



NOTICE OF 2019 ANNUAL MEETING OF SHAREHOLDERS

Wednesday, May 8, 2019

10:00 a.m. Central Time

The Conference Center

One North Wacker Drive

Chicago, Illinois 60606

March 20, 2019

Dear Shareholder:

You are invited to attend the 2019 annual meeting of shareholders of CME Group Inc.

Shareholders will vote on the following items:

Item 1: To elect seventeen directors that we refer to as "Equity directors."

Item 2: To ratify the appointment of Ernst & Young LLP as our independent registered public accounting firm for 2019.

Item 3: To approve, by advisory vote, the compensation of our named executive officers.

Item 4: To elect three Class B-1 directors, two Class B-2 directors and one Class B-3 director.

Item 5: To elect five members to each of the Class B-1, Class B-2 and Class B-3 nominating committees.

Your vote is important. You are eligible to vote if you were a shareholder of record at the close of business on March 11, 2019.

Whether or not you plan to attend the annual meeting, we encourage you to read this proxy statement and vote your shares as soon as possible. Please review the instructions on each of your voting options described in the General Information section of this proxy statement on **page 3**.

Notice Regarding the Availability of Proxy Materials. Under the Securities and Exchange Commission's (SEC) "notice and access" rules, we have elected to provide access to our proxy materials over the Internet. On or around March 22, 2019, we mailed to our shareholders (other than those who previously requested email or paper delivery) a Notice of Internet Availability of Proxy Materials (**Notice**). If you received a Notice, you will not receive a printed copy of the proxy materials in the mail. Instead, the Notice instructs you on how to access and review all the important information contained in the proxy statement and Annual Report on Form 10-K for the year ended December 31, 2018 (**Annual Report**). We believe that providing our proxy materials over the Internet increases the ability of our shareholders to receive the information they need, while reducing the environmental impact of our annual meeting. You may, however, follow the instructions in the Notice to request hard copy materials.

By order of the board of directors,

A handwritten signature in black ink, appearing to read "Terrence A. Duffy".

Terrence A. Duffy
Chairman and Chief Executive Officer

A handwritten signature in black ink, appearing to read "Kathleen M. Cronin".

Kathleen M. Cronin
Senior Managing Director,
General Counsel & Corp. Secretary

This summary highlights key elements of our proxy statement. For more complete information, you should review the entire proxy statement along with our Annual Report.

BUSINESS HIGHLIGHTS

The year 2018 was one of growth and achievement for CME Group. We set annual average daily volume records in four of our six asset classes, as well as in total and electronic options. We continued to launch new products, product extensions, services and analytical tools to provide capital and operational efficiencies to our market participants across the globe. We reported revenue of \$4.3 billion and operating income of \$2.6 billion and demonstrated solid expense control during the year.

The following are additional key performance metrics from 2018:

Record Average Daily Volume	Record Options Average Daily Volume	Aggregate Value of Declared Dividends	CME Globex Average Daily Volume Originating Outside U.S.
19.2 million contracts	3.9 million contracts	\$1.6 billion	4.5 million contracts

Our combination with NEX Group plc (**NEX**), completed during 2018, creates a leading, client-centric, global markets company, generating significant efficiencies across futures, cash and OTC products for market participants seeking to lower their cost of trading and better manage risk. It also will improve our offerings to customers through the complementary combination of CME Group's exchange-traded derivative products and NEX's cash and OTC products. It also expands our international footprint and global client base.

For a more detailed discussion on our financial performance, see our **Annual Report**.

ANNUAL MEETING PROPOSALS AND BOARD RECOMMENDATIONS

Proposal	Board Recommendation
Item 1: Election of Equity Directors	FOR each of the nominees
Item 2: Ratification of Ernst & Young as our Auditors	FOR
Item 3: Approval, by advisory vote, of the compensation of our named executive officers	FOR
Item 4: Election of Class B-1, Class B-2 and Class B-3 Directors	No recommendation
Item 5: Election of Class B-1, Class B-2 and Class B-3 Nominating Committee Members	No recommendation

GENERAL INFORMATION ABOUT THE MEETING	3	ELECTION OF CLASS B-1, CLASS B-2 AND CLASS B-3 DIRECTORS	
ELECTION OF EQUITY DIRECTORS		Item 4 – Election of Class B-1, Class B-2 and Class B-3 Directors	28
Item 1 – Election of Equity Directors	10	Class B-1 Director Nominees	28
Director Nominations and Qualifications	10	Class B-2 Director Nominees	30
Required Vote	11	Class B-3 Director Nominees	31
Equity Directors up for Election	12	ELECTION OF CLASS B-1, CLASS B-2 AND CLASS B-3 NOMINATING COMMITTEES	
Director Attributes	16	Item 5 – Election of Class B-1, Class B-2 and Class B-3 Nominating Committees	32
GOVERNANCE		Class B-1 Committee Nominees	32
Corporate Governance	17	Class B-2 Committee Nominees	33
Governance Highlights	17	Class B-3 Committee Nominees	34
Corporate Governance Materials	17	CD&A AND COMPENSATION MATTERS	
Director Attendance	17	Compensation Committee Matters	35
Director Independence	18	Compensation Discussion and Analysis	37
Public Directors	18	Compensation Committee Report	53
Board Leadership Structure	19	Executive Compensation	54
Board's Role in Risk Oversight	19	Chief Executive Officer Pay Ratio	63
Executive Sessions	20	Director Compensation	64
Annual Assessment of Board, Committee and Individual Director Performance	20	OTHER BUSINESS	
Reporting Concerns to the Audit Committee	20	Security Ownership of CME Group Common Stock	67
Contacting the Board of Directors	20	Other Business	70
Shareholder Engagement	21	Certain Business Relationships with Related Persons	70
Board Committees	21	Charitable and Civic Contributions	72
AUDIT		Section 16(a) Beneficial Ownership Reporting Compliance	72
Item 2 – Ratification of the Appointment of Ernst & Young LLP as our Independent Registered Public Accounting Firm for 2019	24	APPENDIX A – CATEGORICAL INDEPENDENCE STANDARDS	73
The Audit Committee has Pre-Approval Processes for Non-Audit Services	24		
Principal Accountant Fees and Services	25		
Audit Committee Financial Experts	25		
Required Vote	25		
Report of the Audit Committee	26		
ADVISORY VOTE ON THE COMPENSATION OF NAMED EXECUTIVE OFFICERS			
Item 3 – Advisory Vote on the Compensation of our Named Executive Officers	27		
Factors to Consider	27		
Required Vote	27		

The board of directors of CME Group Inc. is providing this proxy statement in connection with the annual meeting of shareholders to be held on Wednesday, May 8, 2019, at 10:00 a.m. Central Time, at The Conference Center, One North Wacker Drive, Chicago, Illinois. The terms the “company,” “we,” “us” and “our” refer to CME Group and its subsidiaries. Shares of our Class A common stock are listed on the Nasdaq Global Select Market (**NASDAQ**) under the trading symbol “CME.” Our principal offices are located at 20 South Wacker Drive, Chicago, Illinois 60606. Our phone number is 312.930.1000.

Further information about CME Group can be found at <http://www.cmegroup.com>. Information made available on our website does not constitute a part of this proxy statement. Additional information regarding the availability of materials referenced in this proxy statement is available on **page 9**.

WHEN AND WHERE IS THE ANNUAL MEETING?

The annual meeting of shareholders of CME Group will be held at 10:00 a.m., Central Time, on Wednesday, May 8, 2019, at The Conference Center, located at One North Wacker Drive, Chicago, Illinois.

WHO MAY ATTEND THE ANNUAL MEETING?

All holders of Class A and Class B common stock on March 11, 2019, the record date for the annual meeting, are entitled to notice of and are invited to attend the annual meeting.

ARE THERE ANY RULES FOR ADMISSION TO THE ANNUAL MEETING?

Yes. You are entitled to attend the annual meeting only if you were, or you hold a valid legal proxy naming you to act for, one of our shareholders on the record date. Please note that seating is limited, and admission will be accepted on a first-come, first-served basis.

If you plan to attend the meeting, you should register in advance. Please go to the “shareholder meeting registration” link at www.proxyvote.com and follow the instructions provided. You will need the 16-digit control number located on your Notice, proxy card or voter instruction form. Please print your registration confirmation and bring it with you to the meeting along with valid picture identification, such as a driver’s license or passport. If you do not have a printed registration confirmation, we must be able to confirm:

- Your identity by reviewing a valid form of photo identification, such as a driver’s license; and
- You were a registered shareholder or held your shares in street name on the record date by:
 - verifying your name and stock ownership against our list of registered shareholders; or
 - reviewing other evidence of your stock ownership that shows your current name and address, such as a copy of your most recent brokerage or bank statement or the Notice, if you hold your shares in street name; or
- You are validly acting as proxy:
 - for a registered shareholder as of the record date, by reviewing a written legal proxy granted to you and signed by the registered shareholder; or
 - for a street name holder as of the record date, by reviewing a written legal proxy from a brokerage firm or bank holding the shares to the street name holder that is assignable, and a written legal proxy to you signed by the street name holder, together with a brokerage or bank statement or Notice showing the street name holder’s shares as described above.

If you do not have a valid form of picture identification and proof that you owned or are legally authorized to act as proxy for someone who owned, shares of our common stock on March 11, 2019, you will not be admitted to the meeting.

At the entrance to the meeting, we will verify that your name appears in our stock records or we will inspect your brokerage or bank statement or Notice, as your proof of ownership and any written proxy you present as the representative of a shareholder. We will decide **in our sole discretion** whether the documentation you present for admission to the meeting meets the requirements described above. If you hold your shares in a joint account, both owners can be admitted to the meeting if proof of joint ownership is provided and you both follow the admission procedures described above. Please allow ample time for these admission procedures.

Shareholders will not be allowed to use cameras (including cell phones with photographic capabilities), recording devices or other electronic devices at the meeting.

WILL THE ANNUAL MEETING BE WEBCAST?

Yes. A live webcast of the annual meeting will be provided from our Investor Relations section of our website www.cmegroup.com. Go to Investor Relations, click on Events and Presentations and then click on listen to webcast for the CME Group Inc. 2019 Annual Meeting of Shareholders. If you miss the meeting, you can view a replay of the webcast on that site. Please note that you will not be able to vote your shares or ask questions via the webcast. If you plan to view the webcast, please submit your vote in advance.

WHAT COMPANY SPONSORED PROPOSALS ARE THE CLASS A AND CLASS B SHAREHOLDERS BEING ASKED TO VOTE ON, COLLECTIVELY AS A SINGLE CLASS?

Holders of all classes of Class A and Class B common stock of CME Group (voting together as a single class) are being asked to vote on the following:

- **Item 1:** The election of seventeen Equity directors.
- **Item 2:** The ratification of the appointment of Ernst & Young as our independent registered public accounting firm for 2019.
- **Item 3:** An advisory vote on the compensation of our named executive officers, referred to as the “say-on-pay” proposal.

WHAT PROPOSALS ARE THE CLASS B SHAREHOLDERS BEING ASKED TO VOTE ON?

Under **Item 4**, our Class B shareholders are being asked to vote on the following:

- **Class B-1 Shareholders:** The election of three Class B-1 directors.
- **Class B-2 Shareholders:** The election of two Class B-2 directors.
- **Class B-3 Shareholders:** The election of one Class B-3 director.

Under **Item 5**, our Class B shareholders are being asked to vote on the following:

- **Class B-1 Shareholders:** The election of five members of the Class B-1 nominating committee.
- **Class B-2 Shareholders:** The election of five members of the Class B-2 nominating committee.
- **Class B-3 Shareholders:** The election of five members of the Class B-3 nominating committee.

WHO IS ENTITLED TO VOTE?

You may vote if you owned shares of Class A or Class B common stock of CME Group as of the close of business on March 11, 2019, the record date for the annual meeting. The number of shares outstanding of each of our classes of common stock as of March 11, 2019 was as follows:

Class	Shares Outstanding
Class A	357,835,836
Class B-1	625
Class B-2	813
Class B-3	1,287
Class B-4	413

There were 6,801 holders of record of our Class A common stock and 1,558 holders of record of our Class B common stock on such date.

All shares of Class A and Class B common stock are entitled to one vote per share. Class A and Class B shareholders will vote together as a single class on all Items, except for **Items 4** and **5**. The respective class of Class B shares will vote as a single class in regards to **Items 4** and **5**.

HOW DO I VOTE?

Shareholders of record (shareholders having an account at Computershare, our transfer agent) have the following ways to cast their vote:

- **Via Internet**—You can vote over the Internet by following the instructions provided in the Notice. You may vote until 10:59 p.m., Central Time, on Tuesday, May 7, 2019.
- **By mail**—If you requested to receive printed proxy materials, you can vote by mail pursuant to instructions provided on the proxy card. Be sure to allow sufficient time for delivery.
- **By calling 1-800-690-6903 (owners of Class A shares only)**—You will need to reference your control number when voting. You may vote until 10:59 p.m., Central Time, on Tuesday, May 7, 2019. Because the separate Class B proposals are contested, automated telephone voting will not be available for Class B shareholders.
- **In person**—By voting at the annual meeting.

For holders in street name (shareholders holding through a bank or broker), your proxy materials include a voting instruction form from the institution holding your shares. The availability of internet or telephone voting will depend upon the institution's voting processes. You may also vote in person at the annual meeting if you obtain a legal proxy from the institution holding your shares. Please contact the institution holding your shares for more information.

Your vote is important. Whether or not you plan to attend the annual meeting, we urge you to vote your shares promptly. Voting early will not affect your right to change your vote and/or to attend the meeting.

WHAT IS A SHAREHOLDER OF RECORD?

A shareholder of record or registered shareholder is a shareholder whose ownership of CME Group stock is reflected directly on the books and records of our transfer agent, Computershare. If you hold stock through a bank, broker or other intermediary, you hold your shares in street name and are not a shareholder of record. For shares held in street name, the record owner of your shares is your bank, broker or other intermediary. We only have access to ownership records for the registered shares. Therefore, if you are not a registered shareholder, you will need to bring additional documentation to evidence your stock ownership as of the record date, such as a copy of your brokerage account statement showing ownership as of the record date, a letter from your broker, bank or other nominee or a copy of your voting instruction card in order to be admitted to the annual meeting.

HOW ARE PROXY MATERIALS BEING DISTRIBUTED?

This year we are taking advantage of SEC rules that allow us to furnish proxy materials to our shareholders via the Internet through the mailing of the Notice instead of mailing printed copies. Most of our shareholders will not receive printed copies of the proxy materials unless they request them.

The Notice was mailed on or around March 22, 2019. The Notice provides instructions on how you may vote your shares over the Internet. If you would like to receive paper copies or electronic copies of our proxy materials, you may follow the instructions in the Notice.

WHAT DOES IT MEAN IF I RECEIVED MORE THAN ONE NOTICE, OR SET OF PROXY MATERIALS?

This means that you have multiple accounts holding CME Group shares. Shares with different registrations cannot be combined and as a result, you may receive more than one Notice or set of proxy materials. For example, shares held through your broker cannot be combined with shares held at our transfer agent, Computershare. Additionally, our Class B shares are not combined with our Class A shares.

If you receive more than one Notice, you must vote each to ensure that all classes of shares you own are voted.

WHY DID MEMBERS OF MY HOUSEHOLD ONLY RECEIVE ONE SET OF PROXY MATERIALS BUT MORE THAN ONE PROXY?

The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for proxy statements with respect to two or more shareholders sharing the same address by delivering a single proxy statement or Notice addressed to those shareholders. This process, which is commonly referred to as “house-holding,” potentially means extra convenience for shareholders and cost savings for companies. As the company has adopted this procedure, a single set of proxy materials or Notice will be delivered to multiple shareholders sharing an address unless contrary instructions have been received from the affected shareholder.

If you participate in house-holding and wish to receive separate copies of the Notice or, if applicable, the proxy materials, please go to www.computershare.com/investor. After the login, go to “My Profile” and select “Communication Preference” to choose your preferred method of delivery.

Beneficial shareholders can request information about house-holding from their banks, brokers or other holders of record.

WHAT IF I RETURN MY PROXY BUT DO NOT PROVIDE VOTING INSTRUCTIONS?

If you sign and date the proxy without indicating your instructions on how to vote your shares, the proxies will vote your shares as follows:

- **“FOR”** the election of the seventeen Equity director nominees.
- **“FOR”** the appointment of Ernst & Young as our independent registered public accounting firm for 2019.
- **“FOR”** the approval of the compensation of our named executive officers, on an advisory basis, as described in this proxy statement.
- **“ABSTAIN”** from voting for the Class B directors, if applicable.
- **“ABSTAIN”** from voting for the Class B nominating committees, if applicable.

