clearing firms whose positions have lost value and make payments to clearing firms whose positions have gained value. The clearing houses have the capability to mark-to-market more frequently as market conditions warrant.

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 credit default and interest rate swap contracts would be one half day of changes in fair value of all open positions, before considering the clearing houses' ability to access defaulting clearing firms' collateral deposits. For CME's cleared credit default swap and 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. During 2015, the clearing houses transferred an average of approximately $3.9 billion a day through their clearing systems for settlement from clearing firms whose positions had lost value to clearing firms whose positions had gained value. The clearing houses reduce the guarantee exposure through initial and maintenance performance bond requirements and mandatory guaranty fund contributions. The company believes that the guarantee liability is immaterial and therefore has not recorded any liability at December 31, 2015.

At December 31, 2015, performance bond and guaranty fund contribution assets on the consolidated balance sheets include cash and U.S. Treasury securities with maturity dates of 90 days or less. U.S. Treasury securities are purchased by CME, at its discretion, using cash collateral. The benefits, including interest earned, and risks of ownership accrue to CME. Interest earned is included in investment income on the consolidated statements of income. At December 31, 2015, the amortized cost and fair value of the U.S. Treasury securities were both $11.0 billion. At December 31, 2014, the amortized cost and fair value of the U.S. Treasury securities were both $16.7 billion. The U.S. Treasury securities held at December 31, 2015 will mature during the first quarter of 2016.

CME Clearing

Clearing firms, at their option, may instruct CME to deposit the cash held by CME into one of the IEF programs. The total principal in the IEF programs was $11.3 billion at December 31, 2015 and $16.4 billion at December 31, 2014. The consolidated statements of income reflect management fees earned under the IEF programs of $11.3 million, $14.9 million and $13.9 million during 2015, 2014 and 2013, respectively. These fees are included in other revenues.

CME and The Options Clearing Corporation (OCC) have a perpetual cross-margin arrangement, whereby a clearing firm may maintain a cross-margin account in which a CME clearing firm's positions in certain equity index futures and options are combined with certain positions cleared by OCC for purposes of calculating performance bond requirements. The performance bond deposits are held jointly by CME and OCC. Cross-margin cash, securities and letters of credit jointly held with OCC under the cross-margin agreement are reflected at 50% of the total, or CME's proportionate share per that agreement. If a participating firm defaults, the gain or loss on the liquidation of the firm's open position and the proceeds from the liquidation of the cross-margin account would be allocated 50% each to CME and OCC. The company believes that the guarantee liability is immaterial and therefore has not recorded any liability at December 31, 2015.

In addition, CME has perpetual cross-margin agreements with Fixed Income Clearing Corporation (FICC) whereby the clearing firms' offsetting positions with CME and FICC are subject to reduced performance bond requirements. Clearing firms maintain separate performance bond deposits with each clearing house, but depending on the net offsetting positions between CME and FICC, each clearing house may reduce that firm's performance bond requirements. In the event of a firm default, the total liquidation net gain or loss on the firm's offsetting open positions and the proceeds from the liquidation of the performance bond collateral held by each clearing house's supporting offsetting positions would be divided evenly between CME and FICC. Additionally, if, after liquidation of all the positions and collateral of the defaulting firm at each respective clearing organization, and taking into account any cross-margining loss sharing payments, any of the participating clearing organizations has a remaining liquidating surplus, and any other participating clearing organization has a remaining liquidating deficit, any additional surplus from the liquidation would be shared with the other clearing house to the extent that it has a remaining liquidating deficit. Any remaining surplus funds would be passed to the bankruptcy trustee. The company believes that the guarantee liability is immaterial and therefore has not recorded any liability at December 31, 2015.

Each CME clearing firm for futures and options is required to deposit and maintain specified guaranty fund contributions in the form of cash or approved securities. In the event that performance bonds, guaranty fund contributions and other assets required to support clearing membership of a defaulting CME clearing firm are inadequate to fulfill that clearing firm's outstanding financial obligation, the base guaranty fund for contracts other than credit default and interest rate swaps is available to cover potential losses after first utilizing $100.0 million of corporate contributions designated by CME to be used in the event of a default of a clearing firm for the base guaranty fund.

CME maintains separate guaranty funds to support the clearing firms that clear interest rate swap products and credit default swap products. The funds for interest rate and credit default swaps are independent of the base guaranty fund and are isolated to clearing firms for products in the respective asset class. Each clearing firm for cleared interest rate swaps and cleared credit default swaps is required to deposit and maintain specified guaranty fund contributions in the form of cash or approved securities. In the event that performance bonds, guaranty fund contributions and other assets required to support clearing membership of a defaulting clearing firm for cleared interest rate swap contracts are inadequate to fulfill that clearing firm's outstanding financial obligation, the interest rate swaps contracts guaranty fund is available to cover potential losses after first utilizing $150.0 million of corporate contributions designated by CME to be used in the event of a default of a cleared interest rate swap clearing firm. In the event that performance bonds, guaranty fund contributions and other assets required to support clearing membership of a defaulting clearing firm for cleared credit default swap contracts are inadequate to fulfill that clearing firm's outstanding financial obligation, the credit default swaps contracts guaranty fund is available to cover potential losses after first utilizing corporate contributions designated by CME to be used in the event of default of a cleared credit default swap clearing firm, which is equal to the greater of $50.0 million and 5% of the credit default swap guaranty fund, up to a maximum of $100.0 million.

CME maintains a 364-day multi-currency line of credit with a consortium of domestic and international banks to be used in certain situations by CME Clearing. CME 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 of the collateral), or in the event of a temporary disruption with the domestic payments system that would delay payment of settlement variation between CME and its 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 of a defaulting firm can be used to collateralize the facility. The line of credit provides for borrowings of up to $7.0 billion. At December 31, 2015, guaranty fund contributions available for CME clearing firms were $6.4 billion. CME has the option to request an increase in the line from $7.0 billion to $10.0 billion, subject to the approval of participating banks. In addition to the 364-day fully secured, committed multi-currency line of credit, the company also has the option to use the $2.3 billion multi-currency revolving senior credit facility to provide liquidity for the clearing house in the unlikely event of default.

CMECE

CMECE maintains a guaranty fund for CMECE commodity and foreign exchange clearing firms. In the unlikely event of default by a CMECE clearing firm, CMECE would first apply assets of the defaulting clearing firm to satisfy its payment obligations. These assets include the defaulting firm's performance bonds and guaranty fund contributions. Thereafter, if the default remains unsatisfied after first applying assets of the defaulting clearing firm to satisfy its payment obligation, CMECE would use guaranty fund contributions of $52.0 million of CMECE funds. At December 31, 2015, clearing firms contribution to the commodity and foreign exchange guaranty fund was $10.6 million. Once clearing firms fully contribute to the guaranty fund, CMECE will still use at least $20.0 million of CMECE funds in addition to the commodity or foreign exchange clearing firms' guaranty fund contributions in the event of a default.

CMECE also maintains a guaranty fund for CMECE interest rate swap clearing firms. In the unlikely event of default by a CMECE clearing firm, CMECE would first apply assets of the defaulting clearing firm to satisfy its payment obligations. These assets include the defaulting firm's performance bonds and guaranty fund contributions. If the default remains unsatisfied, CMECE would apply guaranty fund contributions of $48.2 million for interest rate swap clearing firms that will be contributed by CMECE. Interest rate swap clearing firm contributions to the interest rate swap guaranty fund totaled $94.9 million at December 31, 2015.

CME is required under the Commodity Exchange Act in the United States to segregate cash and securities deposited by clearing firms on behalf of its customers. In addition, CME requires segregation of all funds deposited by its clearing firms from operating funds. CMECE holds cash and securities deposited by clearing firms in segregated accounts, and maintains distinct accounts for its own operating funds.

Cash and non-cash deposits held as performance bonds and guaranty fund contributions at fair value at December 31 for CME and CMECE were as follows:

	2015		2014	
(in millions)	**Cash**	**Non-Cash Deposits and IEF Funds**	**Cash**	**Non-Cash Deposits and IEF Funds**
Performance bonds[1]	$ 33,592.8	$ 91,954.4	$ 38,729.0	$ 93,972.7
Guaranty fund contributions	1,919.2	5,290.0	1,719.9	5,699.0
Cross-margin arrangements	37.8	163.7	102.2	91.2
Performance collateral for delivery	3.2	—	15.7	2.1
Total	$ 35,553.0	$ 97,408.1	$ 40,566.8	$ 99,765.0

(1) Cash performance bonds include cash collateral reinvested in U.S. Treasury securities.

Performance bonds and guaranty fund contributions include collateral for clearing firms for both clearing houses. Cross-margin arrangements include collateral for the cross-margin accounts with OCC and FICC. The performance bond collateral for delivery includes deposits to meet CBOT delivery requirements.

Cash performance bonds may include intraday settlement, if any, that is owed to the clearing firms and paid the following business day. The balance of intraday settlements was $210.2 million and $224.2 million at December 31, 2015 and 2014, respectively. Intraday settlements may be invested on an overnight basis and are offset by an equal liability owed to clearing firms.

In addition to cash, securities and other non-cash deposits, irrevocable letters of credit may be used as performance bond deposits for clearing firms. At December 31, these letters of credit, which are not included in the accompanying consolidated balance sheets, were as follows:

(in millions)	**2015**	**2014**
Performance bonds	$ 2,617.6	$ 2,441.9
Guaranty fund contributions	25.0	25.0
Cross-margin arrangements	—	5.5
Performance collateral for delivery	1,208.0	950.4
Total Letters of Credit	$ 3,850.6	$ 3,422.8

All cash, securities and letters of credit posted as performance bonds are only available to meet the financial obligations of that clearing firm to the clearing houses.

5. PROPERTY

A summary of the property accounts at December 31 is presented below:

(in millions)	2015	2014	Estimated Useful Life
Land and land improvements	$ 17.7	$ 17.7	10 - 20 years [1]
Building and building improvements	280.8	273.5	3 - 39 years
Leasehold improvements	248.5	219.1	3 - 24 years
Furniture, fixtures and equipment	333.3	360.1	2 - 7 years
Software and software development costs	400.0	379.5	2 - 4 years
Total property	1,280.3	1,249.9	
Less accumulated depreciation and amortization	(788.6)	(741.0)	
Property, net	$ 491.7	$ 508.9	

(1) Estimated useful life applies only to land improvements.

6. INTANGIBLE ASSETS AND GOODWILL

Intangible assets consisted of the following at December 31:

	2015			2014		
(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	$ (754.5)	$ 2,084.3	$ 2,838.8	$ (658.8)	$ 2,180.0
Technology-related intellectual property	29.4	(27.2)	2.2	29.4	(23.5)	5.9
Other	2.4	(1.0)	1.4	2.4	(0.9)	1.5
Total amortizable intangible assets	$ 2,870.6	$ (782.7)	2,087.9	$ 2,870.6	$ (683.2)	2,187.4
Indefinite-Lived Intangible Assets:						
Trade names			450.0			450.0
Total intangible assets—other, net			$ 2,537.9			$ 2,637.4
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 KCBT. 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 CFTC. Product authorizations from the CFTC have no term limits.

The originally assigned useful lives for the amortizable intangible assets as of December 31, 2015 are as follows:

Clearing firm, market data and other customer relationships	5 - 30 years
Technology-related intellectual property	4 - 5 years
Other	3 - 24.5 years

Total amortization expense for intangible assets was $99.4 million, $100.6 million and $103.0 million for the years ended December 31, 2015, 2014 and 2013, respectively. As of December 31, 2015, the future estimated amortization expense related to amortizable intangible assets is expected to be as follows:

(in millions)	
2016	$ 96.1
2017	95.5
2018	94.7
2019	94.7
2020	94.7
Thereafter	1,612.2

Goodwill activity consisted of the following for the years ended December 31, 2015 and 2014:

(in millions)	Balance at December 31, 2014	Business Combinations	Divestitures	Other Activity	Balance at December 31, 2015
CBOT Holdings	$ 5,035.7	$ —	$ 30.7	$ —	$ 5,066.4
NYMEX Holdings	2,462.2	—	—	—	2,462.2
Other	71.1	—	(30.7)	—	40.4
Total Goodwill	$ 7,569.0	$ —	$ —	$ —	$ 7,569.0

(in millions)	Balance at December 31, 2013	Business Combinations	Divestitures	Other Activity	Balance at December 31, 2014
CBOT Holdings	$ 5,035.7	$ —	$ —	$ —	$ 5,035.7
NYMEX Holdings	2,462.2	—	—	—	2,462.2
Other	71.1	—	—	—	71.1
Total Goodwill	$ 7,569.0	$ —	$ —	$ —	$ 7,569.0

7. LONG-TERM INVESTMENTS

The company maintains various long-term investments as described below. The investments are recorded in other assets in the consolidated balance sheets.

BM&FBOVESPA S.A. The company owns an approximate 4% interest in BM&FBOVESPA S. A. (BM&FBOVESPA). BM&FBOVESPA is a stock and derivatives exchange in Brazil. The company accounts for its investment in BM&FBOVESPA as an available-for-sale security. During 2015, the company sold approximately 41.0 million shares of BM&FBOVESPA and recognized a net loss of $8.5 million within investment income on the consolidated statements of income based on the average cost method. The fair value of the investment was $199.1 million and $410.8 million at December 31, 2015 and 2014, respectively. The cost basis of the investment was $258.4 million and $405.7 million at December 31, 2015 and 2014, respectively. Substantially all of the difference between the cost basis and fair value of the investment as of December 31, 2015 represents previous changes in foreign currency exchange rates that are suspended in accumulated other comprehensive income and released into current operations as the investment is sold. The company and BM&FBOVESPA have entered into several agreements including co-location, licensing, order routing and technology development arrangements.

Bolsa Mexicana de Valores, S.A.B de C.V. The company owns an approximate 2% interest in Bolsa Mexicana de Valores, S.A.B. de C.V. (Bolsa Mexicana), a financial exchange operator in Mexico. The company accounts for its investment in Bolsa Mexicana stock as an available-for-sale security. The fair value of the investment in Bolsa Mexicana at December 31, 2015 and 2014 was $15.5 million and $21.2 million, respectively. The cost basis of the investment was $17.3 million at December 31, 2015 and 2014. The company and Bolsa Mexicana maintain a strategic partnership that includes an order routing agreement for derivative products.

Bursa Malaysia Derivatives Berhad. The company owns a 25% interest in Bursa Malaysia Derivatives Berhad (Bursa Malaysia), and accounts for its investment in Bursa Malaysia using the equity method of accounting. The company's investment in Bursa Malaysia was $28.0 million at December 31, 2015. The company and Bursa Malaysia have entered into several agreements including agreements to provide licensing, order routing and trade matching services.

DME Holdings Limited. The company owns an approximate 50% interest in DME Holdings Limited (DME Holdings), and accounts for its investment in DME Holdings using the equity method of accounting. The company's investment in DME

Holdings was $17.5 million at December 31, 2015. The company and DME Holdings maintain an agreement for Dubai Mercantile Exchange (DME) futures contracts to be exclusively traded on the CME Globex platform.