If any other matter is presented at the annual meeting, your proxies will vote in accordance with their best judgment. At the time this proxy statement went to press, we knew of no matters to be addressed at the annual meeting beyond those described in this proxy statement.

CAN I CHANGE MY MIND AFTER I VOTE?

For shareholders of record: You may change or revoke your vote by submitting a written notice of revocation directed to the Corporate Secretary, CME Group Inc., 20 South Wacker Drive, Chicago, Illinois 60606 or by submitting a subsequent vote electronically, by telephone or at the annual meeting.

For holders in street name: You may change or revoke your voting instructions by following the specific directions provided to you by your bank, broker or intermediary.

Your most recent vote is the one that is counted.

IS MY VOTE CONFIDENTIAL?

The vote of a particular shareholder will be kept confidential, except as necessary to allow the inspectors of election to certify the voting results or to meet legal requirements. Written comments may be provided by Broadridge to our Corporate Secretary, Kathleen M. Cronin, with the name and address of the shareholder. Each comment will be provided without reference to the vote of the shareholder, unless the vote is mentioned in the comment or unless disclosure of the vote is necessary to understand the comment.

HOW ARE VOTES COUNTED?

For us to conduct the meeting, a minimum number of votes entitled to be cast by the holders of all outstanding common stock as of March 11, 2019, must be present in person or represented by proxy. This is referred to as a quorum.

For proposals brought before the holders of all classes of common stock, voting together without regard to class, at least one-third of the votes entitled to be cast by such holders must be present at the meeting in person or represented by proxy to establish a quorum.

For proposals brought before the holders of Class B-1, Class B-2 and Class B-3 common stock, each voting separately as a class, at least one-third of the votes entitled to be cast by the holders of each such class must be present at the meeting to establish a quorum. See **page 28** for additional information on the quorum requirement for **Items 4** and **5**.

Proxies marked “withhold” or “abstain” are counted as present for establishing a quorum. Additionally, because we have one routine item on the agenda—the ratification of our independent registered public accounting firm — “broker non-votes” received on the other proposals also will be counted for purposes of establishing a quorum for proposals brought before the holders of all classes of common stock, voting together without regard to class. A broker non-vote occurs when a broker does not vote on a proposal because the broker does not have discretionary voting power for that particular proposal applicable stock exchange requirements and has not received instructions from the beneficial owner.

To ensure that there will be a quorum for all proposals to be voted on, please vote before the annual meeting and allow your shares to be represented at the meeting by your proxies. Voting before the annual meeting will not prevent you from voting in person at the meeting. If you vote in person at the meeting, your previous vote will be revoked automatically.

HOW MANY VOTES ARE REQUIRED FOR APPROVAL FOR EACH PROPOSAL?

Assuming that a quorum is present for the particular proposal, the following describes the votes required to approve each proposal.

Item 1: Seventeen Equity directors have been nominated for election at the annual meeting. Our bylaws require that, in uncontested elections, each Equity director be elected by the majority of votes cast with respect to such director. This means that the number of shares voted “for” an Equity director nominee must exceed the number of votes cast “against” that nominee in order for that nominee to be elected. Only votes “for” or “against” are counted as votes cast with respect to an Equity director. Abstentions and broker non-votes will have no effect. If a nominee who currently is serving as a director does not receive the affirmative vote of at least a majority of the votes cast, Delaware law provides that the director would continue to serve on the board as a “holdover director.” However, under our corporate governance principles, each holdover director is required to tender his or her resignation to the board. Under the principles, the governance committee shall make a recommendation to the board as to whether to accept or reject the tendered resignation, or whether other action should be taken. The governance committee and the board, in making their decisions, may consider any factor or other information that they deem relevant. The board shall act on the tendered resignation, taking into account the governance committee’s recommendation, and shall publicly disclose its decision regarding the resignation within ninety (90) days after the results of the election are certified. If the resignation is not accepted, the director will continue to serve until the next annual meeting of shareholders and until the director’s successor is elected.

Items 2 and 3: The affirmative vote of a majority of the shares of our Class A and Class B common stock present in person or represented by proxy and entitled to vote on the matter is necessary for approval. Abstentions will have the same effect as a vote “against” an item. Because **Item 2** is considered a “routine” matter, broker non-votes are not expected to occur with respect to that item. Broker non-votes will have no effect on **Item 3**.

Item 4: The three nominees for Class B-1 director, the two nominees for Class B-2 director and the one nominee for Class B-3 director receiving the highest number of “for” votes will be elected. Abstentions will have no effect on these items because they are not considered votes cast. All Class B shares are held in registered form.

Item 5: The five nominees for the Class B-1 nominating committee, the five nominees for the Class B-2 nominating committee and the five nominees for the Class B-3 nominating committee receiving the highest number of “for” votes will be elected. Abstentions will have no effect on these items because they are not considered votes cast. All Class B shares are held in registered form.

WHO PAYS FOR THE SOLICITATION OF PROXIES?

The solicitation is being conducted by CME Group, which pays for the cost of soliciting proxies. Proxies will be solicited on behalf of the board of directors. This solicitation is being made by mail and over the Internet, but also may be made by telephone or in person. We have hired D.F. King for \$14,000, plus out-of-pocket expenses, to assist in the solicitation. We will reimburse brokerage firms and other custodians, nominees and fiduciaries for their out-of-pocket expenses for sending proxy materials to shareholders and obtaining their vote. Additionally, nominees for Class B director may make solicitations to our shareholders. Such nominees are responsible for the costs incurred in connection with their individual solicitation efforts.

WHEN ARE SHAREHOLDER PROPOSALS DUE FOR THE 2020 ANNUAL MEETING?

To be considered for inclusion in the 2020 proxy statement, shareholder proposals must be received in writing at our principal executive offices no later than November 20, 2019. You should be aware that your proposal must comply with the SEC regulations regarding inclusion of shareholder proposals in company-sponsored proxy materials.

Similarly, in order for you to raise a proposal from the floor during next year's meeting, we must have timely received written notice of the proposal. In accordance with our bylaws, to be timely, a shareholder's notice must be delivered to our Corporate Secretary not earlier than the close of business on January 8, 2020 (the 120th day) and not later than the close of business on February 7, 2020 (the 90th day) prior to the anniversary of the 2019 annual meeting; provided, however, in the event that the date of the 2020 annual meeting is more than 30 days before or more than 60 days after May 8, 2019, to be timely, notice must be delivered not earlier than the open of business on the 120th day prior to the actual date of the 2020 annual meeting and not later than the close of business on the later of the 90th day prior to the actual date of the 2020 annual meeting or, if the first public announcement of the date of the 2019 annual meeting is less than 100 days prior to the date of the meeting, the 10th day following the day on which public announcement of the date of the 2020 annual meeting is first made by CME Group. Your notice of the proposal must contain the information required under our bylaws in order to be considered.

In addition, to be considered at the 2020 annual meeting, proxy access nominations of Equity directors must comply with the requirements and conditions of our proxy access bylaw, including the delivery of proper notice to our Corporate Secretary not earlier than the open of business on October 21, 2019 (the 150th day) and not later than the close of business on November 20, 2019 (the 120th day) prior to the first anniversary of the date we first distributed this proxy statement to shareholders.

Shareholder proposals and proxy access nominations should be sent by mail directed to the Corporate Secretary (Kathleen M. Cronin), CME Group Inc., 20 South Wacker Drive, Chicago, Illinois 60606 or by fax to her attention at 312.930.4556.

ARE THERE ANY MATTERS TO BE VOTED ON AT THE MEETING THAT ARE NOT INCLUDED IN THE PROXY STATEMENT?

At the time this proxy statement went to press, we knew of no matters to be addressed at the annual meeting beyond those described in this proxy statement. If any other matter is presented at the annual meeting, your proxies will vote in accordance with their best judgment.

WHERE CAN I FIND THE VOTING RESULTS OF THE ANNUAL MEETING?

We intend to announce preliminary voting results by press release following the annual meeting and will file the final results in a current report on Form 8-K within four business days of the meeting as required by SEC regulations.

IF I RECEIVED PAPER COPIES OF MATERIALS, CAN I RECEIVE FUTURE PROXY MATERIALS ONLINE?

Yes. If you chose this option, you will not receive paper copies of the proxy materials in the mail. Choosing this option will save us printing and mailing costs and may benefit the environment.

If you hold shares in your name (instead of through a broker or other nominee), you can choose this option by following the instructions provided when you vote over the Internet at www.proxyvote.com and, when prompted, indicate that you agree to receive or access shareholder communications electronically. If you hold your shares through a broker or other nominee, you should follow the instructions regarding electronic delivery, if any, provided by your broker or other nominee.

If you choose to receive your proxy materials electronically, then prior to next year's annual meeting you will receive an email notification when the proxy materials are available for your online review. Your choice for electronic distribution will remain in effect indefinitely, unless you revoke your choice.

CAN I GET ADDITIONAL COPIES OF PROXY MATERIALS?

Yes. Additional copies of our 2018 Annual Report on Form 10-K and this proxy statement are available free of charge upon written request to Shareholder Relations, Attention: Ms. Beth Hausoul, CME Group Inc., 20 South Wacker Drive, Chicago, Illinois 60606.

WHERE CAN I FIND INFORMATION ON CME GROUP'S CORPORATE GOVERNANCE POLICIES AND OTHER MATERIALS REFERENCED IN THIS PROXY STATEMENT?

Copies of our governance materials and other policies referenced in this proxy statement and the charters of all of our committees comprised entirely of board members are available at <http://investor.cmegroup.com/investor-relations> under "Corporate Governance." You may also request hard copies of such materials by sending a request to Shareholder Relations, Attention: Ms. Beth Hausoul, CME Group Inc., 20 South Wacker Drive, Chicago, Illinois 60606.

You are being asked to vote on the election of seventeen Equity director nominees to hold office until the 2020 annual meeting.

OUR BOARD RECOMMENDS THAT SHAREHOLDERS VOTE “FOR” THE EQUITY DIRECTOR NOMINEES

Our directors are elected each year. Each director’s term will last until the 2020 annual meeting and until his or her successor is duly elected.

We have implemented a majority vote standard for the Equity directors, except in the event of a contested election.

The Equity directors are nominated by the board based on the recommendation of the nominating committee for election by our Class A and Class B shareholders voting together (**Equity directors**) under **Item 1**. All Equity director nominees, except for Mr. Kaye and Ms. Lockett, are presently CME Group directors.

In November 2018, the company held a special meeting seeking approval of a proposal to eliminate all or some of the director election rights of our Class B shareholders. While the proposal received majority support from each of the required class votes, it did not achieve approval from a majority of the outstanding shares in the separate votes of the Class B shareholders as required under Delaware law. Therefore, the Class B shareholders will continue to have the right to elect six additional directors (**Class B directors**) as described under **Item 4**.

We have no reason to believe that any of the nominees will be unable or unwilling to serve if elected.

The biographies for the Equity director nominees begin on **page 12** and for the Class B director nominees on **page 28**. Mr. Bernacchi who currently serves as a Class B-1 director will retire at the end of his term.

References to terms of our board of directors in their biographies include service on the board of CME Group (formerly known as Chicago Mercantile Exchange Holdings Inc.) from its formation in 2001 and service on the board of its wholly-owned subsidiary, Chicago Mercantile Exchange Inc. (**CME**). CME Group became a public company in December 2002. The boards of our other exchange subsidiaries, Board of Trade of the City of Chicago, Inc. (**CBOT**), New York Mercantile Exchange, Inc. (**NYMEX**) and Commodity Exchange, Inc. (**COMEX**), also are composed of the same members as the CME Group board of directors. Ages are as of March 11, 2019. Information on public directorships is for the past five years.

DIRECTOR NOMINATIONS AND QUALIFICATIONS

The policy of the board of directors is to remain an interactive, independent, thoughtful, highly qualified and collegial combination of individuals with diverse knowledge, skills and experience, so that the directors, working together, possess the competencies required to effectively carry out the board’s responsibilities.

In considering candidates for the board, the nominating committee, composed entirely of directors who are independent under applicable listing standards, considers the entirety of each candidate’s credentials. With respect to the nomination of continuing directors for re-election, the individual’s contributions to the board are also considered. In assessing new candidates for the board, we do not have specific minimum qualifications that an individual must meet to be considered. The board and its nominating committee seek members having the characteristics essential for effectiveness as a member of our board, including but not limited to:

- Integrity, objectivity, sound judgment and leadership;
- The relevant expertise and experience required to offer advice and guidance to the Chairman and Chief Executive Officer and other members of senior management;
- The ability to make independent analytical inquiries;
- The ability to collaborate effectively and contribute productively to the board’s discussions and deliberations;
- A commitment to enhancing long-term shareholder value;
- An understanding of the company’s business, strategy and challenges;

- The willingness and ability to devote adequate time and effort to board responsibilities and to serve on committees at the request of the board;
- Is not a **Disqualified Person** (as defined in our corporate governance principles); and
- Whether the individual meets the composition requirements of the Commodity Futures Trading Commission (**CFTC**) and the applicable listing standards.

On an annual basis, the governance committee and the nominating committee meet jointly to assess the current and future needs of the board and will make recommendations to the board in the event they identify a need to recruit for an additional member of the board. The board believes it is essential that its members represent diverse viewpoints. In addition to the foregoing criteria, the nominating committee is committed to ensuring each pool of qualified candidates from which board nominees are chosen includes candidates who bring racial and/or gender diversity.

The nominating committee may solicit candidates from its current directors and, if deemed appropriate, retain for a fee recruiting professionals to identify and evaluate candidates. The nominating committee also will consider a nominee for Equity director recommended by shareholders if the recommendation is submitted in writing, accompanied by a description of the proposed nominee's qualifications, and other relevant biographical information and evidence of consent of the proposed nominee to serve as a director if elected. Recommendations should be addressed to the nominating committee, Attention: Corporate Secretary, CME Group Inc., 20 South Wacker Drive, Chicago, Illinois 60606. In considering a shareholder recommendation, the nominating committee may seek input from an independent advisor, legal counsel and/or other directors, as appropriate, and will reach a conclusion using its standard criteria. A copy of our nominating committee's charter is available on our website.

Both Mr. Kaye and Ms. Lockett were identified by certain members of our nominating committee and also were known by other members of our board based on their professional experience. Mr. Kaye brings his extensive experience in accounting to the board and has been classified as an audit committee financial expert. Ms. Lockett brings her leadership and experience in innovating education and personalized learning technologies and through her election further enhances the diversity of the board of directors.

The holders of the Class B-1, Class B-2 and Class B-3 common stock elect members of nominating committees for their respective classes, which are responsible for nominating candidates for election by their class. See **Item 5** beginning on **page 32** for more information. Our certificate of incorporation requires that director candidates for election by a class of Class B common stock own, or be recognized under our rules as the owner of, at least one share of that class.

For more information concerning our current directors' qualifications, see the **Director Attributes** table on **page 16**.

REQUIRED VOTE

Each Equity director candidate must receive a number of "FOR" votes that exceed the number of "AGAINST" votes to be elected.

EQUITY DIRECTORS UP FOR ELECTION AT THE 2019 ANNUAL MEETING

Terrence A. Duffy Age: 60 Director since: 1995		
<p>The Honorable Terrence A. Duffy serves as our Chairman and Chief Executive Officer. Previously, he served as Executive Chairman and President since 2012 and as Executive Chairman since 2006, when he became an officer of the company. He served as Chairman of the board since 2002 and our Vice Chairman from 1998 until 2002. Mr. Duffy has been a member of our board since 1995. He was President of TDA Trading, Inc. from 1981 to 2002 and has been a member of CME since 1981. Mr. Duffy was appointed by President Bush and confirmed by the U.S. Senate in 2003 as a member of the Federal Retirement Thrift Investment Board (FRTIB), a position he held until 2013. The FRTIB administers the Thrift Savings Plan, a tax-deferred defined contribution (retirement savings) plan for federal employees. Mr. Duffy was named CEO of the Year at FOW's 2018 International Awards. He currently serves as Co-Chair of the Mayo Clinic Greater Chicago Leadership Council. He is Vice Chairman of the CME Group Foundation and President of the CME Group Community Foundation. He also is a member of the Economic Club of Chicago, the Executives' Club of Chicago and the President's Circle of the Chicago Council on Global Affairs. Mr. Duffy attended the University of Wisconsin-Whitewater. In 2007, he received a Doctor of Humane Letters from DePaul University.</p>		
Timothy S. Bitsberger Age: 59 Director since: 2008		
<p>Mr. Bitsberger has served as Managing Director and Portfolio Specialist on the Account Management Team at The TCW Group since March 2017, where he is responsible for communicating investment strategies, performance and outlook to clients. Previously, he served as Managing Director, Official Institutions FIG Coverage Group of BNP PNA, a subsidiary of BNP Paribas, from December 2010 to November 2015, as a senior consultant with Booz Allen Hamilton from May 2010 to November 2010 and was with BancAccess Financial from December 2009 to April 2010. He also served as Senior Vice President and Treasurer of Freddie Mac from 2006 to 2008. Mr. Bitsberger also was with the U.S. Treasury Department from 2001 to 2005, serving first as their Deputy Assistant Secretary for federal finance and as the Assistant Secretary for financial markets. He was confirmed by the U.S. Senate as the Assistant Secretary in 2004.</p>		
Charles P. Carey Age: 65 Director since: 2007		Previous Public Directorship: BM&FBOVESPA S.A.
<p>Mr. Carey served as our Vice Chairman from 2007 to 2010 in connection with our merger with CBOT Holdings, Inc. Prior to our merger, Mr. Carey served as Chairman of CBOT since 2003, as Vice Chairman from 2000 to 2002, as First Vice Chairman during 1993 and 1994 and as a board member of CBOT from 1997 to 1999 and from 1990 to 1992. Mr. Carey is a principal in the firms of Henning & Carey Trading Co. and HC Technologies LLC. He has been a member of CBOT since 1978 and was a member of the MidAmerica Commodity Exchange from 1976 to 1978. Mr. Carey previously served on the board of CBOT Holdings, Inc. until our merger in 2007. Mr. Carey serves as Chairman of the CME Group Foundation.</p>		
Dennis H. Chookaszian Age: 75 Director since: 2004	Public Directorships: Career Education Corporation Maxar Technologies Pillarstone Capital REIT (registered securities only)	Previous Public Directorships: Allscripts Healthcare Solutions, Inc. LoopNet, Inc. Prism Technologies Group, Inc.
<p>Mr. Chookaszian served as Chairman of the Financial Accounting Standards Advisory Council from 2007 to 2011. From 1999 until 2001, Mr. Chookaszian served as Chairman and CEO of mPower, Inc., a financial advice provider focused on the online management of 401(k) plans. Mr. Chookaszian served as Chairman and CEO of CNA Insurance Companies from 1992 to 1999. During his 27-year career with CNA, Mr. Chookaszian held several management positions at the business unit and corporate levels, including President and COO from 1990 to 1992 and CFO from 1975 to 1990. Mr. Chookaszian is a registered certified public accountant.</p>		

Ana Dutra Age: 54 Director since: 2015	
<p>Ms. Dutra served as the CEO of The Executives' Club of Chicago, a world-class senior executives organization focused on the development, innovation and networking of current and future business and community leaders, from September 2014 until her retirement in September 2018. Prior to that she was a Proxy Officer and CEO of Korn/Ferry Consulting from 2007 until 2013. Ms. Dutra serves as a director of Elkay Manufacturing, Lifespace communities, Greeley and Hansen, The Committee of 200, Latino Corporate Directors Association, Lurie Children's Hospital of Chicago and Blessings-in-a-Backpack.</p>	
Martin J. Gepsman Age: 66 Director since: 1994	
<p>Mr. Gepsman served as Secretary of the board from 1998 to 2007. He has been a member of CME for more than 30 years. Mr. Gepsman has also been an independent broker and trader since 1985.</p>	
Larry G. Gerdes Age: 70 Director since: 2007	Previous Public Directorships: Access Plans, Inc. Transcend Services, Inc.
<p>Mr. Gerdes has served as our Lead Director since August 2017. He has served as CEO of Pursuant Health (formerly known as SoloHealth), a private health-care company in Atlanta since February 2014, as its Executive Chairman of the board since November 2013, as its Chairman since 2012 and as a board member since 2007. Mr. Gerdes is also a general partner of Gerdes Huff Investments. Mr. Gerdes served as a general partner of Sand Hill Financial Company, a venture capital partnership, from 1983 to January 2019. Mr. Gerdes formerly served as Chairman and CEO of Transcend Services, Inc., concluding with the sale of that company in April 2012, and as a director of Access Plans, Inc. from 2001 until its sale in June 2012. Mr. Gerdes is a major shareholder and President of Friesland Farms, LLC. Mr. Gerdes is a member of the Dean's Advisory Council for The Kelley School of Business at Indiana University and serves as trustee for Monmouth College. Mr. Gerdes previously served on the board of CBOT Holdings, Inc. until our merger in 2007.</p>	
Daniel R. Glickman Age: 74 Director since: 2001	
<p>Mr. Glickman served as our Lead Director from August 2014 to August 2017. Mr. Glickman has served as Executive Director of the Aspen Institute's Congressional Program since 2011 and as Vice President of the Aspen Institute since 2012. Mr. Glickman also has served as Senior Fellow for the Bipartisan Policy Center since 2010. From 2004 to 2010, Mr. Glickman served as Chairman and CEO of the Motion Picture Association of America, Inc. Mr. Glickman previously served as Director of the Institute of Politics at Harvard University's John F. Kennedy School of Government from 2002 to 2004 and served as Senior Advisor in the law firm of Akin, Gump, Strauss, Hauer & Feld, from 2001 to 2004. He also served as U.S. Secretary of Agriculture from 1995 through 2001 and as a member of the U.S. Congress, representing a district in Kansas, from 1977 through 1995. Mr. Glickman serves as co-chair of the global agriculture and development initiative of the Chicago Council on Global Affairs, as Chairman of the Board of the Foundation for Food and Agriculture Research, established in the 2014 Farm Bill by Congress, and Chairman of the International Advisory Board of APCO Worldwide, a public relations firm based in Washington, DC. Mr. Glickman also serves on a number of non-profit advisory boards with a focus on agriculture and food supply.</p>	

Daniel G. Kaye Age: 64 Director since: N/A	Public Directorships: AllianceBernstein AXA Equitable Holdings, Inc.	Previous Public Directorships: Ferrellgas Partners LP
<p>Mr. Kaye served as Interim Chief Financial Officer and Treasurer of HealthEast Care System from January 2013 to May 2014. Prior to joining HealthEast, Mr. Kaye spent 35 years with Ernst & Young LLP from which he retired in 2012. Throughout his time at Ernst & Young, where he was an audit partner for 25 years, Mr. Kaye enjoyed a track record of increasing leadership and responsibilities, including serving as the New England Managing Partner and the Midwest Managing Partner of Assurance. Mr. Kaye serves on the audit (Chair) and compensation committees of AllianceBernstein and on the audit (Chair) and compensation, nominating and corporate governance, and finance and risk committees of AXA Equitable Holdings. Mr. Kaye is a Certified Public Accountant and National Association of Corporate Directors (NACD) Board Leadership Fellow.</p>		
Phyllis M. Lockett Age: 53 Director since: N/A		
<p>Ms. Lockett has served since 2014 as the founding CEO of LEAP Innovations, a national non-profit organization that works with educators and technology companies from across the nation to research, pilot and scale new instructional designs and technology solutions that advance student learning. Prior to her role at LEAP, Ms. Lockett served as President and CEO of New Schools for Chicago, a venture philanthropy organization that invests in the start-up of new public schools, since 2005. Ms. Lockett served from 1999 to 2005 as Executive Director of the Civic Consulting Alliance, a pro-bono consulting firm sponsored by the Civic Committee of the Commercial Club of Chicago that leads strategic planning initiatives, process improvement, and program development projects for government agencies. She also held marketing, sales, and business development roles with Fortune 500 companies including IBM, Kraft Foods, and General Mills. Ms. Lockett is an independent director of the Federal Home Loan Bank of Chicago; and a board member of The Economic Club of Chicago and The Chicago Network. She is also a member of the Commercial Club of Chicago and a Henry Crown Fellow with the Aspen Institute.</p>		
Deborah J. Lucas Age: 60 Director since: 2018		
<p>Ms. Lucas has served as the Sloan Distinguished Professor of Finance at the MIT Sloan School of Management since 2011 and as the Director of the MIT Golub Center for Finance and Policy from 2012. Her current research focuses on government financial institutions and financial policy, and she teaches courses on fixed income securities and derivatives. She serves on advisory boards for the Federal Reserve Bank of New York, the Urban Institute, and the Census Bureau. She is a trustee of the NBER pension plans, an associate editor for several academic journals, and a member of the Shadow Open Market Committee and the Financial Economics Roundtable. Previous appointments include assistant and associate director at the Congressional Budget Office; professor at Northwestern University's Kellogg School; chief economist at the Congressional Budget Office, and senior staff economist at the Council of Economic Advisers. She has been a director on several corporate and non-profit boards.</p>		
Alex J. Pollock Age: 76 Director since: 2004		
<p>Mr. Pollock has served as the Distinguished Senior Fellow, Financial Markets, at the R Street Institute in Washington, DC since January 2016. He previously served as Resident Fellow of the American Enterprise Institute in Washington, DC from 2004 to January 2016 and as President and CEO of the Federal Home Loan Bank of Chicago from 1991 through 2004. He was previously President and CEO of Community Federal Savings. Mr. Pollock serves on the non-profit board of Ascendium Education Group (formerly Great Lakes Higher Education Corporation) and on the board of the Great Books Foundation. Mr. Pollock served as our Lead Director from August 2012 through August 2014.</p>		
Terry L. Savage Age: 74 Director since: 2003		
<p>Ms. Savage is a nationally-syndicated financial columnist, author and President of Terry Savage Productions, Ltd., which provides speeches, columns and videos on personal finance for corporate and association meetings, publications and national television programs and networks. Ms. Savage is a registered investment advisor and commodity trading advisor. She was a member of CME from 1975 to 1980.</p>		

William R. Shepard Age: 72 Director since: 1997		
Mr. Shepard has been a member of CME for more than 45 years. Previously, he served as our Second Vice Chairman from 2002 to 2007. Mr. Shepard is founder and President of Shepard International, Inc., a futures commission merchant.		
Howard J. Siegel Age: 62 Director since: 2000		
Mr. Siegel has been a member of CME since 1977. In 1978, Mr. Siegel began his trading career at Moccatta Metals in their Class B arbitrage operations and served as an order filler until 1980. From there, he went on to fill orders and trade cattle from 1980 until 1982. At that time, Mr. Siegel became a partner and an officer in a futures commission merchant that cleared at CME until selling his ownership interest in 1990. For more than 30 years, Mr. Siegel has been an independent trader on our CME exchange. He continues to actively trade electronically in our agricultural product suite. Mr. Siegel is the Secretary and Treasurer of the CME Group Foundation. He also serves on our risk committee, co-chairs our clearing house risk committee and is the chair of our interest rate swaps committee.		
Michael A. Spencer Age: 63 Director since: 2018		Previous Public Directorships: NEX Group plc
Mr. Spencer served as Chief Executive Officer of NEX Group plc until its acquisition by CME Group and currently serves as a Special Advisor to CME Group. Mr. Spencer has worked in financial services for more than 30 years. He founded Intercapital in 1986, a specialist financial derivatives broking firm. In 1988 Intercapital merged with EXCO plc followed by two additional mergers to eventually form ICAP Group plc in 2000. Mr. Spencer is Chairman of IPGL (Holdings) Ltd and a director of BI Wines and Spirits Ltd. Mr. Spencer also serves as the Chairman of the Conservative Party Foundation Ltd.		
Dennis A. Suskind Age: 76 Director since: 2008	Public Directorships: Bridgehampton National Bank (Vice Chairman) Navistar, Inc.	Previous Directorship: Liquid Holdings Group, Inc.
Mr. Suskind is a retired General Partner of Goldman Sachs & Co. During his tenure in trading, Mr. Suskind served as Vice Chairman of NYMEX, Vice chairman of COMEX, a member of the board of the Futures Industry Association, a member of the board of International Precious Metals Institute, a member of the boards of the Gold and Silver Institutes in Washington, DC and was an inaugural member of the Future Industry Association's Hall of Fame. He is the President of the board of the Hampton Classic Horse Show and of the board of the Stein Eriksen Lodge Hotel. He previously served as the President of the Arthur Ashe Institute for Urban Health for fifteen years. He also served on the board of NYMEX Holdings, Inc. until our merger in 2008.		

DIRECTOR ATTRIBUTES

We believe all our board members have an inquisitive and objective perspective, practical wisdom and mature judgment. In addition, the following highlights the key characteristics the board believes qualifies its Equity director nominees and the Class B nominees who currently serve on the board to serve the interests of our shareholders. This summary, however, is not meant to be a complete description of all the skills and attributes of our board members. Additional details on our individual directors and director nominees are set forth in their individual biographies. The Class B nominees are nominated by separate nominating committees. Therefore, the board has not assessed the attributes of the Class B nominees who are not currently members of the board.

ATTRIBUTE	DIRECTOR AND DIRECTOR NOMINEES WITH ATTRIBUTES			
Industry Experience Possesses an understanding of our markets as a result of trading our products, serving as an officer of a firm which trades our products or working in the financial services industry.	Terrence A. Duffy Timothy S. Bitsberger Charles P. Carey Elizabeth A. Cook Martin J. Gepsman	Gedon Hertshten William W. Hobert Ronald A. Pankau Alex J. Pollock Terry L. Savage	William R. Shepard Howard J. Siegel Michael A. Spencer Dennis A. Suskind David J. Wescott	
Government Relations/Regulatory/Public Policy Experience interacting with our regulators and members of government or prior service in government.	Terrence A. Duffy Timothy S. Bitsberger Charles P. Carey Daniel R. Glickman	Phyllis M. Lockett Deborah J. Lucas Ronald A. Pankau	Alex J. Pollock Michael A. Spencer Dennis A. Suskind	
Management Experience Experience as a chief executive officer, president or senior vice president of a company or a significant subsidiary, operating division or business unit.	Terrence A. Duffy Timothy S. Bitsberger Dennis H. Chookaszian Ana Dutra Larry G. Gerdes	Daniel R. Glickman William W. Hobert Gedon Hertshten Daniel G. Kaye Phyllis M. Lockett	Ronald A. Pankau Alex J. Pollock Michael A. Spencer Dennis A. Suskind	
Financial Expertise Experience as a chief financial officer or similar financial oversight experience and meets the definition of a financial committee expert.	Dennis H. Chookaszian	Larry G. Gerdes	Daniel G. Kaye	
Professional Accreditations Possesses an advanced degree.	Dennis H. Chookaszian Ana Dutra Larry G. Gerdes	Daniel R. Glickman Phyllis M. Lockett	Deborah J. Lucas Alex J. Pollock	
Risk Management Experience Experience in overseeing risk management processes and procedures.	Charles P. Carey Dennis H. Chookaszian Gedon Hertshten	William R. Shepard Michael A. Spencer	Dennis A. Suskind David J. Wescott	
Other Public Company Directorship Experience serving as a director of another publicly traded company.	Charles P. Carey Dennis H. Chookaszian Larry G. Gerdes Daniel R. Glickman	Gedon Hertshten Daniel G. Kaye Deborah J. Lucas Alex J. Pollock	Terry L. Savage Michael A. Spencer Dennis A. Suskind	

CME Group is committed to good corporate governance. By aligning our governance approach with best practices, our company is able to strengthen board and management accountability, promote long-term shareholder value and sustain continued success.

The board of directors has established corporate governance principles, which provide a framework for our effective governance. Our governance committee regularly reviews trends and best practices in corporate governance. The office of the secretary advises our board of directors and management in an effort to strengthen existing governance practices and develop new policies that make us a better company. Below is an overview of the company's governance highlights and materials.

GOVERNANCE HIGHLIGHTS

- Annual election of directors
- Majority voting for Equity directors
- Proxy access bylaw provision for Equity director positions
- Commitment to the inclusion of qualified diverse candidates in any searches for director nominees
- Confidential shareholder voting
- Quarterly executive sessions of independent directors
- Board and committee evaluations and individual peer director evaluations
- Active risk oversight by the full board, a risk committee and other committees with oversight responsibilities based on areas of focus and expertise
- Independent lead director
- Policy restricting the pledging of shares of our Class A common stock
- Orientation for newly elected board members

CORPORATE GOVERNANCE MATERIALS

You can access the following governance materials by visiting <http://investor.cmegroup.com/investor-relations> under "Corporate Governance."

- Corporate Governance Principles
- Board of Directors Conflict of Interest Policy
- Board Code of Ethics
- CME Group Charter
- CME Group Bylaws
- Employee Codes of Conduct
- Charters for committees composed solely of board members
- Guide to Conducting Business for Third Parties of CME Group

Each of these documents is also available in print upon written request made to the Office of the Secretary, CME Group Inc., 20 South Wacker Drive, Chicago, Illinois 60606.

Our employee codes of conduct are applicable to all our employees, including our Chairman and Chief Executive Officer, our Chief Financial Officer and our other senior financial officers.

DIRECTOR ATTENDANCE

The board held eight meetings during 2018. All incumbent directors attended more than 75% of the combined total meetings of the full board and the committees on which he or she served during 2018.