S&P/DJI Indices LLC. The company owns a 27% interest in S&P/Dow Jones Indices LLC (S&P/DJI) and accounts for its investment in S&P/DJI using the equity method of accounting. The company's investment in S&P/DJI was $938.7 million at December 31, 2015. The company has long-term exclusive licensing agreements with S&P/DJI to list products based on the Standard & Poor's Indices and Dow Jones Indices.

8. DEBT

In April 2015, the company repaid the $612.5 million fixed rate notes due 2018 and paid a call premium of $60.5 million. As a result of the transaction, the company recognized debt prepayment costs of $61.8 million in the second quarter of 2015, which includes the call premium.

Long-term debt consisted of the following at December 31:

(in millions)	2015	2014
$612.5 million fixed rate notes due March 2018, stated rate of 4.40%(1)	$ —	$ 611.0
$750.0 million fixed rate notes due September 2022, stated rate of 3.00% (2)	748.4	748.2
$750.0 million fixed rate notes due March 2025, stated rate of 3.00% (3)	744.2	—
$750.0 million fixed rate notes due September 2043, stated rate of 5.30% (4)	748.8	748.7
Total long-term debt	$ 2,241.4	$ 2,107.9

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(1) In February 2010, 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 4.46%.

(2) 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%.

(3) 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%.

(4) In August 2012, CME Group 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 as of December 31, 2015:

(in millions)	Par Value
2016	$ —
2017	—
2018	—
2019	—
2020	—
Thereafter	2,250.0

9. DERIVATIVE INVESTMENTS

The company mitigates certain financial exposures to interest rate risk through the use of derivative financial instruments as part of its risk management program. All derivatives have been designated as cash flow hedges.

In December 2014, the company entered into a forward-starting interest rate swap contract, with a notional value of $500.0 million, to hedge the risk of changes in underlying benchmark interest rates associated with the issuance of fixed rate debt in 2015. The hedge was considered highly effective. The effective portion is included in other comprehensive income and is being amortized over the term of the debt.

The fair value and location of outstanding derivative instruments in the consolidated balance sheet were as follows at December 31:

(in millions)	Balance Sheet Location	2015	2014
Interest rate contract	Other current liabilities	$ —	$ 2.3

The pre-tax effect of derivative instruments on the consolidated statements of income as well as accumulated other comprehensive income (OCI) within the consolidated statements of comprehensive income and consolidated statements of shareholders' equity for the years ended December 31, 2015 and 2014 were as follows:

	Gains (Losses) Recognized in OCI (Effective Portion)		(Gains) Losses Reclassified from Accumulated OCI (Effective Portion)			Gains (Losses) Recognized in Income (Ineffective Portion)		
(in millions)	**2015**	**2014**	**Location**	**2015**	**2014**	**Location**	**2015**	**2014**
Interest rate contracts	$ (4.7)	$ (2.3)	Interest and other borrowing costs	$ (1.2)	$ (1.5)	Gains (losses) on derivative investments	$ (1.8)	$ —

At December 31, 2015, the company expects to reclassify $1.2 million of net gains on derivative instruments from accumulated other comprehensive income to net income as a net reduction to interest expense during the next twelve months.

10. INCOME TAXES

The company is subject to regulation under a wide variety of U.S., federal, state and foreign tax laws and regulations. Income before income taxes and the income tax provision consisted of the following for the years ended December 31:

(in millions)	**2015**	**2014**	**2013**
Income before income taxes:			
Domestic	$ 1,927.3	$ 1,783.7	$ 1,599.2
Foreign	29.5	(12.3)	1.8
Total	$ 1,956.8	$ 1,771.4	$ 1,601.0
Income tax provision:			
Current:			
Federal	$ 554.5	$ 526.4	$ 491.9
State	81.0	36.5	128.8
Foreign	11.0	2.7	8.2
Total	646.5	565.6	628.9
Deferred:			
Federal	75.6	47.1	(157.6)
State	(12.0)	32.4	153.4
Foreign	(0.3)	(0.6)	(1.8)
Total	63.3	78.9	(6.0)
Total Income Tax Provision	$ 709.8	$ 644.5	$ 622.9

Reconciliation of the statutory U.S. federal income tax rate to the effective tax rate is as follows:

	2015	**2014**	**2013**
Statutory U.S. federal tax rate	35.0 %	35.0 %	35.0 %
State taxes, net of federal benefit	3.0	1.6	4.8
Domestic production activities deduction	(1.3)	(1.4)	(7.7)
Increase (decrease) in domestic valuation allowance	0.1	0.1	0.6
Impact of revised state and local apportionment estimates	(0.7)	1.1	6.6
Other, net	0.2	—	(0.4)
Effective Tax Rate	36.3 %	36.4 %	38.9 %

In 2015, the effective rate was higher than the statutory tax rate primarily due to the impact of state and local income taxes. The effective rate was primarily reduced by the Section 199 Domestic Productions Activities Deduction (Section 199 deduction) and the impact of state and local apportionment factors in deferred tax expense. The Section 199 deduction is related to certain activities performed by the company's electronic platform.

In 2014, the effective tax rate was higher than the statutory tax rate largely due to state income taxes and the impact of revised state and local apportionment factors on the company's deferred tax expense. However, the state income tax expense was reduced for benefits achieved in various settlements of state and local income tax audits. The effective tax rate was primarily reduced by the Section 199 deduction.

In 2013, the effective tax rate was higher than the statutory tax rate due to changes in estimate of state and local income tax apportionment factors. The changes in estimate of state and local income tax apportionment factors significantly impacted the company's deferred tax expense and expense related to uncertain tax positions. The increase in effective tax rate was partially offset by benefits accrued for the Section 199 deduction. The benefits accrued include the 2013 estimated benefit as well as benefits accrued for prior periods in which tax returns have been filed claiming the deduction or are expected to be filed claiming the deduction.

At December 31, deferred income tax assets (liabilities) consisted of the following:

(in millions)	2015	2014
Net Current Deferred Income Tax Assets:		
Unrealized loss on securities	$ 1.1	$ 3.0
Stock-based compensation	19.1	19.2
Accrued expenses and other	7.7	2.2
Net Current Deferred Income Tax Assets	$ 27.9	$ 24.4
Net Non-Current Deferred Income Tax Assets:		
Domestic unrealized loss on investment in BM&FBOVESPA	$ 85.6	$ 101.7
Foreign losses	15.6	19.7
Domestic losses	14.1	7.3
Stock-based compensation	24.1	30.7
Deferred compensation and other benefit plans	31.8	38.1
Property	27.3	44.3
Unrealized losses on securities	14.9	16.5
Subtotal	213.4	258.3
Valuation allowance	(122.3)	(99.2)
Total non-current deferred income tax assets	91.1	159.1
Non-Current Deferred Income Tax Liabilities:		
Purchased intangible assets	(7,434.1)	(7,448.2)
Other	(15.3)	(13.6)
Total non-current deferred income tax liabilities	(7,449.4)	(7,461.8)
Net Non-Current Deferred Income Tax Liabilities	$ (7,358.3)	$ (7,302.7)

A valuation allowance is recorded when it is more-likely-than-not that some portion or all of the deferred income tax assets may not be realized. The ultimate realization of the deferred income tax assets depends on the ability to generate sufficient taxable income of the appropriate character in the future and in the appropriate taxing jurisdictions.

At December 31, 2015 and 2014, the company had domestic and foreign income tax loss carry forwards of $124.5 million and $118.9 million, respectively. These amounts primarily related to losses from the acquisition of Swapstream Limited and its affiliates, the acquisition of Pivot, Inc., losses incurred in the operation of various foreign entities and capital losses from the sales of securities. At December 31, 2015 and 2014, the company also had net built-in, unrealized capital losses of $270.9 million and $317.7 million, respectively. At December 31, 2015 and 2014, the company determined that it was not more-likely-than-not that deferred income tax assets related to the acquisition of Swapstream Limited and its affiliates, other deferred income tax assets created from the start-up of various foreign operations, certain capital losses and certain built-in losses will be fully realized. As a result, valuation allowances of $122.3 million and $99.2 million were recorded at December 31, 2015 and 2014, respectively.

The following is a summary of the company's unrecognized tax benefits:

(in millions)	2015	2014	2013
Gross unrecognized tax benefits	$ 206.9	$ 187.6	$ 231.6
Unrecognized tax benefits, net of tax impacts in other jurisdictions	179.6	160.8	183.3
Unrecognized interest and penalties related to uncertain tax positions	19.5	11.0	42.5
Interest and penalties recognized in the consolidated statements of income	8.6	(12.5)	22.4

The company does not believe it is reasonably possible that within the next twelve months, unrecognized tax benefits will change by a significant amount.

A reconciliation of the beginning and ending amounts of unrecognized tax benefits is as follows:

(in millions)	2015	2014	2013
Balance at January 1	$ 187.6	$ 231.6	$ 37.7
Additions based on tax positions related to the current year	20.4	30.5	26.1
Additions for tax positions of prior years	2.7	24.9	168.4
Reductions for tax positions of prior years	(3.8)	(51.8)	(0.4)
Reductions resulting from the lapse of statutes of limitations	—	—	(0.2)
Settlements with taxing authorities	—	(47.6)	—
Balance at December 31	$ 206.9	$ 187.6	$ 231.6

The company is subject to U.S. federal income tax as well as income taxes in Illinois and multiple other state, local and foreign jurisdictions. As of December 31, 2015, substantially all federal and state income tax matters had been concluded through 2007 and 2006, respectively.

11. EMPLOYEE BENEFIT PLANS

Pension Plans. CME maintains a non-contributory defined benefit cash balance pension plan for eligible employees. CME's plan provides for a pay-based credit added to the cash balance account based on age and earnings and includes salary and cash bonuses in the definition of earnings. Employees who have completed a continuous 12-month period of employment and have reached the age of 21 are eligible to participate. Participant cash balance accounts receive an interest credit equal to the greater of the one-year constant maturity yield for U.S. Treasury notes or 4.0%. Participants become vested in their accounts after three years of service. The measurement date used for the plan is December 31.

The following is a summary of the change in projected benefit obligation:

(in millions)	2015	2014
Balance at January 1	$ 223.7	$ 175.7
Service cost	18.4	17.1
Interest cost	9.8	9.6
Actuarial (gain) loss	(11.6)	30.1
Benefits paid	(23.0)	(8.8)
Balance at December 31	$ 217.3	$ 223.7

The aggregate accumulated benefit obligation was $190.8 million and $195.6 million at December 31, 2015 and 2014, respectively.

The following is a summary of the change in fair value of plan assets:

(in millions)	2015	2014	2013
Balance at January 1	$ 225.1	$ 193.6	$ 183.9
Actual return on plan assets	(7.2)	14.3	18.1
Employer contributions	22.6	26.0	—
Benefits paid	(23.0)	(8.8)	(8.4)
Balance at December 31	$ 217.5	$ 225.1	$ 193.6

The plan assets are classified into a fair value hierarchy in their entirety based on the lowest level of input that is significant to each asset or liability's fair value measurement. Valuation techniques for level 2 assets use significant observable inputs such as quoted prices for similar assets, quoted market prices in inactive markets and other inputs that are observable or can be supported by observable market data. The fair value of each major category of plan assets as of December 31 is indicated below.

(in millions)	2015	2014
Level 2:		
Money market funds	$ 26.5	$ 27.2
Mutual funds:		
Fixed income	61.6	67.2
Foreign equity	60.0	57.6
U.S. equity	59.9	63.4
Commodity	9.5	9.7
Total	$ 217.5	$ 225.1

At December 31, 2015 and 2014, the fair value of pension plan assets exceeded the projected benefit obligation by $0.2 million and $1.4 million, respectively. This excess was recorded as a non-current pension asset in other assets in the consolidated balance sheet.

CME's funding goal is to have its pension plan 100% funded at each year-end on a projected benefit obligation basis, while also satisfying any minimum required contribution and obtaining the maximum tax deduction. Year-end 2015 assumptions have been used to project the assets and liabilities from December 31, 2015 to December 31, 2016. The result of this projection is that estimated liabilities would exceed the fair value of the plan assets at December 31, 2016 by approximately $11.7 million. Accordingly, it is estimated that a $11.7 million contribution in 2016 will allow the company to meet its funding goal.

The components of net pension expense and the assumptions used to determine the end-of-year projected benefit obligation and net pension expense in aggregate are indicated below:

(in millions)	2015	2014	2013
Components of Net Pension Expense:			
Service cost	$ 18.4	$ 17.1	$ 18.0
Interest cost	9.8	9.6	7.9
Expected return on plan assets	(16.3)	(14.0)	(13.3)
Recognized net actuarial loss	2.7	0.6	3.1
Net Pension Expense	$ 14.6	$ 13.3	$ 15.7
Assumptions Used to Determine End-of-Year Benefit Obligation:			
Discount rate	4.60%	4.20%	5.10%
Rate of compensation increase	5.00	5.00	5.00
Cash balance interest crediting rate	4.00	4.00	4.00
Assumptions Used to Determine Net Pension Expense:			
Discount rate	4.20%	5.10%	4.10%
Rate of compensation increase	5.00	5.00	5.00
Expected return on plan assets	7.50	7.50	7.50
Interest crediting rate	4.00	4.00	4.00

The discount rate for the plan was determined based on the market value of a theoretical settlement bond portfolio. This portfolio consisted of U.S. dollar denominated Aa-rated corporate bonds across the full maturity spectrum. A single equivalent discount rate was determined to align the present value of the required cash flow with that settlement value. The resulting discount rate was reflective of both the current interest rate environment and the plan's distinct liability characteristics.

The basis for determining the expected rate of return on plan assets for the plan is comprised of three components: historical returns, industry peers and forecasted return. The plan's total return is expected to equal the composite performance of the security markets over the long term. The security markets are represented by the returns on various domestic and international stock, bond and commodity indexes. These returns are weighted according to the allocation of plan assets to each market and measured individually.

The overall objective of the plan is to achieve required long-term rates of return in order to meet future benefit payments. The component of the investment policy for the plan that has the most significant impact on returns is the asset mix. The asset mix has a minimum and maximum range depending on asset class. The plan assets are diversified to minimize the risk of large losses by any one or more individual assets. Such diversification is accomplished, in part, through the selection of asset mix and investment management. The asset allocation for the plan, by asset category, at December 31 was as follows:

	2015	2014
Fixed income	28.3%	29.8%
Foreign equity	27.6	25.6
U.S. equity	27.5	28.2
Money market funds	12.2	12.1
Commodity	4.4	4.3

The range of target allocation percentages for 2016 is as follows:

	Minimum	Maximum
Fixed income	33.0%	45.0%
U.S. equity	23.5	35.0
Foreign equity	23.5	35.0
Commodity	2.0	8.0

At times, the company may determine that it is necessary to place some assets in cash equivalent investments in order to pay expected plan liabilities. Given this, the actual asset allocation for the plan may not fall within the target allocation ranges from time to time.

According to the plan's investment policy, the plan is not allowed to invest in securities that compromise independence, short sales of securities directly owned by the plan, securities purchased on margin or other uses of borrowed funds, derivatives not used for hedging purposes, restricted stock or illiquid securities or any other transaction prohibited by employment laws. If the plan directly invests in short-term and long-term debt obligations, the investments are limited to obligations rated at the highest rating category by Standard & Poor's (S&P) or Moody's.