We strongly encourage, but do not require, our directors to attend the annual meeting. Last year, 16 of our directors attended the annual meeting of shareholders.

DIRECTOR INDEPENDENCE

The experience and diversity of our directors has been, and continues to be, critical to our success. Our corporate governance principles require that the board be composed of at least a majority of independent directors. Additionally, in accordance with applicable listing standards, the members of our audit, compensation, governance and nominating committees must be independent. For a director to be considered independent, the board must affirmatively determine that the director has no direct or indirect material relationship with CME Group. The board has adopted categorical independence standards, which are attached to this proxy statement as **Appendix A**, to assist it in making its determinations regarding independence. These standards conform to and exceed the independence criteria specified in the listing standards of Nasdaq. They specify the criteria by which the independence of our directors will be determined, including relationships and transactions between each director, director nominee, any member of his or her immediate family, his or her affiliates, charitable organizations with which he or she is affiliated, and us.

The board believes all of its non-executive directors act independently of, and effectively monitor and oversee the actions of, management. Based on our categorical independence standards, at its meeting held in February 2019, the governance committee made a preliminary assessment of the independence of the directors and director nominees and based on such assessment made a recommendation to our board regarding their independence. Some of our directors are members of our exchanges, which provides them with access to our open outcry markets, lower trading fees, the ability to vote on certain matters relating to the operation of our open outcry markets and, for members of CME, the ability to elect six of our directors. Directors who are members of our exchanges may make payments directly to us or indirectly to us through our clearing firms in connection with their trading activity on an exchange. To ensure that such payments did not exceed the monetary thresholds set forth in the listing standards of Nasdaq, the governance committee reviewed the directors' and their affiliated clearing firms' trading activities and relationships with our exchanges as part of its independence determination. The governance committee and the board noted that all payments relating to trading fees were made in the ordinary course of our business, were on terms consistent with those prevailing at the time for corresponding transactions by similarly situated unrelated third parties and were not in excess of the applicable payment thresholds.

After considering information provided by our current directors and other nominees in our annual questionnaires, the payments made to us relating to trading activities, as well as additional information gathered by our office of the secretary, the governance committee recommended, and the board determined, that all current directors and nominees for Equity and Class B director be classified as independent except for:

- Messrs. Duffy and Spencer based on their employment relationships with CME Group; and
- Ms. Lockett based on donations received by LEAP Innovations, of which Ms. Lockett is the Chief Executive Officer, from CME Group in 2016, which exceeded 5% of its charitable receipts for the year. We expect that Ms. Lockett will be deemed independent three years after the time of those donations.

PUBLIC DIRECTORS

As the parent company of four self-regulatory organizations, we are required to ensure we meet the core principles of the CFTC which, among other things, require that we have processes and procedures to address potential conflicts of interest that may arise in connection with the operation of our exchanges. Significant representation of individuals who do not have relationships with our exchanges, referred to as "public directors" in the CFTC regulations, play an important role in our processes to address potential conflicts of interest. The board has assessed which directors would be considered public directors based upon their lack of relationship with our exchanges and the industry per the CFTC regulations. The following individuals meet the definition of "public director":

Timothy S. Bitsberger
Dennis H. Chookaszian
Ana Dutra
Larry G. Gerdes
Daniel R. Glickman
Daniel G. Kaye

Phyllis M. Lockett
Deborah J. Lucas
Alex J. Pollock
Terry L. Savage
Dennis A. Suskind

Additionally, our market regulation oversight committee is composed solely of public directors.

BOARD LEADERSHIP STRUCTURE

Mr. Duffy has served as our Chairman and Chief Executive Officer since 2016. Our board leadership structure includes an independent Lead Director and our active board members, of which more than a majority are considered independent. Mr. Gerdes has served as our independent Lead Director since 2017. The independent Lead Director is appointed by the board based on the recommendation of the governance committee for a one-year term and has the following responsibilities:

- Presides at meetings of the board if the Chairman is unavailable and at executive sessions of the board's independent directors.
- Presides at the board's annual evaluation of the Chairman's achievement of his goals and objectives.
- Communicates to the Chairman the results of meetings at which he presides.
- Receives direct communications from directors and/or shareholders in cases where the Chairman is unavailable or where direct communication with the Chairman may not be appropriate.
- Confers with the Chairman, in the Chairman's discretion, in regards to board agendas, scheduling and information distribution.
- Has the authority to call a special meeting of the board in accordance with our bylaws.

Our governance documents provide the board with the flexibility to select the appropriate leadership structure for CME Group. In making leadership determinations, the board considers many factors, including the specific needs of the business and what is in the best interests of our shareholders. A combined Chairman and Chief Executive Officer position provides us with a single leader who communicates the company's business and strategy to our shareholders, customers, employees, regulators and the public. The board believes its current leadership structure allows it to effectively operate, represent the rights of our shareholders and create long-term value and provides a well-functioning and effective balance between strong management leadership and appropriate safeguards and oversight by an independent Lead Director and non-employee board members. The board reserves the right to make changes to its governance structure in the future as it deems appropriate.

BOARD'S ROLE IN RISK OVERSIGHT

While senior management has primary responsibility for managing the company's risk on a day-to-day basis, the board has responsibility for overseeing our risk management activities and the overall programs designed to identify, assess, manage and monitor risks and opportunities as evaluated through our Enterprise Risk Management (**ERM**) program. The board oversees the business of the company, including the risk management programs and results, with the goal of serving the long-term interests of our shareholders. The board has an active role, as a whole and also at the committee level, in overseeing management of our risks, with its focus on the particular risks facing the company.

Our business exposes us to risks that we organize under six key themes: clearing, compliance, financial, operational, reputational, and strategic & commercial. Our ERM program promotes and facilitates the evolution and alignment of consistent and transparent risk management practices at CME Group. Through the ERM program, we provide a comprehensive review of our risk management practices and endeavor, in an ongoing manner, to provide assurances that the enterprise risks are identified, assessed, measured, prioritized and updated by management responsible for the respective risks.

The risk committee is primarily responsible for reviewing, assessing and providing oversight of our risk management practices with respect to those risks enumerated in its charter and assisting the board in its oversight of the effectiveness of our policies and processes to identify, manage and plan for risks. The risk committee approves the ERM framework, the risk universe and reviews and recommends to the board the various levels of acceptable appetite for managing key risks associated with the company's business and strategy. In addition to quarterly risk reports, the risk committee also receives quarterly reports on the control functions relating to information security, compliance and business continuity.

The board also assigns oversight of risks to other committees, such as the clearing house oversight and compensation committees. This structure is designed to increase the effectiveness of our board's oversight by taking into account the

background and experience of the members on various board committees, including their interactions with management. Each committee reports on its activities to the full board. The appendix to the charter of the risk committee provides additional detail on the allocation of risk oversight responsibilities to the various committees. The charter for the risk committee is available on our website.

Our universe of risks is reported to the board and senior management on a quarterly basis along with updates of any developments that could affect our risk profile or other aspects of our business. Risk management and mitigation is ongoing, and the importance assigned to identified risks can change and new risks can emerge during the year as the company develops and implements its strategy.

Our ultimate objective is to help preserve and protect our enterprise value and to help increase the likelihood of achieving our objectives while maintaining or enhancing our reputation. In doing so, the board understands it may not be practicable or cost-effective to eliminate or mitigate certain risks, that it may be necessary to accept certain risks to achieve our goals and objectives and that the processes, procedures and controls employed to address certain risks may be limited in their effectiveness.

EXECUTIVE SESSIONS

Our corporate governance principles require our independent directors to meet in executive session (without management and non-independent directors) on a quarterly basis. These sessions are chaired by the independent Lead Director. The chair of the executive session may, at his discretion, invite our Chairman and Chief Executive Officer, other non-independent directors or other members of management to participate in a portion of such executive session, as appropriate.

ANNUAL ASSESSMENT OF BOARD, COMMITTEE AND INDIVIDUAL DIRECTOR PERFORMANCE

As provided in our corporate governance principles, the board annually reviews its own performance, structure and processes in order to assess how effectively it is functioning. The assessment is implemented and administered by the governance committee through an annual board self-evaluation survey. Our process also includes individual peer director evaluations. All of our board established committees, except for the executive committee, conduct an annual self-assessment.

REPORTING CONCERNS TO THE AUDIT COMMITTEE

Our audit committee has adopted procedures for the receipt of complaints relating to accounting, internal control over financial reporting and auditing matters. Such concerns may be made anonymously through our independent helpline provider and any allegations relating to financial matters are automatically referred to the chairman of the audit committee and will be handled in accordance with the adopted procedures. A copy of the procedures is available on our website.

CONTACTING THE BOARD OF DIRECTORS

Shareholders may contact the board of directors, including a committee of the board or the independent directors as a group, by using the following address:

CME Group Inc.
Attn: Board of Directors c/o Office of the Secretary
20 South Wacker Drive
Chicago, Illinois 60606
Email: directors@cmegroup.com

All communications received will be compiled by the office of the secretary and submitted to the governance committee on a quarterly basis or more frequently as appropriate. Emails received via directors@cmegroup.com are screened for junk commercial email and general solicitations. If a communication does not involve an ordinary business matter as described below and if a particular director is named, the communication will be forwarded to that director.

In order to expedite a response to ordinary business matters, the governance committee has authorized management to receive, research and respond, if appropriate, on behalf of our directors, including a particular director or its non-executive directors, to any communication regarding a product of an exchange or transactions by a clearing firm or a member of an exchange, referred to as an “ordinary business matter.” Any director may review any such communication or response thereto.

SHAREHOLDER ENGAGEMENT

Shareholders who invest in our company and elect the board of directors are entitled to open and meaningful information about our business, strategies, corporate governance and senior management compensation practices so they can make informed decisions and knowledgeably participate in the proxy voting process. The board thoughtfully considers the opinions expressed by shareholders through their votes, periodic meetings and other communications and believes that shareholder engagement leads to enhanced governance practices. These engagements may cover governance, compensation and other matters to ensure that management and the board understand and address the issues that are important to our shareholders.

As owners of our company, you are encouraged to contact us through our provided communication channels to provide your feedback. If you have a corporate governance or compensation matter that you would like to discuss with the board or a particular committee, you may send an email to officeofthesecretary@cme.com.

BOARD COMMITTEES

The responsibilities of each committee composed entirely of board members are summarized in this proxy statement and described in more detail in each committee's written charter. Copies of these charters are available on our website. In addition, the board has established clearing house risk committees, which are designed to include key market participants as members.

In the following descriptions, the chairman is designated with a "C," the independent members are designated with an "I," public directors are identified with a "P," and audit committee financial experts with an "F." Members of the committee are as of the date of the proxy statement.

Audit Committee	
NUMBER OF MEETINGS IN 2018: 11	
<p>The audit committee is a separately-designated standing committee established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended (Exchange Act), and assists the board in fulfilling its oversight responsibilities with respect to the integrity of our financial statements, the qualifications and independence of our independent registered public accounting firm, the performance of our internal audit functions and our external auditors and the effectiveness of our internal control over financial reporting.</p> <p>The committee performs this function by monitoring our financial reporting process and internal control over financial reporting and by assessing the audit efforts of the external and internal auditors. The committee has ultimate authority and responsibility to appoint, retain, compensate, evaluate, and where appropriate, replace the external auditors.</p>	<p>Dennis H. Chookaszian (C,I,P,F) Jeffrey M. Bernacchi (I) Elizabeth A. Cook (I) Larry G. Gerdes (I,P,F) Deborah J. Lucas (I,P) Terry L. Savage (I,P) Dennis A. Suskind (I,P)</p>
Clearing House Oversight Committee	
NUMBER OF MEETINGS IN 2018: 6	
<p>The purpose of the committee is to provide oversight of the risk management activities and the senior management of the clearing house, including oversight with respect to the effectiveness of the risk management program.</p>	<p>William R. Shepard (C,I) Martin J. Gepsman (I) William W. Hobert (I) Alex J. Pollock (I,P) Howard J. Siegel (I) Dennis A. Suskind (I,P)</p>

Compensation Committee	
NUMBER OF MEETINGS IN 2018: 7	
The compensation committee assists the board in fulfilling its responsibilities in connection with the compensation of board members and senior management and oversees the compensation programs for our employees. It performs this function by establishing and overseeing our compensation programs, approving compensation for our executive officers, recommending to the board the compensation of board members who do not serve as our officers, overseeing the administration of our equity award plans and approving the filing of the Compensation Discussion and Analysis section, in accordance with applicable rules and regulations of the SEC, in our proxy statements.	Daniel R. Glickman (C,I,P) Jeffrey M. Bernacchi (I) Timothy S. Bitsberger (I,P) Ana Dutra (I,P) Martin J. Gepsman (I) William R. Shepard (I)
Executive Committee	
NUMBER OF MEETINGS IN 2018: 1	
The executive committee exercises the authority of the board when the board is not in session, except in cases where action of the entire board is required by our articles of incorporation, bylaws or applicable law. The committee may also review and provide counsel to management regarding material policies, plans or proposals prior to submission of such items to the board.	Terrence A. Duffy (C) Charles P. Carey (I) Larry G. Gerdes (I,P,F) Daniel R. Glickman (I,P) Ronald A. Pankau (I) Alex J. Pollock (I,P) Terry L. Savage (I,P) William R. Shepard (I) Dennis A. Suskind (I,P)
Finance Committee	
NUMBER OF MEETINGS IN 2018: 4	
The finance committee assists the board in fulfilling its oversight responsibilities with respect to our financial policies, strategies, capital structure and annual operating and capital budget.	Larry G. Gerdes (C,I,P,F) Charles P. Carey (I) Dennis H. Chookaszian (I,P,F) Gedon Hertshten (I) Deborah J. Lucas (I,P) Ronald A. Pankau (I) Alex J. Pollock (I,P) William R. Shepard (I) Dennis A. Suskind (I,P) David J. Wescott (I)
Governance Committee	
NUMBER OF MEETINGS IN 2018: 5	
The governance committee assists the board by making recommendations on our corporate governance practices. The committee reviews and recommends changes to our corporate governance principles and other policies in the area of corporate governance and establishes a culture of compliance and ethics within the organization through its oversight of the board's governance policies and the employee code of conduct.	Daniel R. Glickman (C,I,P) Dennis H. Chookaszian (I,P,F) Larry G. Gerdes (I,P,F) Alex J. Pollock (I,P) Terry L. Savage (I,P) Dennis A. Suskind (I,P)

Market Regulation Oversight Committee NUMBER OF MEETINGS IN 2018: 6	
The market regulation oversight committee assists the board with its oversight of the operation of our four exchanges that are self-regulatory organizations. The committee provides independent oversight of the policies and programs of such regulatory functions and their senior management and compliance officers to ensure effective administration of our self-regulatory responsibilities.	Timothy S. Bitsberger (C,I,P) Ana Dutra (I,P) Deborah J. Lucas (I,P) Alex J. Pollock (I,P) Dennis A. Suskind (I,P)
Nominating Committee NUMBER OF MEETINGS IN 2018: 7	
The nominating committee reviews qualifications of potential candidates for Equity director and recommends to the board the slate for election at our annual meetings.	Alex J. Pollock (C,I,P) Martin J. Gepsman (I) Larry G. Gerdes (I,P,F) Daniel R. Glickman (I,P) William R. Shepard (I)
Risk Committee NUMBER OF MEETINGS IN 2018: 6	
The primary purpose of the risk committee is to review, assess and provide oversight of the company's risk management practices and to assist the board in its oversight of the effectiveness of the company's policies and processes to identify, manage and plan for its clearing, compliance, financial, operational, reputational and strategic risks as described in more detail on page 19 .	Dennis A. Suskind (C,I,P) Jeffrey M. Bernacchi (I) Timothy S. Bitsberger (I,P) Dennis H. Chookaszian (I,P,F) Elizabeth A. Cook (I) Larry G. Gerdes (I,P,F) Gedon Hertshten (I) Ronald A. Pankau (I) Howard J. Siegel (I)

You are being asked to vote on the ratification of the appointment of Ernst & Young to serve as our independent registered public accounting firm for 2019. Ernst & Young served as our accounting firm for 2018.

OUR BOARD RECOMMENDS THAT YOU VOTE “FOR” THE RATIFICATION OF THE APPOINTMENT OF ERNST & YOUNG AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR 2019

The audit committee has appointed Ernst & Young as CME Group’s independent registered public accounting firm for 2019. We are not required to have the shareholders ratify the selection of Ernst & Young as our independent auditor. We nonetheless are doing so because we believe it is a matter of good corporate practice. If the shareholders do not ratify the selection, the audit committee will reconsider whether or not to retain Ernst & Young, but may choose to retain such independent auditor. Even if the selection is ratified, the audit committee, in its discretion, may change the appointment at any time during the year if it determines that such a change would be in the best interest of CME Group and its shareholders. Representatives of Ernst & Young will be present at the annual meeting, will have the opportunity to make a statement, and will be available to respond to appropriate questions by shareholders. In connection with the audit of our 2018 financial statements, we entered into an engagement letter with Ernst & Young, which sets forth the terms by which Ernst & Young would perform audit services for us and which did not include any limitations of liability for punitive damages. We expect to enter into a similar engagement letter with Ernst & Young for 2019.