The pre-tax balance and activity of the prior service costs and actuarial losses for the pension plan, which are included in other comprehensive income (loss), for 2015 are as follows:

(in millions)	Prior Service Costs	Actuarial Loss
Balance at January 1	$ 0.1	$ 51.6
Unrecognized net loss	—	11.9
Recognized as a component of net pension expense	—	(2.7)
Balance at December 31	$ 0.1	$ 60.8

The company expects to amortize $3.5 million of actuarial loss and prior service costs from accumulated other comprehensive income (loss) into net periodic benefit costs in 2016.

At December 31, 2015, anticipated benefit payments from the plan in future years are as follows:

(in millions)	
2016	$ 14.1
2017	14.7
2018	15.6
2019	17.1
2020	18.0
2021-2025	113.8

Savings Plans. CME maintains a defined contribution savings plan pursuant to Section 401(k) of the Internal Revenue Code, whereby all U.S. employees are participants and have the option to contribute to this plan. CME matches employee contributions up to 3% of the employee's base salary and may make additional discretionary contributions.

In addition to the plan for U.S. employees, the company maintains defined contribution savings plans for employees in international locations.

Aggregate expense for all of the defined contribution savings plans amounted to $11.7 million, $11.2 million and $9.9 million in 2015, 2014 and 2013, respectively.

CME Non-Qualified Plans. CME maintains non-qualified plans, under which participants may make assumed investment choices with respect to amounts contributed on their behalf. Although not required to do so, CME invests such contributions in assets that mirror the assumed investment choices. The balances in these plans are subject to the claims of general creditors of the exchange and totaled $55.9 million and $55.1 million at December 31, 2015 and 2014 respectively. Although the value of the plans is recorded as an asset in marketable securities in the consolidated balance sheets, there is an equal and offsetting liability. The investment results of these plans have no impact on net income as the investment results are recorded in equal amounts to both investment income and compensation and benefits expense.

Supplemental Savings Plan. CME maintains a supplemental plan to provide benefits for employees who have been impacted by statutory limits under the provisions of the qualified pension and savings plan. Employees in this plan are subject to the vesting requirements of the underlying qualified plans.

Deferred Compensation Plan. A deferred compensation plan is maintained by CME, under which eligible employees and members of the board of directors may contribute a percentage of their compensation and defer income taxes thereon until the time of distribution.

COMEX Members' Retirement Plan and Benefits. COMEX maintains a non-qualified retirement and benefit plan under the COMEX Members' Recognition and Retention Plan (MRRP). This plan provides benefits to certain members of the COMEX division based on long-term membership, and participation is limited to individuals who were COMEX division members prior to NYMEX's acquisition of COMEX in 1994. No new participants were permitted into the plan after the date of this acquisition. All benefits to be paid under the MRRP are based on reasonable actuarial assumptions which are based upon the amounts that are available and are expected to be available to pay benefits. Total contributions to the plan were $2.0 million in 2015 and $0.8 million for each of the years 2014 and 2013. At December 31, 2015 and 2014, the obligation for the MRRP totaled $19.9 million and $21.2 million, respectively. Assets with a fair value of $22.0 million and $20.0 million have been allocated to this plan at December 31, 2015 and 2014, respectively, and are included in marketable securities and cash and cash equivalents in the consolidated balance sheets. The balances in this plan are subject to the claims of general creditors of COMEX.

12. COMMITMENTS

Operating Leases. CME Group has entered into various non-cancellable operating lease agreements, with the most significant being as follows:

- In November 2013, the company sold a building in New York and leased back a portion of the property. The operating lease, which has an initial lease term ending on December 31, 2028, contains two consecutive renewal options for five years.

- In April 2012, the company sold two buildings in Chicago at 141 W. Jackson and leased back a portion of the property. The operating lease, which has an initial lease term ending on April 30, 2027, contains four consecutive renewal options for five years.

- In January 2011, the company entered into an operating lease for office space in London. The initial lease term, which became effective on January 20, 2011, terminates on March 24, 2026, with an option to terminate without penalty in January 2021.

- In July 2008, the company renegotiated the operating lease for its headquarters at 20 South Wacker Drive in Chicago. The lease, which has an initial term ending on November 30, 2022, contains two consecutive renewal options for seven and ten years and a contraction option which allows the company to reduce its occupied space after November 30, 2018. In addition, the company may exercise a lease expansion option in December 2017.

- In August 2006, the company entered into an operating lease for additional office space in Chicago. The initial lease term, which became effective on August 10, 2006, terminates on November 30, 2023. The lease contains two 5-year renewal options beginning in 2023.

At December 31, 2015, future minimum payments under non-cancellable operating leases were payable as follows (in millions):

Year	
2016	$ 50.2
2017	44.3
2018	45.1
2019	44.8
2020	42.1
Thereafter	182.8
Total	$ 409.3

Total rental expense, including equipment rental, was $54.8 million in 2015, $51.0 million in 2014 and $28.6 million in 2013.

Other Commitments. Commitments include material contractual purchase obligations that are non-cancellable. Purchase obligations relate to advertising, licensing, hardware, software and maintenance as well as telecommunication services. At December 31, 2015, future minimum payments due under purchase obligations were payable as follows (in millions):

Year	
2016	$ 10.7
2017	10.2
2018	9.7
2019	1.4
2020	0.7
Thereafter	1.4
Total	$ 34.1

13. CONTINGENCIES

Legal and Regulatory Matters. In 2008, Fifth Market, Inc. (Fifth Market) filed a complaint against CME Group and CME in the Delaware District Court seeking a permanent injunction against CME's Globex system and unquantified enhanced damages for what the plaintiff alleges is willful infringement of two patents, in addition to costs, expenses and attorneys' fees. Since the complaint was filed, CME filed multiple reexaminations and reviews of the two patents at the U.S. Patent and Trademark Office (USPTO). In these proceedings, the USPTO cancelled the vast majority of the patent claims. All of the reexaminations are final and not appealable. Of the reviews, one review is still pending at the USPTO and two are on appeal to the Court of Appeals for the Federal Circuit. Based on its investigation to date and advice from legal counsel, the company believes this suit is without merit and continues to defend itself vigorously against these charges. This matter involves an alleged infringement of intellectual property which, due to its nature, involves a potential liability that is uncertain, difficult to quantify and involves a wide range of potential outcomes. We expect the reviews by the USPTO and any appeals thereof, to result in a determination of the validity of the patents at issue which we expect will have an impact on the merits of the matter. Given the uncertainty of factors which may potentially impact the resolution of the matter, at this time the company is unable to estimate the reasonably possible loss or range of reasonably possible loss in the unlikely event it were found to be liable at trial in the matter.

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 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 company believes that the resolution of any of these matters on an individual basis will not have a material impact on its consolidated financial position or results of operations.

At December 31, 2015 and 2014, the company had accrued $3.5 million and $4.3 million, respectively, for legal and regulatory matters that were probable and estimable.

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.

14. GUARANTEES

Mutual Offset Agreement. CME and Singapore Exchange Limited (SGX) have a mutual offset agreement with a current term through October 2016. 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 its intent to terminate. CME can maintain collateral in the form of U.S. Treasury securities or irrevocable, standby letters of credit. At December 31, 2015, CME was contingently liable to SGX on irrevocable letters of credit totaling $610.0 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 December 31, 2015.

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 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 has an aggregate maximum payment amount of $100.0 million. Since its establishment, the Fund has made payments of approximately $2.0 million, which leaves $98.0 million available for future claims. If payments to participants were to exceed this amount, payments would be pro-rated. Clearing members and customers must register in advance with the company 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 December 31, 2015.

15. REDEEMABLE NON-CONTROLLING INTEREST

The following summarizes the changes in redeemable non-controlling interest for the year ended December 31, 2013. Non-controlling interests that do not contain redemption features are presented in the statements of equity.

(in millions)		2013
Balance at January 1	$	80.8
Total comprehensive income attributable to redeemable non-controlling interest		1.5
Purchase of non-controlling interest		(82.3)
Balance at December 31	$	—

In April 2013, the company purchased the remaining 10% non-controlling interest in its business venture with Dow Jones & Company for $80.0 million. Prior to the purchase, the company maintained a 24.4% interest in S&P/DJI. As a result of the purchase of the non-controlling interest, the company's interest in S&P/DJI increased to 27%. The company recognized a $165.6 million tax benefit through additional paid-in capital. The tax benefit was due to a reduction in deferred tax liabilities related to the tax basis in CME Group Index Holdings LLC. The company also recognized a $2.3 million gain through additional paid-in capital related to the purchase of the non-controlling interest.

16. CAPITAL STOCK

Shares Outstanding. The following table presents information regarding capital stock:

	December 31,	
(in thousands)	**2015**	**2014**
Class A common stock authorized	1,000,000	1,000,000
Class A common stock issued and outstanding	336,938	335,452
Class B-1 common stock authorized, issued and outstanding	0.6	0.6
Class B-2 common stock authorized, issued and outstanding	0.8	0.8
Class B-3 common stock authorized, issued and outstanding	1.3	1.3
Class B-4 common stock authorized, issued and outstanding	0.4	0.4

CME Group has no shares of preferred stock issued and outstanding.

Associated Trading Rights. Members of CME, CBOT, NYMEX and COMEX own or lease trading rights which entitle them to access the trading floors, discounts on trading fees and the right to vote on certain exchange matters as provided for by the rules of the particular exchange and CME Group's or the subsidiaries' organizational documents. Each class of CME Group Class B common stock is associated with a membership in a specific division for trading at CME. A CME trading right is a separate asset that is not part of or evidenced by the associated share of Class B common stock of CME Group. The Class B common stock of CME Group is intended only to ensure that the Class B shareholders of CME Group retain rights with respect to representation on the board of directors and approval rights with respect to the core rights described below.

Trading rights at CBOT are evidenced by Class B memberships in CBOT, at NYMEX by Class A memberships in NYMEX and at COMEX by COMEX Division Memberships. Members of CBOT, NYMEX and COMEX do not have any rights to elect members of the board of directors and are not entitled to receive dividends or other distributions on their memberships or trading permits.

Core Rights. Holders of CME Group Class B common shares have the right to approve changes in specified rights relating to the trading privileges at CME associated with those shares. These core rights relate primarily to trading right protections, certain trading fee protections and certain membership benefit protections. Votes on changes to these core rights are weighted by class. Each class of Class B common stock has the following number of votes on matters relating to core rights: Class B-1, six votes per share; Class B-2, two votes per share; Class B-3, one vote per share; and Class B-4, 1/6th of one vote per share. The approval of a majority of the votes cast by the holders of shares of Class B common stock is required in order to approve any changes to core rights. Holders of shares of Class A common stock do not have the right to vote on changes to core rights.

Voting Rights. With the exception of the matters reserved to holders of CME Group Class B common stock, holders of CME Group common stock vote together on all matters for which a vote of common shareholders is required. In these votes, each holder of shares of Class A or Class B common stock of CME Group has one vote per share.

Transfer Restrictions. Each class of CME Group Class B common stock is subject to transfer restrictions contained in the Certificate of Incorporation of CME Group. These transfer restrictions prohibit the sale or transfer of any shares of Class B common stock separate from the sale of the associated trading rights.

Election of Directors. The CME Group Board of Directors is currently comprised of 24 members. Holders of Class B-1, Class B-2 and Class B-3 common stock have the right to elect six directors, of which three are elected by Class B-1 shareholders, two are elected by Class B-2 shareholders and one is elected by Class B-3 shareholders. The remaining directors are elected by the Class A and Class B shareholders voting as a single class.

Dividends. Holders of Class A and Class B common stock of CME Group are entitled to receive proportionately such dividends, if any, as may be declared by the CME Group board of directors.

CME Group Omnibus Stock Plan. CME Group has adopted an Omnibus Stock Plan under which stock-based awards may be made to employees. A total of 40.2 million Class A common stock shares have been reserved for awards under the plan. Awards totaling 23.3 million shares have been granted and are outstanding or have been exercised under this plan at December 31, 2015 (note 17).

CBOT Holdings Long-Term Equity Incentive Plan. In connection with the merger with CBOT Holdings, CME Group assumed CBOT Holdings' 2005 Long-Term Equity Incentive Plan. Under the plan, stock-based awards may be made to certain directors, officers and other key employees or individuals. A total of 2.3 million shares were reserved for awards under the plan. In connection with receiving shareholder approval to increase the amount of authorized shares under the CME Group Omnibus Stock Plan in May 2009, the company undertook to freeze future awards under this plan. The plan terminated during 2015 and, as a result, the remaining shares authorized for future awards expired.

NYMEX Holdings Omnibus Long-Term Incentive Plan. In connection with the merger with NYMEX Holdings, CME Group assumed NYMEX Holdings' 2006 Omnibus Long-Term Incentive Plan (NYMEX Omnibus Stock Plan). Under the plan, stock-based awards may be made to any director, officer or employee of the company and other key individuals providing services to the company. A total of 5.0 million shares have been reserved for awards under the plan. In connection with receiving shareholder approval to increase the amount of authorized shares under the CME Group Omnibus Stock Plan in May 2009, the company undertook to freeze future awards under this plan. As a result, 3.6 million shares that remained authorized for future awards under this plan were frozen.

Director Stock Plan. CME Group has adopted a Director Stock Plan under which awards are made to non-executive directors as part of their annual compensation. A total of 625,000 Class A shares have been reserved under this plan, and approximately 320,000 shares have been awarded through December 31, 2015.

Employee Stock Purchase Plan. CME Group has adopted an Employee Stock Purchase Plan (ESPP) under which employees may purchase Class A shares at 90% of the market value of the shares using after-tax payroll deductions. A total of 500,000 Class A shares have been reserved under this plan, of which approximately 220,000 shares have been purchased through December 31, 2015 (note 17).

17. STOCK-BASED PAYMENTS

CME Group adopted an Omnibus Stock Plan under which stock-based awards may be made to employees. A total of 40.2 million Class A shares have been reserved for awards under the plan. Awards totaling 23.3 million shares have been granted and are outstanding or have been exercised under the plan as of December 31, 2015. Awards granted generally vest over a four-year period, with 25% vesting one year after the grant date and on that same date in each of the following three years.

Total compensation expense for stock-based payments and total income tax benefit recognized in the consolidated statements of income for stock-based awards were as follows:

(in millions)	2015	2014	2013
Compensation expense	$ 61.0	$ 55.0	$ 54.4
Income tax benefit recognized	32.4	19.5	20.0

Excluding estimates of future forfeitures, at December 31, 2015, there was $94.9 million of total unrecognized compensation expense related to employee stock-based compensation arrangements that had not yet vested. This expense is expected to be recognized over a weighted average period of 2.2 years.

Stock options have not been granted since 2012. The following table summarizes stock option activity for 2015. Aggregate intrinsic value is in millions.

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value
Outstanding at December 31, 2014	3,011,267	$ 72	3.7	$ 60.1
Exercised	(984,581)	65		
Cancelled	(212,635)	101		
Outstanding at December 31, 2015	1,814,051	73	3.3	38.7
Exercisable at December 31, 2015	1,812,746	73	3.3	38.6

The total intrinsic value of options exercised during 2015, 2014 and 2013 was $29.5 million, $29.5 million and $35.3 million, respectively.

In 2015, the company granted 574,453 shares of restricted Class A common stock and 7,392 shares of restricted stock units. Restricted common stock and restricted stock units generally have a vesting period of two to four years. The fair value related to these grants was $55.5 million, which is recognized as compensation expense on an accelerated basis over the vesting period. Beginning with restricted stock grants in September 2010, dividends are accrued on restricted Class A common stock and restricted stock units and are paid once the restricted stock vests. In 2015, the company also granted 122,317 performance shares. The fair value related to these grants was $12.3 million, which is recognized as compensation expense on an accelerated and straight-lined basis over the vesting period. The vesting of these shares is contingent on meeting stated performance or market conditions.

The following table summarizes restricted stock, restricted stock units, and performance shares activity for 2015:

	Number of Shares	Weighted Average Grant Date Fair Value
Outstanding at December 31, 2014	2,098,308	$ 72
Granted	704,162	96
Vested	(456,153)	67
Cancelled	(424,019)	70
Outstanding at December 31, 2015	1,922,298	83

The total fair value of restricted stock, restricted stock units, and performance shares that vested during 2015, 2014 and 2013 was $43.3 million, $40.5 million and $31.9 million, respectively.

Eligible employees may acquire shares of Class A common stock using after-tax payroll deductions made during consecutive offering periods of approximately six months in duration. Shares are purchased at the end of each offering period at a price of 90% of the closing price of the Class A common stock as reported on the NASDAQ Global Select Market. Compensation expense is recognized on the dates of purchase for the discount from the closing price. In 2015, 2014 and 2013, a total of 19,756, 23,678 and 18,632 shares, respectively, of Class A common stock were issued to participating employees. These shares are subject to a six-month holding period. Annual expense of $0.2 million, $0.2 million and $0.1 million for the purchase discount was recognized in 2015, 2014 and 2013, respectively.

Non-executive directors receive an annual award of Class A common stock with a value equal to $100,000. Non-executive directors may also elect to receive some or all of the cash portion of their annual stipend, up to $60,000, in shares of stock based on the closing price at the date of distribution. As a result, 25,853, 33,735 and 27,168 shares of Class A common stock were issued to non-executive directors during 2015, 2014 and 2013, respectively. These shares are not subject to any vesting restrictions. Expense of $2.5 million, $2.1 million and $2.1 million related to these stock-based payments was recognized for the years ended December 31, 2015, 2014 and 2013, respectively.

18. ACCUMULATED OTHER COMPREHENSIVE INCOME

The following tables present changes in the accumulated balances for each component of other comprehensive income attributable to CME Group, including current period other comprehensive income and reclassifications out of accumulated other comprehensive income:

(in millions)	Investment Securities	Defined Benefit Plans	Derivative Investments	Foreign Currency Translation	Total
Balance at December 31, 2014	$ (22.9)	$ (31.3)	$ 62.6	$ (2.2)	$ 6.2
Other comprehensive income before reclassifications and income tax benefit (expense)	(78.0)	(11.2)	(4.7)	(10.6)	(104.5)
Amounts reclassified from accumulated other comprehensive income	8.5	2.7	0.6	—	11.8
Income tax benefit (expense)	(2.6)	3.2	1.1	4.0	5.7
Net current period other comprehensive income attributable to CME Group	(72.1)	(5.3)	(3.0)	(6.6)	(87.0)
Balance at December 31, 2015	$ (95.0)	$ (36.6)	$ 59.6	$ (8.8)	$ (80.8)

(in millions)	Investment Securities	Defined Benefit Plans	Derivative Investments	Foreign Currency Translation	Total
Balance at December 31, 2013	$ 98.9	$ (12.8)	$ 65.0	$ 0.9	$ 152.0
Other comprehensive income before reclassifications and income tax benefit (expense)	(116.6)	(30.0)	(2.3)	(5.2)	(154.1)
Amounts reclassified from accumulated other comprehensive income	—	0.3	(1.5)	—	(1.2)
Income tax benefit (expense)	(5.2)	11.2	1.4	2.1	9.5
Net current period other comprehensive income attributable to CME Group	(121.8)	(18.5)	(2.4)	(3.1)	(145.8)
Balance at December 31, 2014	$ (22.9)	$ (31.3)	$ 62.6	$ (2.2)	$ 6.2

(in millions)	Investment Securities	Defined Benefit Plans	Derivative Investments	Foreign Currency Translation	Total
Balance at December 31, 2012	$ 256.7	$ (32.4)	$ (16.4)	$ 1.4	$ 209.3
Other comprehensive income before reclassifications and income tax benefit (expense)	(221.0)	28.4	128.8	(0.8)	(64.6)
Amounts reclassified from accumulated other comprehensive income	(0.7)	3.2	1.6	—	4.1
Income tax benefit (expense)	63.9	(12.0)	(49.0)	0.3	3.2
Net current period other comprehensive income attributable to CME Group	(157.8)	19.6	81.4	(0.5)	(57.3)
Balance at December 31, 2013	$ 98.9	$ (12.8)	$ 65.0	$ 0.9	$ 152.0

19. 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, other than level 1 inputs, 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 U.S. Treasury securities and investments in publicly traded mutual funds 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 and equity investments. If quoted prices are not available to determine fair value, the company uses other inputs that are directly observable.

Assets and liabilities included in level 2 generally consist of asset-backed securities and interest rate swap contracts. 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 company determined the fair value of its interest rate swap contracts using standard valuation models with market-based observable inputs including forward and spot exchange rates and interest rate curves.

The company determined the fair value of its contingent consideration liability, considered a level 3 liability, using a discounted cash flow model to calculate the present value of future payouts. The liability was included in level 3 because management used significant unobservable inputs, including a discount rate of 20% and payout probability of 100%. Significant increases or decreases in any of those inputs in isolation would result in a significantly different fair value.

Financial assets and liabilities recorded in the consolidated balance sheet as of December 31, 2015 and 2014 were classified in their entirety based on the lowest level of input that was significant to each asset or liability's fair value measurement.

Financial Instruments Measured at Fair Value on a Recurring Basis:

	December 31, 2015			
(in millions)	Level 1	Level 2	Level 3	Total
Assets at Fair Value:				
Marketable securities:				
U.S. Treasury securities	$ 16.2	$ —	$ —	$ 16.2
Mutual funds	55.9	—	—	55.9
Equity securities	0.1	—	—	0.1
Asset-backed securities	—	0.3	—	0.3
Total	72.2	0.3	—	72.5
Performance bonds and guaranty fund contributions:				
U.S. Treasury securities (1)	10,973.9	—	—	10,973.9
Equity investments	214.5	—	—	214.5
Total Assets at Fair Value	$ 11,260.6	$ 0.3	$ —	$ 11,260.9
Liabilities at Fair Value:				
Contingent consideration	$ —	$ —	$ 0.3	$ 0.3
Total Liabilities at Fair Value	$ —	$ —	$ 0.3	$ 0.3

	December 31, 2014			
(in millions)	Level 1	Level 2	Level 3	Total
Assets at Fair Value:				
Marketable securities:				
U.S. Treasury securities	$ 19.1	$ —	$ —	$ 19.1
Mutual funds	55.1	—	—	55.1
Equity securities	0.1	—	—	0.1
Asset-backed securities	—	0.4	—	0.4
Total	74.3	0.4	—	74.7
Performance bonds and guaranty fund contributions:				
U.S. Treasury securities (1)	16,699.7	—	—	16,699.7
Equity investments	432.1	—	—	432.1
Total Assets at Fair Value	$ 17,206.1	$ 0.4	$ —	$ 17,206.5
Liabilities at Fair Value:				
Interest rate swap contracts	$ —	$ 2.3	$ —	$ 2.3
Contingent consideration	—	—	17.7	17.7
Total Liabilities at Fair Value	$ —	$ 2.3	$ 17.7	$ 20.0

(1) Performance bonds and guaranty fund contributions on the consolidated balance sheet at December 31, 2015 and 2014 include cash collateral that has been invested in U.S. Treasury securities.

There were no transfers of assets between level 1, level 2 and level 3 during 2015 and 2014. There were no level 3 assets valued at fair value on a recurring basis during 2015 and 2014. The following is a reconciliation of level 3 liabilities valued at fair value on a recurring basis during 2015 and 2014.

(in millions)	Contingent Consideration
Fair value of liability at December 31, 2013	$ 15.7
Realized and unrealized gains (losses):	
Included in other expense	7.1
Settlements	(5.1)
Fair value of liability at December 31, 2014	17.7
Realized and unrealized gains (losses):	
Included in other expense	1.3
Settlements	(18.7)
Fair value of liability at December 31, 2015	$ 0.3

There were no level 3 assets or liabilities valued at fair value on a nonrecurring basis during 2015 and 2014.

The fair values of the fixed-rate notes due 2022, 2025 and 2043, which are classified as level 2 under the fair value hierarchy, were estimated using quoted market prices. At December 31, 2015, the fair values of the fixed-rate notes by maturity date were as follows:

(in millions)	Fair Value
$750.0 million fixed rate notes due September 2022, stated rate of 3.00%	$ 758.4
$750.0 million fixed rate notes due March 2025, stated rate of 3.00%	743.3
$750.0 million fixed rates notes due September 2043, stated rate of 5.30%	856.3

20. EARNINGS PER SHARE

Basic earnings per share is computed by dividing net income attributable to CME Group by the weighted average number of shares of all classes of 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 stock options and stock awards were as follows for the years presented:

(in thousands)	2015	2014	2013
Stock options	420	1,330	1,566
Stock awards	115	124	65
Total	535	1,454	1,631

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

	2015	2014	2013
Net Income Attributable to CME Group (in millions)	$ 1,247.0	$ 1,127.1	$ 976.8
Weighted Average Common Shares Outstanding (in thousands):			
Basic	336,224	334,409	332,678
Effect of stock options and stock awards	1,670	1,654	1,720
Diluted	337,894	336,063	334,398
Earnings per Common Share Attributable to CME Group:			
Basic	$ 3.71	$ 3.37	$ 2.94
Diluted	3.69	3.35	2.92

21. QUARTERLY INFORMATION (UNAUDITED)

(in millions, except per share data)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year to Date
Year Ended December 31, 2015					
Total revenues	$ 842.7	$ 820.0	$ 850.3	$ 813.8	$ 3,326.8
Operating income	507.3	495.1	516.4	469.9	1,988.7
Non-operating income (expense)	16.5	(47.0)	—	(1.4)	(31.9)
Income before income taxes	523.8	448.1	516.4	468.5	1,956.8
Net income attributable to CME Group	330.4	265.0	359.9	291.7	1,247.0
Earnings per common share attributable to CME Group:					
Basic	$ 0.98	$ 0.79	$ 1.07	$ 0.87	$ 3.71
Diluted	0.98	0.78	1.06	0.86	3.69
Year Ended December 31, 2014					
Total revenues	$ 777.4	$ 731.6	$ 762.4	$ 841.1	$ 3,112.5
Operating income	454.5	412.0	430.4	471.5	1,768.4
Non-operating income (expense)	(8.1)	10.1	(1.3)	2.3	3.0
Income before income taxes	446.4	422.1	429.1	473.8	1,771.4
Net income attributable to CME Group	266.8	263.8	290.0	306.5	1,127.1
Earnings per common share attributable to CME Group:					
Basic	$ 0.80	$ 0.79	$ 0.87	$ 0.91	$ 3.37
Diluted	0.79	0.79	0.86	0.91	3.35

22. SUBSEQUENT EVENTS

The company has evaluated subsequent events through the date the financial statements were issued. The company has determined that there were no subsequent events that require disclosure.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of 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 (Exchange Act)) as of the end of the period covered by this Annual Report on Form 10-K. 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.

Management's Annual Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control system has been designed to provide reasonable assurance to management and the board of directors regarding the preparation and fair presentation of published financial statements.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2015. Management based its assessment on criteria for effective internal control over financial reporting described in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Management's assessment included evaluating the design of our internal control over financial reporting and testing the operational effectiveness of our internal control over financial reporting. The results of its assessment were reviewed with the audit committee of the board of directors.

Based on this assessment, management believes that, as of December 31, 2015, our internal control over financial reporting is effective. The effectiveness of our internal control over financial reporting as of December 31, 2015 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in the following report.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders of CME Group Inc. and Subsidiaries

We have audited the accompanying consolidated balance sheets of CME Group Inc. and subsidiaries as of December 31, 2015 and 2014, and the related consolidated statements of income, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2015. Our audits also included the financial statement schedule listed in the Index under Item 15(a)(2). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of CME Group Inc. and subsidiaries at December 31, 2015 and 2014, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2015, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), CME Group Inc. and subsidiaries’ internal control over financial reporting as of December 31, 2015, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 26, 2016 expressed an unqualified opinion thereon.

/s/ Ernst & Young, LLP

Chicago, Illinois
February 26, 2016

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders of CME Group Inc. and Subsidiaries

We have audited CME Group Inc. and subsidiaries' internal control over financial reporting as of December 31, 2015, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). CME Group Inc. and subsidiaries' management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, CME Group Inc. and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of CME Group Inc. and subsidiaries as of December 31, 2015 and 2014, and the related consolidated statements of income, comprehensive income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2015 of CME Group Inc. and subsidiaries and our report dated February 26, 2016, expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Chicago, Illinois
February 26, 2016

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 fourth quarter of 2015 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 during the period covered by this report that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

We have adopted a written code of conduct applicable to all of our employees, including our Executive Chairman and President, Chief Executive Officer, Chief Financial Officer, Chief Accounting Officer and other senior financial officers. In accordance with SEC rules and regulations, our Code of Conduct is available on our website at *www.cmegroup.com* under the “Investor Relations-Corporate Governance” link. We intend to disclose promptly on our Web site any substantive amendments to our Code of Conduct and, in accordance with the listing requirements of the NASDAQ, any waivers granted to our executive officers or Board members will be promptly disclosed on a Current Report on Form 8-K. In addition, we have adopted Corporate Governance Principles which govern the practices of our board of directors. You may also obtain a copy of our Code of Conduct and our Corporate Governance Principles by following the instructions in the section of this Annual Report on Form 10-K entitled “Item 1. Business-Available Information.”

Certain of the information called for by this item is hereby incorporated herein by reference to the relevant portions of CME Group’s definitive proxy statement for the Annual Meeting of Shareholders to be held on May 18, 2016, to be filed by CME Group with the SEC pursuant to Regulation 14A within 120 days after December 31, 2015 (Proxy Statement). Additional information called for by this item is contained in Item 1 of this Annual Report on Form 10-K under the caption “Employees-Senior Leadership Team and Executive Officers.”

ITEM 11. EXECUTIVE COMPENSATION

Certain of the information called for by this item is hereby incorporated herein by reference to the relevant portions of the Proxy Statement.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED SHAREHOLDER MATTERS

Certain of the information called for by this item relating to the security ownership of certain beneficial owners and management is hereby incorporated herein by reference to the relevant portions of the Proxy Statement.