Ernst & Young has served as the company’s auditor since 2002. In accordance with its charter, the audit committee considers annually whether there should be a rotation of the independent auditor. The audit committee has determined that it is in the interest of the company and its shareholders to continue the engagement with Ernst & Young and recommends that shareholders ratify the appointment.

THE AUDIT COMMITTEE HAS PRE-APPROVAL PROCESSES FOR NON-AUDIT SERVICES

The audit committee is responsible for the appointment, retention, compensation and oversight of our independent registered public accounting firm. The audit committee has adopted policies and procedures for pre-approving all services (audit and non-audit) performed by our independent registered public accounting firm. In accordance with such policies and procedures, the audit committee is required to pre-approve all audit and non-audit services to be performed by the independent registered public accounting firm in order to ensure that the provision of such services is in accordance with the rules and regulations of the SEC and does not impair the registered public accounting firm’s independence. Under the policy, pre-approval is generally provided for up to one year, any pre-approval is detailed as to the particular service or category of services and is subject to a specific budget. In addition, the audit committee may pre-approve additional services on a case-by-case basis. The audit committee has delegated specific pre-approval to the chairperson of the audit committee, provided the estimated fee of the proposed service does not exceed \$100,000. The chairperson also has the authority to approve any actual or expected cost overruns relating to any pre-approved services provided the additional fees do not exceed \$100,000.

The chairperson must report any decisions made pursuant to these delegations to the audit committee at its next scheduled meeting. Periodically, but not less than quarterly, our controller provides the audit committee with a report of audit and non-audit services provided and expected to be provided by the independent registered public accounting firm. A copy of our audit and non-audit services policy is available on our website.

PRINCIPAL ACCOUNTANT FEES AND SERVICES

Fees paid to Ernst & Young for each of the last two fiscal years are listed in the following table.

Service Provided	2018	2017
Audit ⁽¹⁾	\$5,065,060	\$3,530,038
Audit-Related Fees ⁽²⁾	120,000	160,000
Tax Fees ⁽³⁾	207,394	293,488
All Other Fees ⁽⁴⁾	—	—
Total	\$5,392,454	\$3,983,526

(1) Fees for professional services rendered for the integrated audit of the consolidated financial statements of CME Group and, as required, audits of various domestic and international subsidiaries and other agreed-upon procedures.

(2) Fees for assurance and related services, including consultation on accounting and internal control matters, financial compliance reports and agreed-upon procedures not required by regulation.

(3) Fees for services rendered for tax return preparation, tax advice and other international, federal and state projects. In 2018 and 2017, tax compliance and preparation fees were \$11,432 and \$43,342, respectively.

(4) Fees for services not included in the foregoing categories.

The audit committee has considered whether the provision of non-audit services is compatible with maintaining the registered public accounting firm's independence. All of the projects included in the foregoing fee table were pre-approved by the audit committee in accordance with our audit and non-audit services policy.

AUDIT COMMITTEE FINANCIAL EXPERTS

The board has determined that Messrs. Chookaszian, Gerdes and Kaye each meet the SEC's definition of an audit committee financial expert.

REQUIRED VOTE

This item must receive a "FOR" vote from the holders of a majority of the shares of our Class A and Class B common stock present in person or represented by proxy and entitled to vote on this matter at the annual meeting, voting together as a single class, to be approved.

ROLES AND RESPONSIBILITIES. The audit committee reviews CME Group's financial reporting process on behalf of the board. Management has the primary responsibility for establishing and maintaining adequate internal financial controls, for preparing the financial statements and for the public reporting process. Ernst & Young, our company's independent registered public accounting firm for 2018, is responsible for expressing opinions on the conformity of the company's audited financial statements with generally accepted accounting principles and on the company's internal control over financial reporting. A copy of the audit committee charter, which has been adopted by our board of directors and further describes the role of the audit committee in overseeing our financial reporting process, is on our website under Investor Relations—Corporate Governance—Board Committees.

REQUIRED DISCLOSURES AND DISCUSSION. The audit committee has reviewed and discussed with management and Ernst & Young the audited financial statements for the year ended December 31, 2018 and Ernst & Young's evaluation of the company's internal control over financial reporting. The committee has also discussed with Ernst & Young the matters that are required to be discussed under the Public Company Accounting Oversight Board (**PCAOB**) standards. Ernst & Young has provided to the committee the written disclosures and the PCAOB-required letter regarding its communications with the audit committee concerning independence, and the committee has discussed with Ernst & Young that firm's independence. The committee has concluded that Ernst & Young's provision of audit and non-audit services to CME Group is compatible with Ernst & Young's independence.

AUDIT COMMITTEE RECOMMENDS INCLUDING THE FINANCIAL STATEMENTS IN THE ANNUAL REPORT. Based on the review and discussions referred to above, the audit committee recommended to the board that the audited financial statements for the year ended December 31, 2018 be included in our 2018 Annual Report on Form 10-K for filing with the SEC. This report is provided by the following independent directors, who currently comprise the audit committee:

Dennis H. Chookaszian, *Chairman*

Jeffrey M. Bernacchi

Elizabeth A. Cook

Larry G. Gerdes

Deborah J. Lucas

Terry L. Savage

Dennis A. Suskind

You are being asked to vote on a non-binding advisory proposal on our executive compensation program for our named executive officers as described in our Compensation Discussion and Analysis beginning on page 37 and Executive Compensation tables beginning on page 54.

OUR BOARD RECOMMENDS THAT SHAREHOLDERS VOTE “FOR” THE ADVISORY PROPOSAL ON THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS

FACTORS TO CONSIDER

The board and the compensation committee are committed to sound governance practices and recognize the interest our shareholders have expressed in CME Group’s executive compensation program. As part of that commitment, and pursuant to Section 14A of the Exchange Act, our shareholders are being asked to approve an advisory resolution on the compensation of the named executive officers, as reported in this proxy statement.

This proposal, commonly known as the “say-on-pay” proposal, gives you the opportunity to endorse our 2018 executive compensation program and policies for the named executive officers through a vote “FOR” the approval of the following resolution:

RESOLVED, that the shareholders of CME Group approve, on an advisory basis, the compensation of CME Group’s named executive officers, as disclosed pursuant to the compensation disclosure rules of the SEC in the proxy statement for the CME Group 2019 annual shareholders meeting (which disclosure includes the Compensation Discussion and Analysis, the Executive Compensation tables and any related material).

We currently hold our advisory “say-on-pay” proposal every year. This vote is not intended to address any specific item of compensation, but rather our overall compensation policies and procedures relating to the named executive officers. Accordingly, your vote will not directly affect or otherwise limit any existing compensation or award arrangement of any of the named executive officers. Because your vote is advisory, it will not be binding on the board. The board and the compensation committee, however, will take into account the outcome of the “say-on-pay” vote when considering future compensation arrangements.

REQUIRED VOTE

This item must receive a “FOR” vote from the holders of a majority of the shares of our Class A and Class B common stock present in person or represented by proxy and entitled to vote on this matter at the annual meeting, voting together as a single class, to be approved.

Our Class B-1 shareholders are being asked to vote for three Class B-1 directors, our Class B-2 shareholders are being asked to vote for two Class B-2 directors and our Class B-3 shareholders are being asked to vote for one Class B-3 director. Each Class B director's term will last until the 2020 annual meeting and until his or her successor is duly elected, or until his or her earlier resignation or removal.

OUR BOARD IS NOT PROVIDING ANY RECOMMENDATION AS TO HOW OUR CLASS B SHAREHOLDERS SHOULD VOTE ON THE ELECTION OF CLASS B-1, CLASS B-2 AND CLASS B-3 DIRECTORS

If you own more than one share of Class B-1, Class B-2 or Class B-3 common stock, you must vote each class of your Class B-1 shares, Class B-2 shares and/or Class B-3 shares the same way. You may not split your vote. If you do so, your vote will be invalid.

In order to hold a valid election of the Class B director(s) elected by a particular class, a quorum of that class (holders of at least one-third of the outstanding shares of that class) must be present in person or by proxy at the annual meeting. From time to time, at the time of the annual meeting, the quorum required for a particular class was not satisfied. At previous annual meetings, the company elected to adjourn the election for a class that did not satisfy the quorum requirement in order to allow for the solicitation of more votes. At the 2019 annual meeting of shareholders, if a quorum is not present for one or more of the proposals under **Item 4** or **Item 5**, the company does not intend to adjourn the meeting. In the absence of a quorum, no valid election can take place under our charter and bylaws. As a consequence, the Class B directors serving on the board of the affected class at the time of the annual meeting would become “holdovers” under Delaware law and our bylaws, and would continue to serve until their successors are duly elected at the 2020 annual meeting or their earlier resignation or removal. The Class B nominating committee members of that class would also be deemed to continue to serve until their successors are duly elected at the 2020 annual meeting.

CLASS B DIRECTOR NOMINEES

Ages of the nominees are as of March 11, 2019, and the nominee's trading badge symbol is shown in parenthesis.

CLASS B-1 DIRECTOR NOMINEES (Class B-1 Shares only)

Vote “FOR” up to three nominees to be elected to the board of directors.

Steve A. Beitler (SAB)

Director since: N/A

Age: 62

Mr. Beitler has been a CME member since 1987. As a CME member, he has served on various CME exchange committees. In 1996, Mr. Beitler partnered with another CME exchange member, Thomas J. Murphy, to form TJM Institutional Services, a National Futures Association introducing broker. TJM Investments, TJM Institutional Services and TJM Europe provide institutional customers with execution and brokerage services on a global basis. The TJM group of companies has over 185 employees and offices in New York, London, Chicago, Connecticut and Florida.

Bradley S. Glass (BRAD)

Director since: N/A

Age: 54

Mr. Glass has been a member of CME since 1987. Mr. Glass is an active independent trader in the financial, equity and agricultural quadrants. He began his career as a currency arbitrage clerk, progressed to a floor trader and successfully transitioned to screen based trading. He has served on numerous CME functional committees: B-1 nominating committee (chairman), clearing house, clearing house operational sub, membership, education, arbitration, Commodity Futures Political Fund, probable cause, leasing, trade procedures, leasing & permit review sub. Mr. Glass earned Master of Accounting and BBA degrees from The University of Michigan, Ross School of Business.

Gedon Hertshten (GHF)
Director since: 2017

Age: 66

Mr. Hertshten started his career in the derivatives industry as an independent trader at the CBOT in 1978 and has been involved in the industry ever since. Following his successful trading career on various exchanges, he founded GH Financials Ltd. in 1993 in London, which operates two subsidiaries located in Chicago and Hong Kong. GH Financials is now a leading global provider of clearing and settlement services and is a clearing member of CME, CBOT, NYMEX and COMEX as well as other exchanges around the globe. Mr. Hertshten served on the board of directors of the LIFFE exchange in London from 1997 to 2005. In 2005, Mr. Hertshten founded the Hertshten Group, which is a growing global company with more than 600 employees involved in three areas: proprietary trading, commercial real estate investments, and insurance business. Today, Mr. Hertshten focuses on expanding the Hertshten Group's global reach and developing new business ventures.

William W. Hobert (WH)
Director since: 2018, 2015-2017

Age: 55

Mr. Hobert founded WH Trading, LLC, a proprietary options and futures trading firm, in 1998. WH Trading serves as a market maker and liquidity provider in numerous asset classes at CME in both its open outcry and electronically traded markets. From 1988 to 1994, Mr. Hobert worked for Cooper-Neff and Associates as an FX options market maker on the floor of CME and in over-the-counter markets. In 1994, he founded Hobert Trading Inc., which is currently a member of WH Trading, LLC.

Patrick J. Mulchrone (PJM)
Prior Service as a Director: 1991-1997, 1998-2002

Age: 61

Mr. Mulchrone has been a member of CME since 1980. He served as a filling order broker in the Eurodollar pit until 2004. Mr. Mulchrone has been an independent trader from 2004 to present. Mr. Mulchrone is a founder of Advantage Futures (2003). He served as a member of the board of directors of Standard Bank & Trust until its sale in 2017. He serves as the Vice Chairman of our political action committee and has served on the Class B-2 nominating committee.

Robert J. Tierney Jr. (RJT)
Director since: N/A

Age: 43

Mr. Tierney has been an active independent trader and a member of the CME and CBOT since 2000. Currently, Mr. Tierney is a managing member and owner of Kore Trading LLC, a registered member firm holding multiple memberships on CME and CBOT. He actively trades and mentors college graduates in the mechanics of spread trading across multiple asset classes. Mr. Tierney also serves as a CME committee member of the probable cause committee as well the business conduct committee since 2012. Previously, he was a managing partner at AlphaBit Trading LLC from 2012-2018.

REQUIRED VOTE

The three nominees for Class B-1 director receiving the highest number of "FOR" votes will be elected.

CLASS B-2 DIRECTOR NOMINEES (Class B-2 shares only)

Vote “FOR” up to two nominees to be elected to the board of directors.

Yra G. Harris (YRA)

Prior Service as a Director: 1997-2003

Age: 65

Mr. Harris has over 32 years of experience in all areas of commodity trading, with broad expertise in cash currency markets. He is currently actively trading as a macro-global trend trader. Mr. Harris is a regular guest analyst on Currency & Global Interest Markets on Bloomberg and CNBC. He has managed daily operations for several firms and served as a commodity trading advisor, representing investors nationwide. He was a member of the Financial Products Advisory Committee of the CFTC from 1992 to 1997. Over the years, Mr. Harris has served as an order filler in currencies, on the Globex Screen Design Task Force, and as a key member of the strategic planning committee with responsibility to facilitate the demutualization of CME. He served as Chairman of the Class B-2 nominating committee for three terms, served on many CME committees including currency task force review group, business conduct, floor practices (Disciplinary), computer trade reconstruction, ad hoc dual trading and financial instruments steering committee.

Ronald A. Pankau (PAN)

Director since: 2011

Age: 62

Mr. Pankau has been an independent trader since 1981. He serves as the Co-Chairman, Treasurer and Secretary of our political action committee. He also is a member of our finance, executive and risk committees. He has participated in numerous risk management educational programs and as a long-time market participant has significant market risk management experience. He also serves on our business conduct and pit supervision committees. He is the owner and CEO of JH Best and Sons, a steel fabricating plant.

David J. Wescott (COT)

Director since: 2003, 1989-1996

Age: 61

Mr. Wescott has been a member of CME for more than 35 years. He is a founder and partner in Nirvana Technology Solutions, a hosting company for the trading community through data center co-location, technology consulting, and 24-hour technology support. He has served as President of The Wescott Group LTD since 1991 and Managing Partner of The Dowd/Wescott Group LTD since 2006. Mr. Wescott has served, chaired, vice chaired, or co-chaired on several board and functional committees at CME and served as a past member of the CFTC Regulatory Coordination Advisory Committee under former Chair, Wendy Gramm. Mr. Wescott also devotes significant time to individual business opportunities.

REQUIRED VOTE

The two nominees for Class B-2 director receiving the highest number of “FOR” votes will be elected.

CLASS B-3 DIRECTOR NOMINEE (Class B-3 shares only)

Vote “FOR” one nominee to be elected to the board of directors.

Elizabeth A. Cook (LZY)

Director since: 2015

Age: 58

Ms. Cook has been a member of CME since 1983, starting her career in 1978 as a runner for Clayton Brokerage Inc. She is a member of the board’s risk and audit committees. Ms. Cook actively participates as co-chair of the CME arbitration and floor conduct committees and serves on the board of the CME gratuity fund. In addition, she serves on CME’s membership and business conduct committees and continues her involvements as a CME political action committee member. Ms. Cook is the founder and owner of MiCat Group LLC, a firm specializing in option execution services focusing on equities, FX and interest rates. She also serves as president of Lucky Star LLC, a commercial property management company. Ms. Cook is also on the board of Women in Listed Derivatives and Associated Colleges of Illinois. Her external activities include National Association of Corporate Directors Governance Fellow and completion of its Director Professionalism course, Private Directors Association, member of the Executives’ Club of Chicago Finance Forum, member of Business Executives for National Security, Ambassador of the Navy Seal Foundation, Ambassador for The ALS Association Greater Chicago Chapter and an active supporter of Honor Flight Chicago. Ms. Cook has participated in numerous risk and audit educational programs and as a long-time market participant has significant risk management experience.

REQUIRED VOTE

The nominee for Class B-3 director receiving the highest number of “FOR” votes will be elected.