Equity Compensation Plan Information

We currently have the following equity compensation plans: CME Group Inc. Amended and Restated Omnibus Stock Plan, the CME Group Inc. Director Stock Plan, CME Group Inc. Amended and Restated Employee Stock Purchase Plan and the Amended and Restated NYMEX Holdings, Inc. 2006 Omnibus Stock Plan. A description of each of these plans and the number of shares authorized and available for future awards is included in note 17 of the notes to consolidated financial statements of CME Group Inc. and subsidiaries. In connection with our receipt of shareholder approval to increase the authorized shares under our Omnibus Stock Plan, we agreed not to issue future awards under the NYMEX plan. In connection with our merger with CBOT Holdings, Inc., we acquired its 2005 Long-Term Equity Plan which expired on April 21, 2015.

Prior to our holding company reorganization in 2001, CME issued options under the Chicago Mercantile Exchange Omnibus Stock Plan, which was not approved by CME shareholders. In connection with our holding company reorganization, CME, as the sole shareholder of CME Holdings, approved the assumption by CME Holdings of the Omnibus Stock Plan. After the reorganization, the plan was amended and restated as the Chicago Mercantile Exchange Holdings Inc. Amended and Restated Omnibus Stock Plan. Options issued prior to the sole shareholder approval are listed in the table below as being made under an equity compensation plan not approved by security holders, and options issued after such time are listed below as being made under an equity compensation plan approved by security holders. The Employee Stock Purchase Plan and the 2005 Director Stock Plan were last approved by shareholders at our annual meeting of shareholders in 2012 and 2014, respectively. In connection with our mergers with CBOT Holdings, Inc. and NYMEX Holdings, Inc., we assumed their existing equity plans and all outstanding stock options to purchase their shares became options to purchase shares of CME Group Class A common stock. The related shares for these awards are listed in the table below as being made under an equity compensation plan approved by security holders based upon the fact that shareholders of the Company approved the related merger transactions.

Plan category	Number of Securities to be Issued Upon Exercise of Outstanding Options (a)	Weighted-Average Exercise Price of Outstanding Options (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (excluding securities reflected in column (a))(c)
Equity compensation plans approved by security holders	1,814,051	$ 73.24	21,164,109
Equity compensation plans not approved by security holders	—		
Total	1,814,051		21,164,109

ITEM 13. CERTAIN RELATIONSHIPS, RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

Certain of the information called for by this item is hereby incorporated herein by reference to the relevant portions of the Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Certain of the information called for by this item is hereby incorporated herein by reference to the relevant portions of the Proxy Statement.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Financial Statements, Financial Statement Schedules and Exhibits

(1) Financial Statements

The following Consolidated Financial Statements and related Notes included within Item 8, together with the Reports of Independent Registered Public Accounting Firm with respect thereto and included within Item 9A, are hereby incorporated by reference:

Reports of Independent Registered Public Accounting Firm

Consolidated Balance Sheets at December 31, 2015 and 2014

Consolidated Statements of Income for the Years Ended December 31, 2015, 2014 and 2013

Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2015, 2014 and 2013

Consolidated Statements of Equity for the Years Ended December 31, 2015, 2014 and 2013

Consolidated Statements of Cash Flows for the Years Ended December 31, 2015, 2014 and 2013

Notes to Consolidated Financial Statements

(2) Financial Statement Schedules

The following Financial Statement Schedule is filed as part of this Annual Report on Form 10-K:

CME Group Inc. and Subsidiaries
Schedule II—Valuation and Qualifying Accounts
For the Years Ended December 31, 2015, 2014 and 2013
(dollars in millions)

	Balance at beginning of year	Charged against goodwill	Charged (credited) to costs and expenses	Other(1)	Balance at end of year
Year Ended December 31, 2015					
Allowance for doubtful accounts	$ 1.2	$ —	$ 1.1	$ (0.4)	$ 1.9
Allowance for deferred tax assets	99.2	—	(2.4)	25.5	122.3
Year Ended December 31, 2014					
Allowance for doubtful accounts	$ 1.2	$ —	$ 0.1	$ (0.1)	$ 1.2
Allowance for deferred tax assets	47.5	—	—	51.7	99.2
Year Ended December 31, 2013					
Allowance for doubtful accounts	$ 0.8	$ —	$ 0.8	$ (0.4)	$ 1.2
Allowance for deferred tax assets	24.8	—	4.6	18.1	47.5

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(1) Includes write-offs of doubtful accounts and reversals of deferred tax asset valuation allowances against accumulated other comprehensive income.

All other schedules have been omitted because the information required to be set forth in those schedules is not applicable or is shown in the consolidated financial statements or notes thereto.

(3) Exhibits

See (b) Exhibits below

(b) Exhibits

Exhibit Number	Description of Exhibit
3.	***Articles of Incorporation and Bylaws***
3.1	Fourth Amended and Restated Certificate of Incorporation of CME Group Inc. (incorporated by reference to Exhibit 3.1 to CME Group Inc.'s Current Report on Form 8-K, filed with the SEC on May 29, 2012, File No. 001-31553).
3.2	Eleventh Amended and Restated Bylaws of CME Group Inc. (incorporated by reference to Exhibit 3.1 to CME Group Inc.'s Current Report on Form 8-K, filed with the SEC on May 26, 2015, File No. 001-31553).
4.	***Instruments Defining the Rights of Security Holders***
4.1	Amended and Restated Commercial Paper Dealer Agreement, dated as of October 20, 2014, among CME Group Inc., as Issuer, and Barclays Capital Inc. (incorporated by reference to Exhibit 4.1 to CME Group's 10-K, filed with the SEC on February 26, 2015, File No. 001-31553).
4.2	Amended and Restated Issuing and Paying Agency Agreement, dated as of September 26, 2014, between CME Group Inc. and Bank of America, National Association, as Issuing and Paying Agent (incorporated by reference to Exhibit 4.2 to CME Group's 10-K, filed with the SEC on February 26, 2015, File No. 001-31553).
4.3	Amended and Restated Commercial Paper Dealer Agreement, dated as of October 20, 2014, between CME Group Inc., as Issuer, and Merrill Lynch, Pierce, Fenner & Smith Incorporated, as Dealer (incorporated by reference to Exhibit 4.3 to CME Group's 10-K, filed with the SEC on February 26, 2015, File No. 001-31553).
4.4	Amended and Restated Commercial Paper Dealer Agreement, dated as of October 20, 2014, between CME Group Inc., as Issuer, and Goldman, Sachs & Co., as Dealer (incorporated by reference to Exhibit 4.4 to CME Group's 10-K, filed with the SEC on February 26, 2015, File No. 001-31553).
4.5	Indenture, dated August 12, 2008, between CME Group Inc. and U.S. Bank National Association (incorporated by reference to Exhibit 4.1 to CME Group Inc.'s Current Report on Form 8-K, filed with the SEC on August 13, 2008, File No. 001-31553).
4.6	Fifth Supplemental Indenture (including the form of 3.00% note due 2022), dated September 10, 2012, 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 September 10, 2012, File No. 001-31553).
4.7	Sixth Supplemental Indenture (including the form of 5.300% note due 2043), dated as of September 9, 2013, 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 September 9. 2013, File No. 001-31553).
4.80	Seventh Supplemental Indenture (including the form of 3.000% Notes due 2025), dated as of March 9, 2015, 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 March 9, 2015, File No. 001-31553).
10.	***Material Contracts***
10.1(1)	CME Group Inc. Amended and Restated Omnibus Stock Plan, amended and restated effective as of May 23, 2012 (incorporated by reference to Exhibit 10.1 to CME Group Inc.'s Form 8-K, filed with the SEC on May 29, 2012, File No. 001-31553); First Amendment to the Amended and Restated Omnibus Stock Plan, effective as of December 5, 2012 (incorporated by reference to Exhibit 10.1 to CME Group Inc.'s Form 10-K, filed with the SEC on February 28, 2013, File No. 001-31553).
10.2(1)	Form of Equity Grant Letter for Executive Officers (incorporated by reference to Exhibit 10.2 to CME Group Inc.'s Form 10-K, filed with the SEC on February 28, 2013, File No. 001-31553).
10.3(1)	Form of equity grant letter for performance based shares based on specific Company initiatives (incorporated by reference to Exhibit 10.7 to CME Group Inc.'s Form 10-Q, filed with the SEC on August 5, 2011, File No. 001-31553).
10.4(1)	Form of equity grant letter for annual grant of performance shares (incorporated by reference to Exhibit 10.4 to CME Group Inc.'s Form 10-K, filed with the SEC on February 28, 2013, File No. 001-31553).

Exhibit Number	Description of Exhibit
10.5(1)	CME Group Inc. Director Stock Plan, amended and restated effective as of May 21, 2014 (incorporated by reference to Exhibit 10.1 to CME Group Inc.'s Current Report on Form 8-K, filed with the SEC on May 28, 2014, File No. 001-31553).
10.6(1)	Form of Equity Stipend Grant Letter for Non-Executive Directors (incorporated by reference to Exhibit 10.4 to CME Group Inc.'s Form 10-K, filed with the SEC on February 26, 2010, File No. 001-31553).
10.7(1)	CME Group Inc.'s Amended and Restated Employee Stock Purchase Plan, amended and restated as of May 23, 2012 (incorporated by reference to Exhibit 10.2 to CME Group Inc.'s Form 8-K, filed with the SEC on May 29, 2012, File No. 001-31553; First Amendment to the Amended and Restated Employee Stock Purchase Plan, effective as of December 5, 2012 (incorporated by reference to Exhibit 10.7 to CME Group Inc.'s Form 10-K, filed with the SEC on February 28, 2013, File No. 001-31553).
10.8(1)	Amended and Restated NYMEX Holdings, Inc. 2006 Omnibus Long-Term Incentive Plan, amended and restated as of December 31, 2008 (incorporated by reference to Exhibit 10.7 to CME Group Inc.'s Form 10-K, filed with the SEC on March 2, 2009, File No. 001-31553).
10.9(1)*	Chicago Mercantile Exchange Inc. Senior Management Supplemental Deferred Savings Plan (SMSDSP), Amended and Restated.
10.10(1)	Amended and Restated Chicago Mercantile Exchange Inc. Directors' Deferred Compensation Plan, amended and restated as of January 1, 2009 (incorporated by reference to Exhibit 10.9 to CME Group Inc.'s Form 10-K, filed with the SEC on March 2, 2009, File No. 001-31553).
10.11(1)	Chicago Mercantile Exchange Inc. Supplemental Executive Retirement Plan consisting of the Grandfathered Supplemental Retirement Plan, amended and restated as of January 1, 2008, and the Amended and Restated 409A Supplemental Executive Retirement Plan, amended and restated as of January 1, 2008 (incorporated by reference to Exhibit 10.9 to CME Group Inc.'s Form 10-K, filed with the SEC on February 28, 2008, File No. 000-33379).
10.12(1)	Chicago Mercantile Exchange Inc. Supplemental Executive Retirement Trust; First Amendment thereto, dated September 7, 1993 (incorporated by reference to Exhibit 10.5 to Chicago Mercantile Exchange Inc.'s Form S-4, filed with the SEC on February 24, 2000, File No. 333-95561).
10.13(1)	Recognition and Retention Plan for Members of the COMEX Division of New York Mercantile Exchange (incorporated by reference to Exhibit 10.11 to NYMEX Holdings, Inc.'s Form 10-K, filed with the SEC on March 29, 2001, File No. 333-30332); Amendment to the Recognition and Retention Plan for Members of the COMEX Division of the New York Mercantile Exchange, dated October 22, 2015 (incorporated by reference to Exhibit 10-.1 to CME Group's Form 10-Q, filed with the SEC on November 6, 2015, File No. 001-31533).
10.14(1)	Amended and Restated CME Group Inc. Incentive Plan for Named Executive Officers (Amended and Restated as of May 21, 2014) (incorporated by reference to Exhibit 10.2 to CME Group Inc.’s Form 8-K, filed with the SEC on May 28, 2014, File No. 001-31553).
10.15(1)	CME Group Inc. Severance Plan for Eligible Executives, amended and restated effective January 1, 2013 (incorporated by reference to Exhibit 10.16 to CME Group Inc.'s Form 10-K, filed with the SEC on February 28, 2014, File No. 001-31553); First Amendment to CME Group Inc. Severance Plan for Eligible Executives, effective as of October 13, 2014 (incorporated by reference to Exhibit 10.16 to CME Group's 10-K, filed with the SEC on February 26, 2015, File No. 001-31553).
10.16(1)	CME Group Inc. Severance Plan, amended and restated effective January 1, 2013 (incorporated by reference to Exhibit 10.17 to CME Group Inc.'s Form 10-K, filed with the SEC on February 28, 2014, File No. 001-31553); First Amendment to the Amended and Restated CME Group Inc. Severance Plan, effective October 13, 2014 (incorporated by reference to Exhibit 10.17 to CME Group's 10-K, filed with the SEC on February 26, 2015, File No. 001-31553).
10.17(1)	Agreement, effective as of November 11, 2015, between CME Group Inc. and Terrence A. Duffy (incorporated by reference to Exhibit 10.1 to CME Group Inc.'s Form 8-K, filed with the SEC on November 12, 2015, File No. 001-31553).
10.18(1)	Agreement, effective as of November 11, 2015, between CME Group Inc. and Phupinder S. Gill (incorporated by reference to Exhibit 10.2 to CME Group Inc.'s Form 8-K, filed with the SEC on November 12, 2015, File No. 001-31553).
10.19(1)	Consulting Agreement between Leo Melamed and CME Group Inc., dated June 26, 2009 (incorporated by reference to Exhibit 10.2 to CME Group Inc.'s Form 10-Q, filed with the SEC on August 6, 2009, File No. 001-31553).