Our bylaws provide that holders of our Class B-1, Class B-2 and Class B-3 shares elect the members of their respective Class B nominating committees. The Class B nominating committees are not committees of our board of directors and serve only to nominate the slate of Class B directors for their respective classes. Each Class B nominating committee is composed of five members who serve for a term of one year. The existing members are responsible for selecting up to 10 candidates to stand for election as members of a particular Class B nominating committee. The five nominees with the greatest number of votes will serve on the applicable committee. Ages of the nominees are as of March 11, 2019.

OUR BOARD IS NOT PROVIDING ANY RECOMMENDATION AS TO HOW OUR CLASS B SHAREHOLDERS SHOULD VOTE ON THE ELECTION OF CLASS B-1, CLASS B-2 AND CLASS B-3 NOMINATING COMMITTEES

NOMINEES FOR 2020 CLASS B-1 NOMINATING COMMITTEE

Vote “FOR” up to five nominees to be elected to the Class B-1 Nominating Committee.

Thomas A. Bentley (TAB) Independent floor trader	Member since: 1982 Shares Owned: B-1 Age: 63
Kevin G. Boyle (KGB) Independent floor trader	Member since: 1981 Shares Owned: B-1 Age: 62
Steven F. French (FS) Independent floor trader	Member since: 1990 Shares Owned: B-1, B-3 Age: 57
Joseph H. Gressel (GPC) Independent floor trader	Member since: 1976 Shares Owned: B-1, 2 B-4s Age: 69
Mark S. Kobilca (HTR) Independent floor trader	Member since: 1978 Shares Owned: B-1, B-4 Age: 64
Gary T. Lark (GTX) Independent floor trader	Member since: 1985 Shares Owned: B-1 Age: 67
W. Winfred (FRED) Moore II (FMOR) Independent floor trader	Member since: 1977 Shares Owned: B-1 Age: 69
James V. Sauter (TCP) Independent floor trader	Member since: 1996 Shares Owned: B-1 Age: 61
Michael J. Small (SML) Independent floor trader	Member since: 1985 Shares Owned: B-1 Age: 58
Michael G. Sundermeier (MIK) Independent floor trader	Member since: 1981 Shares Owned: B-1 Age: 59

REQUIRED VOTE

The five nominees for the Class B-1 nominating committee receiving the highest number of “FOR” votes will be elected.

NOMINEES FOR 2020 CLASS B-2 NOMINATING COMMITTEE

Vote “FOR” up to five nominees to be elected to the Class B-2 Nominating Committee.

Frank Catizone (FDC) Independent floor trader	Member since: 1986 Shares Owned: B-2 Age: 60
Richard J. Duran (RJD) Independent floor trader	Member since: 1979 Shares Owned: B-2 Age: 70
Patrick J. Lahey (XDE) Independent floor trader	Member since: 2015 Shares Owned: B-2 Age: 40
Patrick W. Maloney (PAT) Independent floor trader	Member since: 1986 Shares Owned: B-2 Age: 57
Andrew J. Schwieters (AJS) Independent floor broker	Member since: 2004 Shares Owned: B-2 Age: 46
Stuart A. Unger (UNG) Independent floor trader	Member since: 1975 Shares Owned: B-2 Age: 71
Barry D. Ward (BDW) Independent floor trader	Member since: 1990 Shares Owned: B-2 Age: 55
James J. Zellinger (JZZ) Independent floor trader	Member since: Shares Owned: B-2 Age: 73

REQUIRED VOTE

The five nominees for the Class B-2 nominating committee receiving the highest number of “FOR” votes will be elected.

NOMINEES FOR 2020 CLASS B-3 NOMINATING COMMITTEE

Vote “FOR” up to five nominees to be elected to the Class B-3 Nominating Committee.

John F. Connors Jr. (CON) Independent floor trader	Member since: 2010 Shares Owned: 2 B-3s Age: 49
Joel P. Glickman (GLK) Independent trader	Member since: 1983 Shares Owned: B-3 Age: 63
Spencer K. Hauptman (SPNC) Independent floor broker	Member since: 2003 Shares Owned: B-3 Age: 40
Kevin P. Heaney (FROG) Independent floor broker	Member since: 2005 Shares Owned: B-3 Age: 41
Robert J. Kevil Jr. (REV) Independent floor broker	Member since: 2006 Shares Owned: B-3 Age: 38
Stephen J. Leuer (LURE) Independent floor broker	Member since: 1987 Shares Owned: B-3 Age: 55
Thomas G. Rossi (SSI) Independent floor broker	Member since: 1986 Shares Owned: B-3 Age: 55
Phillip E. Teuscher (PXT) Independent floor trader	Member since: 2010 Shares Owned: 3 B-3s Age: 42
Richard S. Turim (RST) Independent floor trader	Member since: 1982 Shares Owned: B-3 Age: 67
Paul D. Zirpolo (ZIR) Independent floor trader	Member since: 1987 Shares Owned: B-1, B-3 Age: 60

REQUIRED VOTE

The five nominees for the Class B-3 nominating committee receiving the highest number of “FOR” votes will be elected.

This section provides an overview of the role and responsibility of our compensation committee. We have an executive compensation program that is designed to tie pay to performance, balance rewards with prudent business decisions and risk management, and focus on both annual and long-term performance for the benefit of our shareholders. In designing our program, we also take into consideration our unique role in the financial services industry.

OUR COMPENSATION COMMITTEE PROVIDES OVERSIGHT OF OUR COMPENSATION PROGRAM FOR OUR SENIOR MANAGEMENT GROUP

The compensation committee is composed of six independent directors. The primary responsibilities of the compensation committee are to review and approve compensation arrangements for our senior management group (our Chairman and Chief Executive Officer and the other members of our management team), to review and recommend compensation arrangements for the board of directors, to adopt incentive compensation plans in which senior management is eligible to participate and to oversee matters relating to employee compensation, employee benefit plans and employee incentive programs. A complete description of the committee's responsibilities may be found in its charter, a copy of which is on our website.

There were seven meetings of the committee in 2018. The committee typically meets in executive session for a portion of each regular committee meeting and may include members of management as appropriate. The committee provides regular reports to the board of directors on its activities.

In November 2018, the company completed the acquisition of NEX. As a result, the compensation committee began overseeing matters relating to legacy NEX employee compensation, employee benefit plans and employee incentive programs, including matters relating to the integration of NEX programs into CME Group programs, which is expected to be complete in 2020.

THE COMMITTEE CONSIDERS THE RECOMMENDATIONS OF OUR CHAIRMAN AND CHIEF EXECUTIVE OFFICER IN APPROVING COMPENSATION FOR OUR OTHER EXECUTIVE OFFICERS

The committee is solely responsible for approving the compensation of our executive officers. The committee, however, takes into consideration the recommendations of our Chairman and Chief Executive Officer in approving compensation for executive officers other than himself.

THE COMMITTEE DELEGATES AUTHORITY TO OUR CHAIRMAN AND CHIEF EXECUTIVE OFFICER ON A LIMITED BASIS SUBJECT TO PRE-ESTABLISHED CRITERIA

Subject to pre-established guidelines for individual awards and aggregate value limitations, the committee delegates authority to the individual in the role of Chief Executive Officer to approve salary increases, equity awards and annual cash bonus awards for employees other than the executive officers. The committee reviews annual reports on the use of such delegation.

OUR PROGRAM IS DESIGNED TO CREATE LONG-TERM SHAREHOLDER VALUE WHILE DISCOURAGING EXCESSIVE RISK TAKING

We realize that it is not possible to grow and enhance long-term shareholder value without assuming some level of risk. This is true whether we decide to make an acquisition, introduce a new product or change our corporate strategy. Our compensation program is designed to provide appropriate incentives for creating long-term shareholder value and delivering on our financial and strategic goals while discouraging excessive risk taking.

Several elements of our program, which are discussed in more detail in the **Compensation Discussion and Analysis** section beginning on **page 37**, are designed to promote the creation of long-term value and thereby discourage behavior that leads to excessive risk taking. The following are the key elements of our program designed to address compensation risk:

- We utilize a mix of both fixed and variable compensation. Our fixed pay is intended to provide a stable income.
- A significant portion of our senior management group compensation is composed of long-term equity incentives and the senior management group is also subject to company stock ownership guidelines based on their level of responsibility.

- Our annual cash bonus plan for our senior management group and other senior employees as currently in effect will not pay out in the event we fail to achieve cash earnings at or above the threshold level of performance.
- We set maximum guidelines for annual incentive and long-term incentive awards, thereby establishing and communicating potential payouts.
- All compensation of our senior management group is subject to the approval of the compensation committee, which includes the ability to decrease an award for failure to perform or inappropriate risk taking.
- We have adopted a recoupment policy, whereby employees at the level of managing director and above may be required to repay any previously granted annual bonus awards to the extent that all or a portion of such individual's award was not actually earned due to a restatement of our financial results with the outcome being the achievement of the related performance metric was less than previously reported.
- We prohibit all of our employees and board members from engaging in any derivative transactions in our securities (hedging the economic risk of their ownership of our stock) and have adopted a policy restricting the pledging of our Class A shares by our board members and executive officers.
- As discussed below, the committee engages its independent compensation consultant to advise on executive compensation best practices and to provide counsel as it considers executive compensation programs and arrangements, as it deems appropriate.

OUR COMPENSATION COMMITTEE HAS ITS OWN INDEPENDENT COMPENSATION CONSULTANT

The committee has engaged Meridian Compensation Partners, LLC to serve as its independent advisor. During 2018, Meridian provided information on trends in executive compensation as well as general executive compensation advice. They also advised on proposed changes to director compensation to ensure alignment with the competitive market.

In mid-2018, Skadden, Arps, Slate, Meagher & Flom LLP & Affiliates, who serves as outside counsel for the company, advised the committee regarding the revised employment agreement with our Chairman and Chief Executive Officer.

Management also engages its own consultants to provide advice as it relates to compensation programs. In 2018, management engaged Exequity LLP for information on executive compensation practices as well as technical guidance on executive compensation matters.

Such consultants may attend compensation committee meetings and provide advice to the compensation committee. The committee at its discretion may also include its independent advisor in such reviews and decision-making processes, meeting either jointly or separately from management and management's consultant.

The committee has assessed the independence of the advisors it engaged in 2018 relative to the factors identified by the SEC and Nasdaq.

OUR COMPENSATION COMMITTEE IS COMPOSED OF INDEPENDENT MEMBERS WITH LIMITED RELATIONSHIPS WITH THE COMPANY (COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION)

During 2018, none of the members of the compensation committee served at any time as an officer or employee of CME Group or received any compensation from us other than in the capacity as a member of the board or a committee. Except as described below regarding Mr. Shepard, none of the members of the compensation committee has any relationship with us other than service as a director or member of one of our exchanges. Mr. Shepard owns a minority interest in one of our clearing firms, which made net payments to us of approximately \$147 million, and he owns a trading firm that made indirect payments to us through its clearing firm in excess of \$120,000 in connection with trading activity conducted on our exchanges in 2018. Such fees are consistent with those prevailing at the time for corresponding activity by other similarly situated unrelated third parties. No interlocking relationship exists between the members of our board or the compensation committee and the board of directors or compensation committee of any other company.

This discussion provides you with a detailed description of our compensation program for our named executive officers. It also provides an overview of our compensation philosophy and our policies and programs, which are designed to achieve our compensation objectives, and an overview of our program as it relates to other members of our management team. These individuals along with our named executive officers are referred to as our senior management group.

KEY TOPICS COVERED IN OUR COMPENSATION DISCUSSION AND ANALYSIS

- Opportunity for Shareholder Feedback, below
- Executive Summary, **page 38**
- Chief Executive Officer Total Pay vs. Performance, **page 40**
- Philosophy and Objectives, **page 41**
- Peer Group, **page 43**
- Principal Elements of our Compensation Program, **page 44**
- 2018 Named Executive Officer Bonus Awards, **page 45**
- 2018 Named Executive Officer Equity Awards, **page 47**
- Stock Ownership Guidelines, Hedging Policy, Tally Sheets and Recoupment Policy, **page 51**

2018 NAMED EXECUTIVE OFFICERS

Terrence A. Duffy, Chairman and Chief Executive Officer

John W. Pietrowicz, Chief Financial Officer

Bryan T. Durkin, President

Julie Holzrichter, Chief Operating Officer

Sean P. Tully, Global Head of Financial and OTC Products

For the biographies of our current executive officers, including the named executive officers, please see **Item 1. Business — Employees — Executive Officers** beginning on **page 14** of our 2018 Annual Report on Form 10-K, filed with the SEC on February 28, 2019.

Opportunity for shareholder feedback

The compensation committee carefully considers feedback from our shareholders regarding the compensation program for our senior management group. We believe the changes made in recent years to enhance the performance orientation of our program have been well received by shareholders, as evidenced by our “say-on-pay” vote results.

At our 2018 annual meeting of shareholders, approximately 93% of shareholders voted FOR the approval of our non-binding advisory vote approving the compensation of our named executive officers.

Shareholders who wish to directly communicate with members of the compensation committee may do so using directors@cmegroup.com as discussed on **page 20** of this proxy statement.

You should read this section in conjunction with the advisory vote we are conducting on the compensation of our named executive officers under **Item 3** on **page 27** as it contains information that is relevant to your voting decision.

EXECUTIVE SUMMARY

Our business

CME Group exchanges 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. The company offers futures and options on futures trading across asset classes through the CME Globex platform, fixed income trading via BrokerTec and foreign exchange trading on the EBS platform. In addition, it operates one of the world's leading central counterparty clearing providers, CME Clearing. With a range of pre- and post-trade products and services underpinning the entire lifecycle of a trade, CME Group also offers optimization, reconciliation and processing services through TriOptima and Traiana.

For more information on our business, see **Business** and **Management's Discussion and Analysis of Financial Condition and Results of Operations** in our **Annual Report** and the business highlights in the **Summary Information** on **page 1**.

2018 compensation highlights for our named executive officers

The compensation committee took the following compensation actions with respect to our named executive officers during 2018 or related to 2018 performance:

- Entered into a revised employment agreement with Mr. Duffy in May 2018. The details of the revised employment agreement can be found on **page 59**.
- Awarded base salary increases to certain named executive officers to better align their compensation to market competitive levels as described on **page 45**.
- Awarded bonuses to our named executive officers based on our achievement of 2018 cash earnings at 115% of the target goal as described beginning on **page 46**. For 2018, we set a cash earnings goal that required significant effort on behalf of our management.
- Certified results for the September 2015 award of performance shares based on net income margin growth relative to the diversified financial services index of the S&P 500 and total shareholder return relative to the S&P 500 for the 2016-2018 performance period. Due to outstanding achievement against both goals, 200% of the target number of shares were earned and became vested in March 2019 as described on **page 48**.
- Awarded performance-granted restricted shares to Mr. Duffy based on the company's 2018 relative total shareholder return achievement at the 93.4 percentile of the S&P 500. This award is time-vested and the number of shares subject to the award was determined based on the achievement of the performance targets and granted in March 2019. The performance-granted restricted shares are described on **page 49**.
- Awarded equity grants to our named executive officers in September 2018 to encourage longer-term retention while also increasing the focus on longer-term value creation. The 2018 equity awards were comprised of 50% time-vested restricted stock and 50% performance shares, as described on **page 48**.
- Approved the use of a single metric, relative total shareholder return, for performance share awards granted in 2018 and awarded performance shares to our named executive officers in September 2018 tied to our total shareholder return as compared to the S&P 500 measured over a three-year period (2019-2021), as described on **page 48**.
- In 2018, at least 50% of target total compensation for each of our named executive officers was considered performance-based, as it was directly tied to cash earnings or relative stock performance goals.

Key elements of the program are designed to ensure pay for performance

Our overall goals and philosophy are complemented by several specific elements that are designed to align the compensation for our senior management group with our performance and position the company for creating long-term shareholder value including:

- Our annual bonus is tied to our generation of cash earnings. To the extent we fail to achieve cash earnings at the threshold level, representing 25% below the target, no bonuses would be paid to our senior management group. The bonus opportunities for our named executive officers are set forth on **page 46**. We believe the cash earnings metric is a key component to measuring our growth and contributes directly to deriving value for our shareholders as it is the metric used for determining our regular quarterly dividend payments.
- The aggregate amount of our bonus pool is subject to an overall cap when we achieve cash earnings at the maximum level, representing 20% above the established target. We believe this cap provides transparency to our investors as to our compensation exposure and the expected expense is accrued on a quarterly basis based on actual cash earnings performance.
- In addition to verifying the annual achievement of cash earnings for purposes of our bonus program, our compensation committee also considers other elements of our performance, such as our net income, total shareholder return, earnings per share and return on equity, as appropriate.
- Our annual long-term incentive awards for our senior management group are comprised of 50% time-vested restricted shares and 50% performance shares. The performance shares have a three-year performance period with total shareholder return relative to the S&P 500 as the performance metric. This performance metric, when combined with the cash earnings performance metric in our annual bonus plan, focuses our senior management group on financial and operational measures of success and shareholder results. The annual equity award opportunities for our named executive officers are set forth on **page 47**.
- Our senior management group is subject to stock ownership guidelines as discussed on **page 51**.
- To ensure alignment with our shareholders, we have a policy that prohibits all employees and board members from engaging in any hedging or other derivative transactions with respect to CME Group stock as well as a policy which restricts pledging of our Class A common stock by our board members and executive officers.