Exhibit Number	Description of Exhibit
10.20(1)	Consulting Agreement between Leo Melamed and Chicago Mercantile Exchange Holdings Inc., dated November 14, 2005 (incorporated by reference to Exhibit 10.28 to Chicago Mercantile Exchange Holdings Inc.'s Form 10-K filed with the SEC on March 6, 2006, File No. 000-33379); Amendment, dated as of June 21, 2012 (incorporated by reference to Exhibit 10.4 to CME Group Inc.'s Form 10-Q, filed with the SEC on August 8, 2012, File No. 001-31553).
10.21(2)	License Agreement, dated June 29, 2012, between Standard & Poor's Financial Services LLC and Chicago Mercantile Exchange Inc. (incorporated by reference to Exhibit 10.6 to CME Group Inc.'s Form 10-Q, filed with the SEC on August 8, 2012, File No. 001-31553).
10.22(2)	Amended and Restated Index License Agreement, between CME Group Index Services LLC and the Board of Trade of the City of Chicago, Inc., effective as of July 1, 2011 (incorporated by reference to Exhibit 10.5 to CME Group Inc.'s Form 10-Q, filed with the SEC on August 8, 2012, File No. 001-31553).
10.23(2)	License Agreement, effective as of October 9, 2003, between The Nasdaq Stock Market, Inc., a subsidiary of National Association of Securities Dealers, Inc., and Chicago Mercantile Exchange Inc. (incorporated by reference to Exhibit 10.9 to Chicago Mercantile Exchange Holdings Inc.'s Form 10-K, filed with the SEC on March 11, 2004, File No. 001-31553), Amendment, dated April 26, 2005 (incorporated by reference to Exhibit 10.1 to Chicago Mercantile Exchange Holdings Inc.'s Form 10-Q, filed with the SEC on August 4, 2005, File No. 001-31553); Amendment, dated June 22, 2005 (incorporated by reference to Exhibit 10.2 to Chicago Mercantile Exchange Holdings Inc.'s Form 10-Q, filed with the SEC on August 4, 2005, File No. 001-31553); Amendment, dated as of June 26, 2008 (incorporated by reference to Exhibit 10.1 to CME Group Inc.'s Form 10-Q, filed with the SEC on August 7, 2008, File No. 001-31553).
10.24	Credit Agreement, dated as of March 19, 2015, among CME Group Inc., certain financial institutions and other persons party thereto as lenders, and Bank of America, N.A., as Administrative Agent (incorporated by reference to Exhibit 10.1 to CME Group Inc.'s Form 8-K, filed with the SEC on March 24, 2015, File No. 001-31553).
10.25	$250,000,000 Credit Agreement, dated as of November 30, 2012, among CME Group Inc., as borrower, and the lenders party thereto, and Bank of America, N.A., as administrative agent, Barclays Bank plc, Citibank, N.A., UBS Securities LLC, and Wells Fargo Bank, National Association, as co-syndication agents, and Merrill Lynch, Pierce, Fenner & Smith Incorporated, Barclays Bank plc, UBS Securities LLC, and Wells Fargo Securities, LLC, as joint lead arrangers and joint book managers (incorporated by reference to Exhibit 10.2 to CME Group Inc.'s Form 8-K, filed with the SEC on December 5, 2012, File No. 001-31533).
10.26	364-Day Chicago Mercantile Exchange Credit Facility, dated as of November 5, 2015, between Chicago Mercantile Exchange Inc., certain lenders and Bank of America, N.A., as Administrative Agent (incorporated by reference to Exhibit 10.1 to CME Group Inc.'s Form 8-K, filed with the SEC on November 10, 2015, File No. 001-31553).
10.27	Amended and Restated Commercial Paper Dealer Agreement, dated as of October 20, 2014, among CME Group Inc., as Issuer, and Barclays Capital Inc., as Dealer (incorporated by reference to Exhibit 4.1 above).
10.28	Amended and Restated Issuing and Paying Agency Agreement, dated as of September 26, 2014, between CME Group Inc. and Bank of America, National Association, as Issuing and Paying Agent (incororated by reference to Exhibit 4.2 above).
10.29	Amended and Restated Commercial Paper Dealer Agreement, dated as of October 20, 2014, between CME Group Inc., as Issuer, and Merrill Lynch, Pierce, Fenner & Smith Incorporated, as Dealer (incorporated by reference to Exhibit 4.3 above).
10.30	Amended and Restated Commercial Paper Dealer Agreement, dated as of October 20, 2014, between CME Group Inc., as Issuer, and Goldman, Sachs & Co., as Dealer (incorporated by reference to Exhibit 4.4 above).
12.1*	Ratio of Earnings to Fixed Charges.
21.1*	List of Subsidiaries of CME Group Inc.
23.1*	Consent of Ernst & Young LLP.
31.1*	Section 302—Certification of Phupinder S. Gill.
31.2*	Section 302—Certification of John W. Pietrowicz.
32.1*	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	XBRL Instance Document

Exhibit Number	Description of Exhibit
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

* Filed herewith.

(1) Management contract or compensatory plan or arrangement.
(2) The Chicago Mercantile Exchange Inc. Senior Management Supplemental Deferred Savings Plan was amended and restated and refiled to incorporate certain non-material amendments that inadvertently were not previously filed.
(3) Confidential treatment pursuant to Rule 406 of the Securities Act has been previously granted by the SEC for portions of this exhibit.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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, in the City of Chicago and State of Illinois on the 26th day of February, 2016.

CME Group Inc.

By: /S/ JOHN W. PIETROWICZ

John W. Pietrowicz
Senior Managing Director and Chief Financial Officer

Signature	Title
/S/ TERRENCE A. DUFFY **Terrence A. Duffy**	Executive Chairman of the Board and Director & President
/S/ PHUPINDER S. GILL **Phupinder S. Gill**	Chief Executive Officer and Director
/S/ JOHN W. PIETROWICZ **John W. Pietrowicz**	Senior Managing Director and Chief Financial Officer
/S/ JACK TOBIN **Jack Tobin**	Managing Director and Chief Accounting Officer
/S/ LEO MELAMED **Leo Melamed**	Chairman Emeritus and Director
/S/ JEFFREY M. BERNACCHI **Jeffrey M. Bernacchi**	Director
/S/ TIMOTHY S. BITSBERGER **Timothy S. Bitsberger**	Director
/S/ CHARLES P. CAREY **Charles P. Carey**	Director
/S/ DENNIS H. CHOOKASZIAN **Dennis H. Chookaszian**	Director
/s/ ELIZABETH A. COOK **Elizabeth A. Cook**	Director
/s/ ANA DUTRA **Ana Dutra**	Director
/S/ MARTIN J. GEPSMAN **Martin J. Gepsman**	Director
/S/ LARRY G. GERDES **Larry G. Gerdes**	Director
/S/ DANIEL R. GLICKMAN **Daniel R. Glickman**	Lead Director
/s/ WILLIAM W. HOBERT **William W. Hobert**	Director

/s/ WILLIAM P. MILLER II **William P. Miller II**	Director
/s/ JAMES E. OLIFF **James E. Oliff**	Director
/s/ RONALD A. PANKAU **Ronald A. Pankau**	Director
/s/ EDEMIR PINTO **Edemir Pinto**	Director
/s/ ALEX J. POLLOCK **Alex J. Pollock**	Director
/s/ JOHN F. SANDNER **John F. Sandner**	Director
/S/ TERRY L. SAVAGE **Terry L. Savage**	Director
/s/ WILLIAM R. SHEPARD **William R. Shepard**	Director
/s/ HOWARD J. SIEGEL **Howard J. Siegel**	Director
/s/ DENNIS A. SUSKIND **Dennis A. Suskind**	Director
/s/ DAVID J. WESCOTT **David J. Wescott**	Director

Exhibit 10.9

CHICAGO MERCANTILE EXCHANGE INC.

SENIOR MANAGEMENT SUPPLEMENTAL DEFERRED SAVINGS PLAN

(As Amended and Restated Effective February 22, 2016)

SECTION 1

General

1.1. History, Purpose and Effective Date.

(a) The Chicago Mercantile Exchange Inc., a Delaware corporation (the "Exchange"), maintains the Chicago Mercantile Exchange Inc. Senior Management Supplemental Deferred Savings Plan (the "Plan") to provide a select group of key management employees of the Exchange and participating affiliates (each, an "Employer") with the opportunity to defer receipt of compensation and receive additional retirement income from the Employer. The Plan is intended to constitute a plan maintained primarily for the purpose of providing deferred compensation for a select group of management or highly compensated employees within the meaning of Sections 201(2), 301(a)(3), and 401(a)(1) of the Employee Retirement Income Security Act of 1974, as amended ("ERISA").

(b) The Plan has been amended and restated, effective as of February 22. 2016 (the "Effective Date"), as set forth herein.

(c) Notwithstanding anything herein to the contrary, the terms of the Plan as in effect prior to January 1, 2005, as modified and set forth in the document entitled "Chicago Mercantile Exchange Inc. Grandfathered Senior Management Supplemental Deferred Savings Plan" (the "Pre-2005 Plan"), shall apply to the portion (if any) of a Participant's Account that was vested as of December 31, 2004, including credited earnings and losses with respect thereto (the "Grandfathered Account"), and the provisions of this amended and restated Plan shall not apply to such Grandfathered Account.

(d) The Employers participating in the Plan as of the Effective Date are listed in Appendix A.

1.2. Administration.

(a) The Retirement Committee (the "Retirement Committee") appointed by the Compensation Committee (the "Compensation Committee") of the Board of Directors of the Exchange is the Plan Administrator of the Plan. If the Compensation Committee fails to act to appoint the members of the Retirement Committee, then the Compensation Committee will be deemed to be the Retirement Committee hereunder. The Plan Administrator shall from time to time adopt rules for the administration of the Plan and shall have the sole discretion to make decisions and take any action with respect to questions arising in connection with the Plan, including, but not limited to, the construction and interpretation of the Plan, the resolution of any ambiguities, the determination of the conditions subject to which any benefits may be payable, the resolution of all questions concerning the status and rights of a Participant and others under the Plan, and whether a claimant is eligible for benefits under the Plan, the determination of the amount of benefits, if any, a claimant is entitled to receive, and making any other determinations which it believes necessary or advisable for the administration and operation of the Plan. Any such decision or action shall be final and binding upon all Participants and beneficiaries, and benefits under the Plan shall be paid only if the Plan Administrator decides in its discretion that the claimant is entitled to them. The Plan Administrator's decision or action in respect of any of the above shall be conclusive and binding upon all Participants and their beneficiaries, heirs, assigns, administrators, executors and any other person claiming through or under them, subject to such individual's rights to a review of the denial of any benefit claim under the claims procedure set forth in Section 1.11.

(b) In providing for the administration of the Plan, the Plan Administrator may delegate responsibilities for the operation and administration of the Plan by written document filed with the Plan records. Any such delegation may be revoked at any time. The Secretary of the Exchange (or, on behalf of the Secretary of the Exchange, any Corporate Secretary or Assistant Secretary) shall certify to any interested person the names of the employees of the Exchange who are, from time to time, authorized to act on behalf of the Plan Administrator and who are responsible for the day-to-day operation and administration of the Plan. The Plan Administrator may appoint and compensate such specialists to aid it in the administration of the Plan and arrange for such other services as it considers necessary or appropriate to carry out the provisions of the Plan.

1.3. Plan Year. The term "Plan Year" means the calendar year.

1.4. Source of Benefit Payments. Subject to the terms and conditions of the Plan, any amount payable to or on account of a Participant under this Plan shall be paid from the general assets of the Employer or from one or more trusts, the assets of which are subject to the claims of the Employer's general creditors. The amounts payable hereunder shall be reflected on the accounting records of the Employer but shall not be construed to create, or require the creation of, a trust, custodial or escrow account. None of the individuals entitled to benefits under the Plan shall have any preferred claim on, or any beneficial ownership interest in, any assets of the Employer or to any investment reserves, accounts, trusts or funds that the Employer may purchase, establish or accumulate to aid in providing the benefits under the Plan, and any rights of such individuals under the Plan shall constitute unsecured contractual rights only. Nothing contained in the Plan shall constitute a guarantee by the Employer that the assets of the Employer shall be sufficient to pay any benefits to any person. Nothing contained in the Plan and no action taken pursuant to its provisions shall create a trust or fiduciary relationship of any kind between the Employer and an employee or any other person.

1.5. Expenses. The expenses of administering the Plan shall be borne by the Exchange.

1.6. Effect on Other Benefit Plans. Any amounts credited or paid under this Plan shall not be considered to be compensation for the purposes of any qualified plan (within the meaning of Section 401(a) of the Internal Revenue Code of 1986, as amended (the "Code")) maintained by the Employer. The treatment of such amounts under other employee benefit plans shall be in accordance with the provisions of such plans.

1.7. Applicable Laws. The Plan shall be construed and administered in accordance with the laws of the State of Illinois.

1.8. Gender and Number. Where the context admits, words in any gender shall include any other gender, words in the singular shall include the plural and the plural shall include the singular.

1.9. Notices. Any notice or document required to be given to or filed with the Plan Administrator will be properly filed if delivered or mailed by registered mail, postage prepaid, to the Secretary of the Exchange, at its principal executive offices. The Plan Administrator may, by advance written notice to affected persons, revise such notice procedure from time to time. Any notice required under the Plan may be waived by the person entitled to notice.

1.10. Evidence. Evidence required of anyone under the Plan may be by certificate, affidavit, document or other information which the person acting on it considers pertinent and reliable, and signed, made or presented by the proper party or parties.

1.11. Claims Procedure.

(a) For purposes of the Plan, a claim for a benefit is a written application for a benefit filed with the Plan Administrator. In the event that any Participant or other person claims to be entitled to a benefit under the Plan, and the Plan Administrator or its designee determines that such claim should be denied in whole or in part, the Plan Administrator or its designee shall, in writing, notify such claimant within 90 days (180 days if special circumstance require) of receipt of such claim that his claim has been denied. The notice of denial will be written in a manner calculated to be understood by the average Participant and will include the following information: (a) the specific reason for the denial; (b) specific reference to those Plan provisions on which the denial is based; (c) a description of any additional information necessary to perfect the claim and an explanation of why the information is necessary; and (d) a description of the Plan's review procedures, the time limits applicable to those procedures, including a statement of the claimant's right to bring a civil action under ERISA Section 502(a) following the denial of his claim on review.

(b) If the Plan Administrator requests additional information from a claimant prior to an initial determination or a determination on appeal, the Plan Administrator will notify the claimant and permit the claimant to have 45 days to provide the requested information. The time of the Plan Administrator's decision will be tolled until the information is received or until the 45-day period has elapsed. If the information is not timely received by the Plan Administrator, its decision will be made without the requested information.

(c) Within 60 days after the mailing or delivery by the Plan Administrator or its designee of such notice, such claimant may request, by mailing or delivery of written notice to the Plan Administrator, a review by the Plan Administrator of the decision denying the claim. The clamant may submit written comments, documents, records and other information relating to his claim, whether or not those comments, documents, records or other information were submitted in connection with the initial claim. The claimant may also request that the Plan provide, free of charge, copies of all documents, records or other information relevant to his claim.

(d) If the claimant fails to request such a review within such 60-day period, it shall be conclusively determined for all purposes of this Plan that the denial of such claim by the Plan Administrator is correct.

(e) After such review, the Plan Administrator shall determine whether such denial of the claim was correct and shall notify such claimant in writing of its determination within 60 days of receipt of the claimant's request for review (120 days if special circumstances require). In the case of a claim denial on review, the notice will be written in a manner calculated to be understood by the average Participant and will include the following information: (a) the specific reason or reasons for denial; (b) specific reference to those Plan provisions on which denial is based; (c) a statement that the claimant is entitled to receive, upon written request and free of charge, reasonable access to and copies of all documents, records and other information relevant to his claim for benefits; and (d) a statement of any voluntary appeal procedures offered by the Plan and the claimant's right to obtain information about the procedures and to bring a civil action under ERISA Section 502(a).

SECTION 2

Participation

2.1. Participant.

(a) Employees of the Employer are eligible to participate in the Plan ("Participants") if they satisfy the eligibility criteria set forth in Section 3.2(a), 3.3(a), or 3.4(a); provided, however, that Participants shall be limited to a select group of management or highly compensated employees within the meaning of Sections 201(2), 301(a)(3), and 401(a)(1) of ERISA.

(b) If the Exchange determines that participation by one or more Participants shall cause the Plan to be subject to Part 2, 3 or 4 of Title I of ERISA, the entire interest of such Participant or Participants under the Plan shall be segregated from the Plan in the discretion of the Exchange, and such Participant or Participants shall cease to have any interest under the Plan.