Overview of pay and performance alignment

One of the guiding principles of our compensation program is to focus on achievement that benefits us and our shareholders. In support of that objective, a significant portion of the pay package for our named executive officers is delivered in the form of stock-based compensation, the value of which rises and falls in alignment with our stock performance.

The following graphic depicts the alignment of the total pay of the individual serving as Chief Executive Officer at the end of the applicable year with our total shareholder return and cash earnings achievement for each of the last five years (Mr. Gill for 2014-2015 and Mr. Duffy for 2016-2018). Total shareholder return (TSR) is shown on a year-over-year, indexed basis. Specifically, an investment of \$100 (with reinvestment of all dividends) is assumed to have been made in our Class A common stock on December 31, 2014 and its performance is tracked through December 31, 2018.

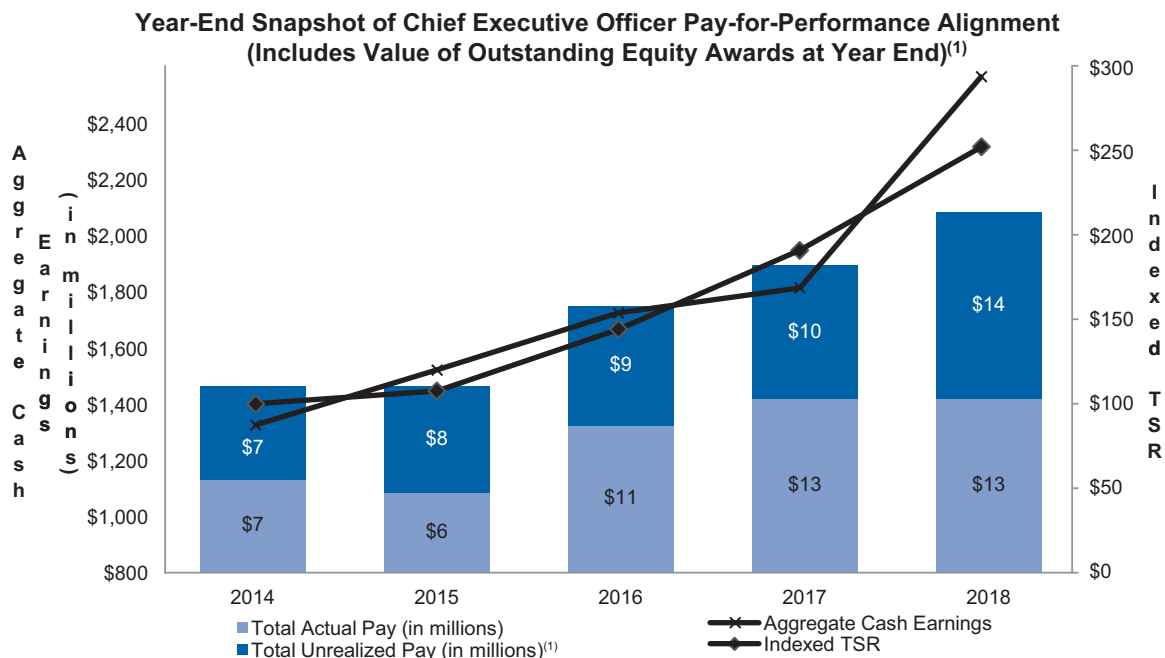
Chief Executive Officer pay, as depicted in the following graphic, is the sum of reported pay elements set forth in the **Summary Compensation Table** for each of the last five years except for the values of stock option, restricted stock, and performance share awards which are included as follows:

- The value of stock option awards is shown as (1) the value realized at exercise for any options exercised during the year as reported in the **Option Exercises and Stock Vested** table, and (2) the value of all outstanding, in-the-money stock options at year end measured as the positive difference between our stock price at year end minus the option exercise price.
- The value of restricted stock awards is shown as (1) the value realized on vesting for any shares that vested during the year as reported in the **Option Exercises and Stock Vested** table, and (2) the value of all outstanding restricted shares at year end measured using our stock price at year end.

- The value of performance share awards is shown as (1) the value realized on vesting for any earned shares that vested during the year as reported in the **Option Exercises and Stock Vested** table, and (2) the market value of the shares actually earned at the completion of the performance period which had not yet vested, as reported in the **Outstanding Equity Awards at Fiscal Year End** table, and as certified by the committee based on achievement of the performance goals.

While the **Summary Compensation Table** discloses the fair value of stock option, restricted stock and performance share awards on the grant date in the manner required by the SEC (for purposes of allocating the accounting expense over the requisite service period), we feel those values do not reflect the value actually received as a result of actual stock and financial performance. We believe the value of stock option, restricted stock and performance share awards as shown in this section better reflects the true alignment of our Chief Executive Officers' pay with our stock performance. As the graphic shows, our Chief Executive Officers' total actual pay plus the unrealized value of his outstanding equity awards at year end has been aligned with TSR over the last five years, which accords with the primary objectives of our executive compensation program.

On balance, Chief Executive Officer pay shows alignment with both stock performance and cash earnings given the focus on these measures in our incentive opportunities.



Chief Executive Officer Total Pay

	2014	2015	2016	2017	2018
Summary Compensation Table					
Salary	\$1,000,000	\$1,000,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000
Non-Equity Incentive Plan Compensation	\$1,176,000	\$1,599,309	\$ 2,898,443	\$ 3,467,511	\$ 4,591,913
Change in Pension Value	\$ 71,395	\$ 24,903	\$ 36,555	\$ 42,850	\$ 26,445
All Other Compensation	\$ 175,103	\$ 229,541	\$ 343,641	\$ 418,210	\$ 469,126
Option Exercises and Stock Vested					
Option Awards: Value Realized on Exercise	\$3,564,950	\$1,876,521	\$ 655,385	\$ —	\$ —
Restricted Stock Awards: Value Realized on Vesting	\$1,091,866	\$1,350,293	\$ 1,803,676	\$ 3,931,664	\$ 2,005,188
Performance Stock Awards: Value Realized on Vesting	\$ 100,229	\$ 128,784	\$ 3,753,218	\$ 3,804,071	\$ 4,748,347
Total Actual Pay	\$7,179,543	\$6,209,351	\$10,990,918	\$13,164,306	\$13,341,019
Outstanding Equity Awards at Fiscal Year End⁽¹⁾					
Option Awards: Unrealized Gain	\$3,735,145	\$2,556,803	\$ —	\$ —	\$ —
Restricted Stock Awards: Market Value of Shares That Have Not Vested	\$3,181,560	\$2,917,139	\$ 5,092,356	\$ 6,053,043	\$ 8,474,618
Performance Stock Awards: Market Value of Performance Shares Earned but Not Vested	\$ 235,809	\$2,812,768	\$ 3,517,714	\$ 4,193,096	\$ 4,937,774
Performance Stock Awards: Value of Performance-based Restricted Stock Earned but Granted after Year End	\$ —	\$ —	\$ 750,000	\$ 15,000	\$ 750,000
Total Unrealized Value of Outstanding Equity Awards⁽¹⁾	\$7,152,514	\$8,286,710	\$ 9,360,070	\$10,261,139	\$14,162,392
Percent Change in Total Unrealized Value of Outstanding Equity Awards	—%	16%	13%	10%	38%
Change in Total Unrealized Value of Outstanding Equity Awards	\$ —	\$1,134,196	\$ 1,073,360	\$ 901,069	\$ 3,901,253
Chief Executive Officer	Gill	Gill	Duffy	Duffy	Duffy

(1) These values do not reflect compensation delivered each year but rather a snapshot of the value of all unexercised stock options, unvested restricted shares, and unvested but earned performance shares as of each year end. The type of equity award granted impacts the timeframe for realizing the value: stock options may be outstanding for up to 10 years given the 10-year option term, restricted shares may be outstanding for up to four years given the four-year vesting schedule, and performance shares, which have been tied to either a one- or three-year performance period, are included as outstanding only when they are deemed earned at the completion of the performance period. Stock options and restricted stock are included in each year end snapshot until the year in which the option is exercised or the restricted shares vest, at which point the actual value received is reported in the Total Actual Pay section above. In 2012, we began granting performance shares tied to a three-year performance period and time-vested restricted stock to our senior management group and ceased granting stock options.

PHILOSOPHY AND OBJECTIVES OF OUR COMPENSATION PROGRAM

The elements of our executive compensation program are designed to:

- **Pay for performance.** Focus on company and individual achievement for the benefit of CME Group and its shareholders through the incorporation of a significant portion of annual compensation for our senior management group that varies based on company and individual performance.
- **Reward growth and profitability without undue risk.** Motivate and reward our employees to achieve results in support of our strategic initiatives and to encourage profitability and growth while discouraging excessive risk taking.
- **Hire and retain top caliber executives.** Our compensation and benefits program is competitively designed to attract and retain the best talent.
- **Align with shareholder value.** The interests of our senior management group are linked to those of our shareholders through the risks and rewards of the ownership of our stock. The overall design of the program, while competitive, should also be at a reasonable cost to our shareholders.

Our program is designed to be consistent with best practices

The compensation committee designs our compensation program to motivate our senior management group to lead our entire company toward achieving short- and long-term financial and strategic goals, in addition to increasing shareholder value, all without encouraging excessive risk taking. The committee continually evaluates what it considers to be best practices in executive compensation, and modifies our program to support our strategies and provide an appropriate balance of risk and reward. The following highlights our current compensation practices that we believe drive performance and focus our senior management group on the creation of long-term value:

- We tie pay to performance. In 2018, at least 50% of the target total compensation opportunity for our named executive officers was tied to specific cash earnings or relative total shareholder return performance goals.
- We set objective targets tied to company performance for our cash bonus that must be met at the threshold level in order to fund the bonus pool.
- We mitigate undue risk, including utilizing caps on potential payouts and clawback provisions.
- We have reasonable post-employment and change of control provisions.
- We use employment contracts on a limited basis. Contracts are generally structured to include a three- to five-year term, do not provide for excessive severance payments or include “golden parachute” tax gross ups.
- We have adopted stock ownership guidelines and restrictions on hedging and pledging transactions to ensure our executives’ interests are linked to those of our shareholders.
- We provide only modest perquisites.
- Our compensation committee reviews the reasonableness of our compensation by reviewing “tally” sheets and wealth accumulation reports.

USE OF COMPETITIVE DATA AND COMPARISON PRACTICES***Benchmarking practices***

We are a complex organization that seeks to attract talent from a broad group of companies primarily located in the financial services industry and within the technology sector. Because no individual company or single group of companies is exactly comparable to CME Group, when reviewing competitive data, we consider a broad set of data from a number of sources. We believe that reviewing a combination of published survey compensation data in addition to publicly available compensation data (e.g. proxy statements) provides a valid reference point for the range of pay among companies with whom we compete for executive talent.

We broadly target compensation opportunities at the median (50th percentile) of the market, in total and for each component of pay for target performance levels. However, we believe that benchmarking does not provide a complete basis for establishing compensation. Therefore, we do not use the market statistics rigidly, nor do we apply any specific formula to the data. We also review the range of values around the median, including the 25th and 75th percentiles.

We use the competitive compensation data for several purposes as it relates to the named executive officers and other employees. We use it to assess the competitiveness of total compensation for individual members of senior management and other employees on an annual basis, and we use it to develop and evaluate total compensation programs and guidelines for senior management and other employees on a more ad hoc basis. When making decisions about senior management pay we analyze compensation relative to the market median levels, and may make adjustments for market conditions and special considerations as appropriate in the context of our pay for performance philosophy. The compensation committee, within its discretion, may make alterations based on its evaluation of the benchmarking data, as it deems appropriate, to ensure that our senior management compensation is performance-based and competitive in nature.

CME Group compensation peer group

The following peer group was used for benchmarking our program for senior management and members of our board in 2018.

CBOE Holdings Inc.	Equifax Inc.
E*Trade Financial Corporation	Fiserv Inc.
Franklin Resources Inc.	Intercontinental Exchange Inc.
Invesco Ltd.	MasterCard Inc.
Moody's Corp.	Nasdaq OMX Group Inc.
Northern Trust Corp.	Paychex Inc.
Schwab (Charles) Corp.	S&P Global, Inc.
T. Rowe Price Group Inc.	TD AMERITRADE Holding Corp.
Western Union Co.	

In selecting the peer group for executive compensation purposes, we targeted the following industries: exchanges, financial services, technology, transaction services and other technology-driven financial companies. We selected companies within these sectors of similar size as measured by revenue and market capitalization. The companies within the peer group generally range between 0.5 and 2.5 times CME Group in terms of revenues or market capitalization. At the time of the committee's annual review of key financial and performance measures of our peer group companies in 2018, CME Group was positioned at the 26th percentile of the peer group on revenue and at the 91st percentile on market capitalization.

Comparison of Chief Executive Officer pay to other named executive officers

The differences between the allocation of compensation of the individual serving in the role of Chief Executive Officer and the other named executive officers are primarily the result of the differences in the role and responsibilities of the individual within the organization, the level of competitive demand for the individual's talent in the industry and the results of our benchmarking studies for similarly situated positions in the marketplace. We have not adopted a policy whereby the compensation of the individual serving in the role of Chief Executive Officer or any other named executive officer must be a certain multiple higher or lower than any of the other named executive officers. As previously discussed, we broadly target total compensation levels at the median (50th percentile) of our peer group.

Role of individual performance in the program

While consideration of compensation data to ensure that our compensation is competitive is a critical component of compensation decisions, individual performance is factored into setting compensation in the following ways:

- Base salary adjustments are based on an assessment of the individual's performance in the preceding year, changes in his or her responsibilities as well as a comparison with market data for comparable positions in our peer group and within the industry.
- Our incentive targets for annual bonus and equity opportunities are based on the individual's role and responsibilities in the organization in achieving our annual goals as well as the competitive market data for similarly situated positions in the marketplace.
- Individual performance and the achievement of specific goals is taken into consideration by the compensation committee in determining whether to use its discretion in approving annual bonuses and equity awards at, above or below the target level.

PRINCIPAL ELEMENTS OF OUR COMPENSATION PROGRAM

The principal components of our executive compensation program and the purpose of each component are presented in the following table.

Compensation Component	Key Characteristics	Purpose	Where Reported in More Detail
Base Pay	Fixed compensation component. Reviewed annually, and adjusted, if and when appropriate.	Intended to compensate the executive competitively with the market based upon their job duties and level of responsibility.	Summary Compensation Table on page 54 under “Salary” and described on page 45 .
Performance-Based Bonus	Variable compensation component. Opportunity based upon our performance measured by cash earnings. Individual awards based on bonus opportunities and individual performance.	Intended to motivate and reward the executive’s contribution to achieving our short-term/annual goals.	Summary Compensation Table under “Non-Equity Incentive Plan Compensation,” Grants of Plan-Based Awards on page 55 under “Estimated Future Payouts Under Non-Equity Incentive Plan Awards” and described on page 46 .
Long-Term Incentives	Variable compensation component. Amounts actually realized will depend upon company financial/stock performance. Individual awards based on equity opportunities and individual performance.	Intended to motivate and reward the executive’s contribution to achieving our long-term objectives and increasing shareholder value and to serve as a retention mechanism.	Summary Compensation Table under “Stock Awards”, Grants of Plan-Based Awards under the columns referencing equity awards, Option Exercises and Stock Vested on page 57 and described on page 47 .
Health and Welfare Plans and Retirement Plans	Fixed component of pay.	Intended to provide benefits that promote employee health and support employees in attaining financial security.	Summary Compensation Table under “Change in Pension Value and Non-Qualified Deferred Compensation Earnings” and “All Other Compensation,” Pension Benefits on page 58 and Non-Qualified Deferred Compensation on page 58 .
Post-Employment Compensation	Fixed compensation component.	Intended to provide a temporary income source following termination (other than for cause) including in the case of a change-in-control to ensure continuity of management during that event.	Potential Payments to Named Executive Officers on page 62 and described on page 50 .