2.2. Plan Not Contract of Employment. The Plan does not constitute a contract of employment, and participation in the Plan will not give any employee the right to be retained in the employ of the Employer nor any right or claim to any benefit under the Plan, unless such right or claim has specifically accrued under the terms of the Plan.

SECTION 3

Deferred Compensation; Plan Accounting

3.1. Deferred Compensation Accounts. The Plan Administrator shall maintain, or cause to be maintained, an Account in the name of each Participant consisting of the following subaccounts (as applicable):

(a) a subaccount (the "Elective Deferral Account") consisting of the base salary and/or bonus deferred by the Participant in accordance with Section 3.2, as adjusted in accordance with Section 3.5;

(b) a subaccount (the “401(k) Make-Whole Account”) consisting of the 401(k) Savings Plan Make-Whole Credits credited to the Participant’s Account in accordance with Section 3.3, as adjusted in accordance with Section 3.5; and

(c) a subaccount (the “Cash Balance Make-Whole Account”) consisting of the Cash Balance Plan Make-Whole Credits credited to the Participant’s Account in accordance with Section 3.4, as adjusted in accordance with Section 3.5.

A Participant’s Account shall also be segregated according to the Plan Year to which credits to the Account relate (each such segregated portion of the Account is sometimes referred to herein as a “Plan Year Account”).

The beginning balance of each Participant’s Plan Year Account on the Effective Date shall be the amount credited to such respective Plan Year Accounts under the Plan as in effect immediately prior to the Effective Date; provided, however, that the portion of the Participant’s Account consisting of the Participant’s Grandfathered Account shall be segregated and shall be subject to the provisions of the Pre-2005 Plan as provided under Section 1.1(c).

3.2. Deferral Election.

(a) The provisions of this Section 3.2 shall apply with respect to a Plan Year only to Participants who (i) as of the October 1 immediately preceding the commencement of such Plan Year, are Eligible Executives, or (ii) become Eligible Executives before October 1 of the Plan Year. As used in the Plan, an “Eligible Executive” means an employee of the Employer having a job level at or above Executive Director.

(b) Subject to such terms, conditions, and limitations as the Plan Administrator may, from time to time, impose, a Participant may make an irrevocable election to defer receipt of base salary and/or bonus earned by him from the Employer in any Plan Year, by filing a deferral election in writing with the Plan Administrator at such time and in such manner as the Plan Administrator shall provide, but in no case later than the day preceding the first day of such Plan Year. Notwithstanding the preceding sentence, a Participant who first becomes an Eligible Executive of the Employer before October 1 of a Plan Year may file a deferral election within 30 days of becoming eligible to participate in the deferral election feature of the Plan with respect to compensation earned by him during the portion of such Plan Year after such election is filed. A Participant’s election under this Section 3.2(b) shall apply only to the Plan Year for which it is made and not for any subsequent Plan Year.

(c) The maximum percentage of base salary that may be deferred by a Participant for a Plan Year shall be 50%. The maximum percentage of bonus that may be deferred by a Participant for a Plan Year shall be 100%.

(d) The Elective Deferral Account of each Participant shall be credited with the amount deferred by the Participant as of the date on which such compensation would otherwise have been paid to the Participant or such other date as the Plan Administrator may reasonably provide.

3.3. 401(k) Savings Plan Make-Whole Credits.

(a) The provisions of this Section 3.3 shall apply with respect to a Plan Year to a Participant (i) whose base salary (excluding bonus) for such Plan Year exceeds the dollar limitation under Section 401(a)(17) of the Code for such Plan Year, or (ii) is an Eligible Executive at any time during such Plan Year.

(b) Subject to such terms, conditions, and limitations as the Plan Administrator may from time to time impose, for each Plan Year the 401(k) Make-Whole Account of each Participant shall be credited with a "401(k) Savings Plan Make-Whole Credit." Such 401(k) Savings Plan Make-Whole Credit shall be credited to the Participant's Account at such time or times as the Plan Administrator shall determine but no later than 2½ months following the end of such Plan Year.

(c) The 401(k) Savings Plan Make-Whole Credit shall be 3 percent of the greater of the following amounts: (i) the amount, if any, by which the Participant's base salary (excluding bonus, but before reduction by any portion of base salary deferred pursuant to Section 3.2) for such Plan Year exceeds the dollar limitation under Section 401(a)(17) of the Code for such Plan Year, or (ii) the portion, if any, of the Participant's base salary deferred for such Plan Year pursuant to Section 3.2.

3.4. Cash Balance Plan Make-Whole Credits.

(a) The provisions of this Section 3.4 shall apply with respect to a Plan Year to a Participant (i) whose base salary and bonus paid in such Plan Year exceeds the dollar limitation under Section 401(a)(17) of the Code for such Plan Year, or (ii) is an Eligible Executive at any time during such Plan Year; provided, however, that no Participant who is a "Grandfathered CBOT Participant" as defined in the Pension Plan for Employees of the Chicago Mercantile Exchange (the "Pension Plan") shall be subject to this Section 3.4.

(b) To the extent that the amount credited for any Plan Year to a Participant's account under the Pension Plan is limited or reduced, either by reason of the limitation on compensation imposed by Section 401(a)(17) of the Code, or by reason of the Pension Plan's exclusion from the compensation base used in determining accruals ("Pensionable Compensation") of (x) elective deferrals under this Plan, (y) bonus award amounts under either the Amended and Restated CME Group Inc. Incentive Plan for Named Executive Officers or the Amended and Restated CME Group Inc. Annual Incentive Plan (the "Bonus Plans") that would qualify as Pensionable Compensation but for the Participant's election to receive such amounts in unrestricted shares of common stock of CME Group Inc. ("Company Stock") rather than in cash, and (z) amounts includible in the Participant's gross income under Section 83 of the Code upon the vesting of restricted shares of Company Stock issued to the Participant as payment of a bonus award under the Bonus Plans, the Account of the Participant shall be credited with a "Cash Balance Plan Make-Whole Credit," to be calculated in such manner and credited at such time or times as the Plan Administrator shall determine but no later than 2½ months after the end of such Plan Year.

3.5. Adjustment of Accounts.

(a) Upon becoming a Participant, a Participant shall elect from among the assumed investments that the Plan Administrator offers from time to time those investments in which the Participant's Account shall be deemed invested and the percentage of contributions to be allocated to each such assumed investment. The Participant may change such allocation (with respect to either future credits to his or her Account or existing Account balances) by notification to the Plan Administrator in such manner as it shall direct, and the Plan Administrator shall implement such change in election as soon as practicable following receipt thereof. In the event a Participant fails to provide such direction, the Participant's Account shall be adjusted on the basis of such default investment as the Plan Administrator shall establish from time to time.

(b) The amounts credited to a Participant's Account in accordance with Sections 3.2, 3.3 and 3.4 shall be adjusted from time to time in accordance with uniform procedures established by the Plan Administrator to reflect the value of an investment equal to the Participant's Account balance in the assumed investments elected or deemed elected by the Participant to use for purposes of adjusting his Account. Such amount shall be determined without regard to taxes that would be payable with respect to any such assumed investment. The Plan Administrator may eliminate any assumed investment alternative at any time; provided, however, that the Plan Administrator may not retroactively eliminate any assumed investment alternative. To the extent permitted by the Plan Administrator, the Participant may elect to have different portions of his Account balance for any period adjusted on the basis of different assumed investments.

(c) Notwithstanding the election by Participants of certain assumed investments and the adjustment of their Accounts based on such investment decisions, the Plan does not require, and no trust or other instrument maintained in connection with the Plan shall require, that any assets or amounts which are set aside in trust or otherwise for the purpose of paying Plan benefits shall actually be invested in the investment alternatives selected by Participants.

SECTION 4

Payment of Plan Benefits

4.1. Vesting.

(a) The portion of a Participant's Account attributable to base salary or bonus deferred pursuant to Section 3.2 shall be fully vested and nonforfeitable at all times.

(b) Vesting of the portion of a Participant's Account attributable to 401(k) Savings Plan Make-Whole Credits credited under Section 3.3 shall be determined as follows:

(i) The portion of a Participant's Account attributable to 401(k) Savings Plan Make-Whole Credits credited for Plan Years beginning prior to January 1, 2007 shall be fully vested and nonforfeitable.

(ii) The portion of a Participant's Account attributable to 401(k) Savings Plan Make-Whole Credits credited under Section 3.3 for Plan Years beginning on or after January 1, 2007 shall be fully vested and nonforfeitable in the case of a Participant who was an employee of the Employer on December 31, 2006 and has been continuously employed by the Employer from that date until the date as of which the 401(k) Savings Plan Make-Whole Credit is credited.

(iii) Except as otherwise provided in Section 4.1(b)(ii), the vested portion of a Participant's 401(k) Make-Whole Account credited with respect to Plan Years beginning on or after January 1, 2007 shall be based on his or her Years of Vesting Service (as defined in the Chicago Mercantile Exchange Inc. 401(k) Savings Plan), as determined in the following table:

Years of Vesting Service	Vested percentage
Less than 2	0%
2	20%
3	40%
4	60%
5 or more	100%

(iv) In the event of a Participant's termination of employment for any reason other than death before such Participant's 401(k) Make-Whole Account is fully vested, the nonvested portion of his or her 401(k) Make-Whole Account shall be forfeited.

(c) Vesting of the portion of a Participant's Account attributable to Cash Balance Plan Make-Whole Credits credited under Section 3.4 shall be determined as follows:

(i) The portion of a Participant's Account attributable to Cash Balance Plan Make-Whole Credits credited for Plan Years beginning prior to January 1, 2007 shall be fully vested and nonforfeitable.

(ii) The portion of a Participant's Account attributable to Cash Balance Plan Make-Whole Credits credited for Plan Years beginning on or after January 1, 2007 shall be fully vested and nonforfeitable in the case of a Participant who was an employee of the Employer on December 31, 2006 and has been continuously employed by the Employer from that date until the date as of which the Cash Balance Plan Make-Whole Credit is credited.

(iii) Except as otherwise provided by Section 4.1(c)(ii), the portion of a Participant's Account attributable to Cash Balance Plan Make-Whole Credits credited for Plan Years beginning on or after January 1, 2007 shall become 100% vested and nonforfeitable upon the completion of three years of Eligibility Service (as defined in the Pension Plan) and shall be 0% vested prior to that time. In the event of a Participant's termination of employment for any reason other than death prior to the completion of three years of Eligibility Service, the portion of his or her Account to which this Section 4.1(c)(iii) applies shall be forfeited.

4.2. Timing of Payment; Distribution Elections

(a) Except as otherwise provided in this Section 4, the vested balance in each Plan Year Account of a Participant shall be paid in a lump sum on the first payroll date following the end of the Restricted Period. For purposes hereof, the "Restricted Period" means the period commencing on the Participant's separation from service and ending on the six-month anniversary of such separation from service or, if earlier, the date of the Participant's death. Notwithstanding the foregoing, in the event a Participant has made a valid distribution election with respect to a Plan Year Account in accordance with Section 4.2(b) or (c), such Plan Year Account shall be distributed in accordance with such election (subject to the limitations of Section 4.2(d)).

(b) With respect any Plan Year Account relating to a Plan Year before 2007 for which a Participant made a valid irrevocable distribution election between January 1, 2005 and September 30, 2006, pursuant to rules and procedures adopted by the Plan Administrator intended in good faith to comply with Section 409A of the Code and Internal Revenue Service guidance issued thereunder, the vested balance of such Plan Year Account shall be paid in accordance with such election. Such election must specify (i) whether the Plan Year Account is to be paid in a lump sum or in substantially equal annual installments, in either case paid or commencing at the time of the Participant's separation from service, and (ii) if installments are elected, the number of such installments (not to exceed five).

(c) With respect to any Plan Year Account relating to a Plan Year after 2006, a Participant may elect in such manner as the Plan Administrator may prescribe the time and manner in which the vested portion of such Plan Year Account shall be distributed. Such election shall specify either (i) that payment is to be made (or is to commence) upon the Participant's separation from service, or (ii) that payment is to be made (or is to commence) upon the earlier of the Participant's separation from service or a specific date that is not earlier than two years after the first day of the Plan Year to which the Plan Year Account relates. The election shall also specify whether the Plan Year Account is to be paid in a lump sum or in substantially equal annual installments, and if installments are elected, the number of such installments (not to exceed five) (a "form of payment election"). In the case of a Participant who elects to have payment of his or her Plan Year Account be made (or commence) upon the earlier of the Participant's separation from service or a fixed date in accordance with clause (ii) of this Section 4.2(c), the Participant may make a separate form of payment election for each such payment trigger. A Participant's Payment Election with respect to a Plan Year Account shall be made before the first day of the Plan Year to which such Plan Year Account relates or, in the case of a Participant who first becomes eligible for the Plan after January 1 and before October 1 of the Plan Year pursuant to Section 3.2, within the first 30 days of such eligibility. Except as otherwise provided in this Section 4, a Participant's Payment Election shall be irrevocable.

(d) Notwithstanding any provision herein to the contrary, (i) with respect to any distribution triggered by the Participant's separation from service, no portion of such Plan Year Account shall be paid until the first payroll date after the end of the Restricted Period, and (ii) the foregoing restriction shall not affect the timing of any installment payment after the first installment.

4.3. <u>Unforeseeable Emergencies</u>.

(a) In the event of a Participant's Unforeseeable Emergency, such Participant may request an emergency withdrawal from his or her vested Account. Any such request shall be subject to the approval of the Plan Administrator, which approval (a) shall only be granted to the extent reasonably needed to satisfy the need created by the Unforeseeable Emergency, and (b) shall not be granted to the extent that such need may be relieved (i) through reimbursement or compensation by insurance or otherwise or (ii) by liquidation of the Participant's assets (to the extent the liquidation of such assets would not itself cause severe financial hardship).

(b) In the event of a Participant's Unforeseeable Emergency on account of which the Participant receives a withdrawal pursuant to Section 4.3(a), the Participant's Deferral Election shall be canceled.

(c) An "Unforeseeable Emergency" means a severe financial hardship of the Participant or beneficiary resulting from an illness or accident of the Participant or his or her spouse or dependent (as defined in Section 152(a) of the Code), loss of the Participant's property due to casualty (including the need to rebuild a home following damage to a home not otherwise covered by insurance), or other similar extraordinary and unforeseeable circumstances arising as a result of events beyond the Participant's control. Circumstances that may constitute an Unforeseeable Emergency include the imminent foreclosure of or eviction from the Participant's primary residence; the need to pay for medical expenses, including non-refundable deductibles, as well as for the costs of prescription drug medication; and the need to pay for the funeral expenses of a spouse or a dependent (as defined in Section 152(a) of the Code). The purchase of a home and the payment of college tuition generally are not Unforeseeable Emergencies. Whether the Participant is faced with an Unforeseeable Emergency permitting an emergency withdrawal shall be determined by the Plan Administrator in its sole discretion, based on the relevant facts and circumstances and applying regulations and other guidance under Section 409A of the Code.

4.4. Beneficiary Designation. Each Participant may from time to time designate any legal or natural person or persons (who may be designated contingently or successively) to whom his benefits under the Plan are to be paid if he dies before he receives all of his vested benefits. A beneficiary designation will be effective only if effected in such manner as the Plan Administrator shall prescribe from time to time, and only if the designation is delivered to the Plan Administrator while the Participant is alive, and will cancel all beneficiary designations with respect to the Plan filed earlier. Except as otherwise specifically provided in this Section 4.4, if no valid beneficiary designation is in effect at the time of a Participant's death, or if the designated beneficiary of a deceased Participant dies before him or before complete payment of the Participant's benefits, his benefits shall be paid to the legal representative or representatives of the estate of the last to die of the Participant and his designated beneficiary.

4.5. Distributions to Disabled Persons. Notwithstanding the provisions of this Section 4, if, in the Plan Administrator's opinion, a Participant or beneficiary is under a legal disability or is in any way incapacitated so as to be unable to manage his financial affairs, the Plan Administrator may direct that payment be made to a relative or friend of such person for his benefit until claim is made by a conservator or other person legally charged with the care of his person or his estate, and such payment shall be in lieu of any such payment to such Participant or beneficiary. Thereafter, any benefits under the Plan to which such Participant or beneficiary is entitled shall be paid to such conservator or other person legally charged with the care of his person or his estate.

4.6. Benefits May Not be Assigned. Neither the Participant nor any other person shall have any voluntary or involuntary right to commute, sell, assign, pledge, anticipate, mortgage or otherwise encumber, transfer, hypothecate or convey in advance of actual receipt the amounts, if any, payable hereunder, or any part hereof, which are expressly declared to be unassignable and non-transferable. No part of the amounts payable shall be, prior to actual payment, subject to seizure or sequestration for payment of any debts, judgments, alimony or separate maintenance owed by the Participant or any other person, or be transferred by operation of law in the event of the Participant's or any other person's bankruptcy or insolvency.

4.7. Withholding for Tax Liability. The Exchange may withhold or cause to be withheld from any payment of benefits made pursuant to the Plan any taxes required to be withheld and such sum as the Exchange may reasonably estimate to be necessary to cover any taxes for which the Exchange may be liable and which may be assessed with regard to such payment.

SECTION 5

Miscellaneous

5.1. Section 409A. This Plan is intended to comply with the requirements of Section 409A of the Code and shall be interpreted in a manner consistent therewith. Accordingly, notwithstanding any provisions of the Plan to the contrary:

(a) The Plan shall be operated at all times in accordance with the requirements of Section 409A of the Code and, in the event of any inconsistency between any provision of the Plan and Section 409A, the provisions of Section 409A shall control.

(b) Any provision in the Plan that is determined to violate the requirements of Section 409A of the Code shall be void and without effect.

(c) Any provision required by Section 409A of the Code to appear in the Plan document that is not expressly set forth herein shall be deemed to be set forth herein, and the Plan shall be administered in all respects as if such provision was expressly set forth herein.

5.2. Limitation of Liability. The Exchange, its parents, subsidiaries, and affiliates, the Board of Directors of any of the foregoing, any officer, employer or agent of any of the foregoing, and the members of the Retirement Committee shall not incur any liability individually or on behalf of any other individuals or on behalf of the Exchange or its parents, subsidiaries, or affiliates for any act, or failure to act, made in good faith in relation to the Plan.

SECTION 6

Amendment and Termination

6.1. Amendment and Termination.

(a) The Exchange may amend or terminate the Plan at any time and from time to time, and retroactively if deemed necessary or appropriate.

(b) Any amendment of the Plan shall be effected either (i) by resolution of the Compensation Committee or its successor, or (ii) by resolution of the Retirement Committee; provided, however, that only the Compensation Committee or its successor is authorized to approve an amendment that is anticipated to result in a material impact to the Exchange unless it otherwise acts to delegate this responsibility; and provided further that the Retirement Committee may adopt minor or administrative amendments to the Plan, including amendments to comply with applicable laws.

(c) A Plan termination shall be effected by resolution of the Compensation Committee or its successor. In the event of a termination of the Plan, Participants' vested Account balances shall be distributed in such manner as the Plan Administrator shall determine consistent with the requirements of Section 409A of the Code.

Dated this 22nd day of February, 2016.

CHICAGO MERCANTILE EXCHANGE INC.

By /s/ Hilda Harris Piell

Its Senior Managing Director & Chief Human Resources Officer

LIST OF PARTICIPATING EMPLOYERS

Chicago Mercantile Exchange Inc.
GFX Corporation
New York Mercantile Exchange, Inc.
CME Group Index Services LLC (see Supplement A)
Pivot, Inc.

SUPPLEMENT A
CERTAIN CGIS EMPLOYEES

Any eligible individual who was formerly employed by Dow Jones and Company, Inc. (“Dow Jones”) and who was offered and accepted employment with CME Group Index Services LLC (“CGIS”) as a result of the joint venture transaction between CME Group Inc. and Dow Jones shall be treated for eligibility and vesting service purposes as though his or her service with Dow Jones from his or her most recent date of hire with Dow Jones had been rendered as an employee of an Employer.

SUPPLEMENT B

FROZEN NYMEX ACCOUNTS

Applicability of this Supplement B

The provisions of this Supplement B apply to, and supersede any conflicting provisions of the core plan document (the "Core Plan") with respect to, the Accounts ("Frozen NYMEX Accounts") that were transferred to the Plan from the former New York Mercantile Exchange Deferred Compensation Plan for Key Employees (the "NYMEX Plan") as a result of the merger of the NYMEX Plan into the Plan. Except as otherwise provided in this Supplement B, Frozen NYMEX Accounts shall be subject to the provisions of the Core Plan. Section references in this Supplement B are to the Core Plan except as otherwise specified.

A. Adjustment of Accounts.

1. The deemed investment of each Frozen NYMEX Account as of the Transfer Date shall correspond to the deemed investment of such account immediately before the Transfer Date, as determined by applying the investment mapping rule adopted by the Plan Administrator. The "Transfer Date" is the date on which the assets from the NYMEX Plan's rabbi trust are transferred to the rabbi trust for this Plan.

2. In all other respects the Frozen NYMEX Accounts shall be subject to the provisions of Section 3.5.

B. Payment of Plan Benefits

1. Frozen NYMEX Accounts shall be subject to Sections 4.3 through 4.7 of the Core Plan, but shall not be subject to Section 4.1 or 4.2.

2. All Frozen NYMEX Accounts shall be 100% vested.

3. Payment of a Participant's Frozen NYMEX Account shall be made, or shall commence, on the first day of the month that next follows the six-month anniversary of the Participant's separation from service (the "Distribution Commencement Date"). Payment shall be made in a lump sum unless the election previously made by the Participant under the NYMEX Plan specified an installment payout, in which event payment shall be made in annual installments payable on the Distribution Commencement Date and anniversaries thereof.

4. No changes to a Participant's distribution election shall be permitted.

5. Notwithstanding anything to the contrary herein, in the event of a Participant's death before his or her NYMEX Account has been fully distributed, the balance in the Participant's NYMEX Account shall be paid to his or her beneficiary in a lump sum within 90 days after the date of the Participant's death.

Exhibit 12.1

Ratio of Earnings to Fixed Charges [(1)]

The following table sets forth our ratio of earnings to fixed charges [(1)] for the periods indicated. All amounts are in millions, except for the ratio of earnings to fixed charges.

	Year Ended December 31,				
	2015	2014	2013	2012	2011
Income before income taxes	$ 1,956.8	$ 1,771.4	$ 1,601.0	$ 1,693.4	$ 1,936.5
Add back:					
Share of losses on equity investees [(2)]	2.6	6.5	6.4	5.5	5.9
Amortization of capitalized interest	0.2	0.3	0.2	0.2	0.2
Distributed income from equity investees	94.9	76.2	68.5	14.9	—
Subtract:					
Share of earnings of equity investees [(2)]	(102.6)	(91.3)	(76.9)	(36.2)	(1.6)
Capitalized interest	—	—	—	(0.6)	(1.0)
Adjusted Earnings Before Income Taxes	1,951.9	1,763.1	1,599.2	1,677.2	1,940.0
Plus:					
Interest expense	117.4	119.4	151.4	132.7	117.9
Interest expense within rent	16.0	15.5	13.9	11.7	11.2
Adjusted Earnings	$ 2,085.3	$ 1,898.0	$ 1,764.5	$ 1,821.6	$ 2,069.1
Fixed Charges	$ 133.4	$ 134.9	$ 165.3	$ 144.4	$ 129.1
Ratio of Earnings to Fixed Charges	15.64	14.07	10.67	12.62	16.02

(1) The ratio of earnings to fixed charges is calculated by dividing adjusted earnings by fixed charges. “Fixed charges” consist of interest incurred and an estimate of interest within rental expense.

(2) Represents CME Group's interest in various entities, which is recognized using the equity method of accounting.

Exhibit 21.1

CME Group Subsidiaries

Name of Subsidiary*	Jurisdiction of Incorporation or Organization
Board of Trade of the City of Chicago, Inc.	Delaware
C-B-T Corporation	Delaware
Chicago Mercantile Exchange Inc.	Delaware
Chicago Mercantile Exchange Korea Inc.	Republic of Korea
Chicago Mercantile Exchange Luxembourg Holdings S.à.r.l.	Luxembourg
Chicago Mercantile Exchange Luxembourg S.à.r.l.	Luxembourg
CME Benchmark Europe Limited	United Kingdom
CME Clearing Europe Limited	United Kingdom
CME Consulting (Beijing) Co. Ltd.	China
CME ECM Inc.	Delaware
CME Europe Limited	United Kingdom
CME Finance Holdings Limited	United Kingdom
CME Global Marketplace Inc.	Delaware
CME Group Asia Holdings Pte.Ltd.	Singapore
CME Group Hong Kong Limited	Hong Kong
CME Group Index Services LLC	Delaware
CME Group International Market Data Limited	United Kingdom
CME Group Japan Kabushiki Kaisha	Japan
CME Group Marketing Canada Inc.	Canada
CME Group Singapore Operations Pte.Ltd.	Singapore
CME Group Strategic Investments LLC	Delaware
CME India Holdings LLC	Delaware
CME India Technology and Support Services Private Limited	India
CME Interest Earning Facility for Customer-Segregated Funds, L.L.C.	Illinois
CME Interest Earning Facility for Proprietary Funds, L.L.C.	Illinois
CME Marketing Europe Limited	United Kingdom
CME Operations Limited	United Kingdom
CME Shareholder Servicing LLC	Illinois
CME Swaps Marketplace Ltd.	United Kingdom
CME Technology and Support Services Limited	United Kingdom
CME Trade Repository Limited	United Kingdom
CME Ventures LLC	Delaware
CMEF Luxembourg S.a.r.l.	Luxembourg
CMEG Brazil 1 Participações Ltda.	Brazil
CMEG Brazil Investments 1 LLC	Delaware
CMEG Brazil Investments 2 LLC	Delaware
CMEG Foundation Services Inc.	Delaware
CMEG México, S. de R.L. de C.V.	Mexico
CMEG NYMEX Holdings Inc.	Delaware
CMEG Strategic Sdn. Bhd.	Malaysia
CMESCC Inc.	Delaware

Commodity Exchange, Inc.	New York
ConfirmHub, LLC	Delaware
Elysian Systems Limited	United Kingdom
GFX Corporation	Illinois
Globex Markets Ltd.	United Kingdom
New York Mercantile Exchange, Inc.	Delaware
Pivot, Inc.	Delaware

***Inactive subsidiaries and subsidiaries in the process of liquidation have been excluded.**

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

(1) Registration Statement (Form S-8 No. 333-105236) pertaining to the CME Group Inc. Amended and Restated Omnibus Stock Plan,

(2) Registration Statement (Form S-8 No. 333-159932) pertaining to the CME Group Inc. Amended and Restated Omnibus Stock Plan and the 2005 Director Stock Plan,

(3) Registration Statement (Form S-8 No. 333-104804; Form S-8 No. 333-115656) pertaining to the Agreement between Chicago Mercantile Exchange Holdings Inc. and James J. McNulty,

(4) Registration Statement (Form (S-8 No. 333-124497) pertaining to the Employee Stock Purchase Plan and the 2005 Director Stock Plan,

(5) Registration Statement (Form S-8 No. 333-144543) pertaining to CBOT Holdings, Inc.'s 2005 Long-Term Equity Incentive Plan,

(6) Registration Statement (Form S-8 No. 333-153462) and Post-Effective Amendment No. 2 to Registration Statement on Form S-4 (Form S-8 No. 333-151577) pertaining to the NYMEX Holdings, Inc.'s 2006 Omnibus Long-Term Incentive Plan,

(7) Registration Statement (Form S-8 No. 333-182741 pertaining to the Employee Stock Purchase Plan,

(8) Registration Statement (Form S-3ASR No. 333-132554) Shelf Registration Statement for the offering of debt securities, Class A Common Stock, Preferred Stock and Warrants,

(9) Registration Statement (Form S-3ASR No. 333-163473) Shelf Registration Statement for the offering of debt securities, Class A Common Stock, Preferred Stock and Warrants,

(10) Registration Statement (Form S-3ASR No. 333-185311) Shelf Registration Statement for the offering of debt securities, Class A Common Stock, Preferred Stock and Warrants.

(11) Registration Statement (Form S-3ASR No. 333-208334) Shelf Registration Statement for the offering of debt securities, Class A Common Stock, Preferred Stock and Warrants.

of our reports dated February 26, 2016 with respect to the consolidated financial statements and schedules of CME Group Inc., and the effectiveness of internal control over financial reporting of CME Group Inc., incorporated by reference in this Annual Report (Form 10-K) for the year ended December 31, 2015.

/s/ Ernst & Young LLP

Chicago, Illinois
February 26, 2016

Exhibit 31.1

CERTIFICATIONS

I, Phupinder S. Gill, certify that:

1. I have reviewed this report on Form 10-K of CME Group Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 26, 2016

/s/ Phupinder S. Gill

Name:	Phupinder S. Gill
Title:	*Chief Executive Officer*

Exhibit 31.2

I, John W. Pietrowicz, certify that:

1. I have reviewed this report on Form 10-K of CME Group Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 26, 2016

/s/ John W. Pietrowicz

Name: John W. Pietrowicz

Title: *Chief Financial Officer*

Exhibit 32.1

Certification of CEO and CFO Pursuant to
18 U.S.C. Section 1350,
as Adopted Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report on Form 10-K of CME Group Inc. (Company) for the year ended December 31, 2015 as filed with the Securities and Exchange Commission on the date hereof (Report), Phupinder S. Gill, as Chief Executive Officer of the Company, and John W. Pietrowicz, as Chief Financial Officer of the Company, each hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of his knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Phupinder S. Gill

Name:	Phupinder S. Gill
Title:	Chief Executive Officer

Date: February 26, 2016

/s/ John W. Pietrowicz

Name:	John W. Pietrowicz
Title:	Chief Financial Officer

Date: February 26, 2016

This certification accompanies the Report pursuant to § 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed filed by the Company for purposes of §18 of the Securities Exchange Act of 1934, as amended.

A signed original of this written statement required by § 906 of the Sarbanes-Oxley Act of 2002 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.