We do not maintain formal targets for the allocation of total compensation through each of the foregoing elements. We believe that members of our senior management who have more direct responsibility for the performance of CME Group should have a greater percentage of their compensation tied to the performance of CME Group. In accordance with this philosophy:

- Base salary should represent a lower percentage of overall compensation as employees gain more responsibility with more direct influence over our performance.
- Employees in positions that most directly influence performance should have a larger percentage of their compensation tied to CME Group’s performance through equity awards with a portion of the equity awards tied to corporate performance goals.
- Actual awards of incentive compensation should be closely aligned with the performance of CME Group.

The following are the approximate average percentages the elements represent out of the total compensation for our named executive officers for 2018 as set forth in the **Summary Compensation Table**:

Base Salary	Annual Cash Bonus ⁽¹⁾	Annual Equity ⁽²⁾	Other Compensation ⁽³⁾
13%	30%	54%	3%

(1) Annual cash bonus is composed of amounts listed in the **Summary Compensation Table** under “Non-Equity Incentive Plan Compensation.”

(2) Annual equity value shown is composed of amounts listed in the **Summary Compensation Table** under “Stock Awards.”

(3) Other compensation is composed of amounts listed in the **Summary Compensation Table** under “Change in Pension Value and Non-Qualified Deferred Compensation Earnings” and “All Other Compensation” columns.

Description of each element of compensation

Base salary

We generally target base salary at the 50th percentile of the competitive market relative to each position’s duties and level of responsibility. Each year the compensation committee reviews the base salaries of the senior management group taking into consideration their total compensation. In general, the evaluation of base salaries involves a review of a variety of factors:

- The nature and responsibility of the position.
- The impact, contribution, expertise and experience of the individual.
- Competitive market information regarding salaries to the extent available and relevant.
- The importance of retaining the individual along with the competitiveness of the market for the individual’s talent and services.
- Recommendations of the Chairman and Chief Executive Officer (except in the case of his own compensation).

Mr. Pietrowicz received a base salary increase from \$500,000 to \$550,000 effective January 1, 2018, to better align his compensation with market levels. Mr. Durkin’s salary was increased from \$800,000 to \$900,000 effective January 1, 2018, in connection with his increased responsibilities as President. Ms. Holzrichter received a salary increase from \$450,000 to \$475,000 effective January 1, 2018, and from \$475,000 to \$500,000 effective January 1, 2019, to better align her compensation with market levels.

Bonus

Our annual bonus program is designed to provide incentives to the named executive officers and other members of senior management to drive annual performance based on our strategic goals as approved by the board. In support of our pay-for-performance philosophy, the bonus plan is only funded when we achieve cash earnings at or above the threshold level. We use cash earnings as our funding metric because we believe it provides a transparent view of CME Group’s performance during the year. Cash earnings is also the metric used in our dividend policy, which provides that our dividend target for our regular quarterly dividends is set at approximately 50% to 60% of the prior year’s cash earnings.

On an annual basis, the cash earnings target is approved by our compensation committee. The cash earnings target is established to motivate our named executive officers toward operational excellence and superior financial performance and is designed to be challenging to meet, while remaining achievable with concentrated effort and focus. Annual bonuses will only be paid to our senior management group to the extent we achieve cash earnings at or above the threshold level, which was set at 25% below the target performance goal for 2018. The annual bonus pool is subject to a cap when we achieve cash earnings at the maximum level, which is set at 20% above the established target goal. It is anticipated that the achievement of the maximum level of cash earnings would be exceptional, requiring extraordinary effort on the part of our senior management.

Our cash earnings are calculated using the following formula for the purpose of the annual bonus.

Cash Earnings Calculation for Annual Bonus

Net Income
+ Depreciation
+ Stock-Based Compensation*
+ Amortization on Purchased Intangibles*
- Capital Expenditures
= Cash Earnings
+/- Net Interest Expense*
= Bonus Incentive Plans Cash Earnings
Target as approved by compensation committee
***Adjusted on an after tax basis**

The following shows our cash earnings goals and actual achievement for 2018 for purposes of our annual bonus program:

Threshold	Target	Maximum	Actual
\$1.606 billion	\$2.142 billion	\$2.570 billion	\$2.463 billion

The compensation committee has discretion to make equitable adjustments to the cash earnings performance calculation to reflect effects of external events outside the control of our senior management group, such as unforeseen litigation or changes in accounting or taxation standards. Such adjustments may also reflect the effects of unusual or significant strategic events that are within the control of our senior management that were not contemplated at the time the goal was established and that were undertaken with an expectation of improving our long-term financial performance, such as acquisitions or strategic relationships. In 2018, the committee approved adjustments for certain non-performance items, such as deferred tax and foreign exchange fluctuation impacts, as well as related to our acquisition of NEX, consistent with prior practice.

2018 bonus awards

Annual bonus opportunities are based upon CME Group's achievement of cash earnings and are awarded in consideration of the individual's performance during the year. The committee approved the bonuses for the named executive officers for 2018 based on our achievement of cash earnings and in recognition of the previously discussed accomplishments set forth on [page 1](#).

The table below shows the payout opportunities and actual bonus payments for 2018 as well as a comparison to actual 2017 cash bonuses for the named executive officers.

2018 Named Executive Officer Bonus Awards								
Name	Bonus Plan Target as % of Salary	Bonus Plan Target	Bonus Plan Maximum as % of Salary	Bonus Plan Maximum	2018 Annual Bonus as % of Salary	2017 Annual Bonus	2018 Annual Bonus ⁽¹⁾	Percentage Change ⁽²⁾
Terrence A. Duffy	175%	\$2,625,000	350%	\$5,250,000	306%	\$3,467,511	\$4,591,913	32%
John W. Pietrowicz	100%	550,000	200%	1,100,000	174%	659,208	960,433	46%
Bryan T. Durkin	125%	1,125,000	250%	2,250,000	218%	1,317,781	1,963,757	49%
Julie Holzrichter	100%	475,000	200%	950,000	174%	593,795	830,077	40%
Sean P. Tully	100%	450,000	200%	900,000	174%	594,431	787,185	32%

(1) Under the terms of our bonus program, bonus awards are calculated utilizing base salary paid during the applicable plan year.

(2) Messrs. Pietrowicz, Durkin and Ms. Holzrichter received base salary increases effective January 1, 2018 as discussed on [page 45](#). No other named executive officers received increases to base salary in 2018.

Our 2018 actual annual cash earnings results were 115.0% of the target level performance. As such, bonuses for the named executive officers were approved by the committee at approximately 175% of their individual bonus target opportunities. The bonuses for all named executive officers were delivered at the level determined by cash earnings performance, without any additional discretion applied by the committee.

Equity

Long-term grants of equity are important to reflect an alignment with shareholder value creation and a competitive mix of long- and short-term incentives. Our equity program is designed to reward and encourage the success and contributions of our employees, including our named executive officers, which leads to value creation for CME Group and our shareholders.

Since 2012, the annual equity awards for members of our senior management group have been delivered in the form of performance shares and time-vested restricted stock. This mix of equity vehicles enables us to focus employees on stock performance, provides for employee retention and directly aligns employee interests with shareholder value creation.

Equity grant practices

The following is a summary of our equity grant practices and the role of the committee in approving awards:

- Our annual equity awards are granted on September 15th or in the event the 15th is not a business day, the closest business day thereto.
- At a meeting prior to the annual grant date, the committee approves the awards for the senior management group based upon the target equity opportunities and recommendations from the Chairman and Chief Executive Officer using a pre-set calculation of a percentage of base salary and a recent closing price. Actual awards are granted based on the previously approved calculation and the closing price on the actual grant date. The committee receives a report of the actual awards at a subsequent meeting.
- The committee has delegated authority to the individual in the role of Chief Executive Officer to approve annual, sign-on, retention and initiative-based equity awards to employees below our senior management group other than our chief accounting officer, within parameters set by the committee. The committee is provided with an annual report on awards granted under such delegated authority.
- Our Omnibus Stock Plan and our Director Stock Plan prohibit the granting of options or stock appreciation rights below the market value on the date of grant, the repricing of existing awards, and payment of dividends on performance-based shares prior to the achievement of performance goals. Dividends relating to outstanding shares of unvested time-based restricted stock are accrued and paid out at vesting.

The equity targets for our named executive officers were established based upon a review of the nature of the responsibility of the position of the executive within CME Group, the competitive market data derived through our benchmarking practices and the ability of the employee to impact the overall growth and performance of CME Group based upon his or her role within the company. As discussed in more detail on **page 42**, we generally target total compensation in the 50th percentile of our peer group. Through competitive compensation analysis, we compare equity compensation on a standalone basis as well as part of an executive's overall total compensation.

The committee has the discretion to adjust the annual equity awards to distinguish for individual performance. The annual equity awards for the named executive officers were made at the target levels for 2018 and were comprised of 50% performance shares and 50% time-vested restricted stock.

The table below shows the annual equity award opportunities for our named executive officers and actual awards made in 2018.

2018 Named Executive Officer Equity Awards				
Name	Annual Equity Award Target as % of Base Salary	Annual Equity Award Target	Actual Annual Equity Award as % of Target	Actual Annual Equity Award ⁽¹⁾
Terrence A. Duffy	350%	\$5,250,000	100%	\$5,250,000
John W. Pietrowicz	300%	1,650,000	100%	1,650,000
Bryan T. Durkin	300%	2,700,000	100%	2,700,000
Julie Holzrichter	300%	1,425,000	100%	1,425,000
Sean P. Tully	300%	1,350,000	100%	1,350,000

(1) The valuation methods used for award determination reflected above differ from those used in the **Summary Compensation Table**.

Performance shares tied to 2019-2021 performance

The September 2018 performance share awards were based solely on total shareholder return relative to the S&P 500, measured over 2019 through 2021. Historically, performance share awards were tied to a second financial metric, most recently net income margin growth relative to the diversified financial services index of the S&P 500. However, with the mid-year acquisition of NEX, setting the net income baseline for the combined company would require a significant use of judgment. For 2018, the committee approved the use of a single metric for performance share awards with a plan to revisit performance metrics prior to the 2019 grants to ensure ongoing performance metrics are aligned with longer term measures of success for the combined company. Following the three-year performance period, the award will be settled in unrestricted shares of stock, based upon achievement of the following performance metric:

Relative TSR Performance % of Target Award Earned			
Below 25th Percentile	25th Percentile	50th Percentile	75th Percentile
0	50%	100%	200%

The details of the performance share awards granted in September 2018 tied to 2019-2021 total shareholder return relative to the S&P 500 are as follows:

Annual Performance Shares Awarded in 2018						
Name	Award Date	Performance Metric	Performance Share Payout Opportunity (in Shares)			
			Threshold	Target	Maximum	
Terrence A. Duffy	9/14/2018	2019-2021 TSR	7,580	15,160	30,320	
John W. Pietrowicz	9/14/2018	2019-2021 TSR	2,383	4,765	9,530	
Bryan T. Durkin	9/14/2018	2019-2021 TSR	3,899	7,797	15,594	
Julie Holzrichter	9/14/2018	2019-2021 TSR	2,058	4,115	8,230	
Sean P. Tully	9/14/2018	2019-2021 TSR	1,949	3,898	7,796	

Performance shares tied to 2016-2018 performance

Certain members of our senior management group received performance share awards in September 2015 for the performance period 2016 through 2018, with 50% based on growth in net income margin relative to the diversified financial services index of the S&P 500 and 50% based on total shareholder return relative to the S&P 500. The company achieved 96th percentile growth in net income margin relative to the diversified financial services index of the S&P 500 for the performance period, exceeding the target goal of 50th percentile and the maximum goal of 75th percentile. The company achieved 97th percentile total shareholder return relative to the S&P 500 for the performance period, exceeding the target goal of 50th percentile and the maximum goal of 75th percentile. Performance on both of these metrics resulted in an above-target payout of 200% of the total target performance shares being earned.

The following table shows total payout opportunities of the previously granted annual performance shares tied to 2016 through 2018 performance based on the range of performance against the established metrics, and actual shares earned when performance was certified by the committee in early 2019.

Annual Performance Shares Tied to 2016-2018 Performance						
Name	Award Date	Performance Metric ⁽¹⁾	Performance Share Payout Opportunity (in Shares)			Actual Shares Earned
			Threshold	Target	Maximum	
Terrence A. Duffy	9/15/2015	2016-2018 Net Income Margin Growth	3,281	6,562	13,124	13,124
	9/15/2015	2016-2018 TSR	3,281	6,562	13,124	13,124
John W. Pietrowicz	9/15/2015	2016-2018 Net Income Margin Growth	1,181	2,362	4,724	4,724
	9/15/2015	2016-2018 TSR	1,181	2,362	4,724	4,724
Bryan T. Durkin	9/15/2015	2016-2018 Net Income Margin Growth	1,838	3,675	7,350	7,350
	9/15/2015	2016-2018 TSR	1,838	3,675	7,350	7,350
Julie Holzrichter	9/15/2015	2016-2018 Net Income Margin Growth	1,116	2,231	4,462	4,462
	9/15/2015	2016-2018 TSR	1,116	2,231	4,462	4,462
Sean P. Tully	9/15/2015	2016-2018 Net Income Margin Growth	919	1,837	3,674	3,674
	9/15/2015	2016-2018 TSR	919	1,837	3,674	3,674

(1) The committee certified performance results associated with the annual awards tied to 2016-2018 performance on March 11, 2019. Based on the committee's certification, the pre-established goals were achieved above the target levels established for each metric, resulting in 200% of the target shares to be paid. These shares became vested on March 15, 2019.

Initiative-based equity awards

In addition to annual equity awards, certain members of senior management may be eligible to receive initiative-based equity awards based upon their contributions to select key corporate initiatives. Participation in such awards is at the recommendation of the individual serving in the role of Chief Executive Officer, subject to approval by the compensation committee. We did not grant any such initiative-based awards to our named executive officers in 2018.

Performance-based grant of restricted stock

In lieu of participation in our initiative-based equity program, Mr. Duffy is eligible to receive an annual grant of time-vested restricted stock with a value of up to 100% of his base salary based upon the achievement of outstanding performance as measured based on cash earnings and total shareholder return over the prior year:

Outstanding Cash Earnings Performance Award			Outstanding TSR Performance Award		
	For each 0.1% Above 120% of Goal	At or Above 130% of Goal		For each 0.1% Above 75th Percentile	At or Above 85th Percentile
Value of Performance Award as % of base salary	0.5%	50%	Value of Performance Award as % of base salary	0.5%	50%

For 2018, our actual cash earnings performance was 115.0% of the target goal and our total shareholder return performance was at the 93.4 percentile of the S&P 500. As a result of the outstanding performance on relative total shareholder return in 2018, the committee approved an award of time-vested restricted shares for Mr. Duffy, which was granted on March 15, 2019 with a value of 50% of his base salary, and will vest over a four-year period, with 25% vesting one year after the grant date and 25% vesting on each anniversary date thereafter.

The following table shows the total payout opportunity of these performance-granted time-vested restricted stock awards based on the range of performance against the established metrics, and the actual number of shares granted after performance results were certified by the committee in early 2019.

2019 Performance-Based Grants of Restricted Stock						
Name	Award Date	Performance Metric	Performance Share Payout Opportunity (in Shares)			Actual Shares Earned
			Threshold	Target	Maximum	
Terrence A. Duffy ⁽¹⁾	N/A	2018 Cash Earnings	44	N/A	4,408	—
	3/15/2019	2018 TSR	44	N/A	4,408	4,408

(1) The compensation committee certified performance results associated with the 2018 cash earnings goal and the 2018 TSR performance relative to the S&P 500 goal on February 6, 2019 and approved the award to be granted on March 15, 2019. Based on the committee's certification, the pre-established goal associated with the TSR performance was achieved, and the maximum TSR payout opportunity was earned.

Performance-granted restricted shares were awarded to Mr. Duffy on March 15, 2018 associated with the 2017 achievement of total shareholder return performance at the 75.2 percentile of the S&P 500. The committee certified the performance and approved the award of time-vested restricted shares on February 7, 2018. This award of 92 shares has a four-year vesting schedule, with 25% vesting one year after the grant date and 25% vesting on each anniversary thereafter.

Health and Welfare Plans and Retirement Plans

All eligible employees, including the named executive officers, participate in our benefit programs. We provide health and wellness benefits, including medical and dental coverage, disability insurance benefits based on two-thirds of base salary and life insurance benefits based on three times base salary. In addition, employees are eligible to participate in our qualified retirement plans, which consist of our 401(k) savings plan and our cash balance pension plan.

In addition to the qualified retirement plans, employees whose pay exceeds the compensation limits for qualified benefit plans set by the Internal Revenue Service participate in a non-qualified deferred compensation plan which provides for “make-whole” contributions. For more information on our deferred compensation plans, see **Non-Qualified Deferred Compensation Plans** beginning on **page 58**.

Qualified and non-qualified retirement benefits provided to the named executive officers are set forth in the following tables: **Pension Benefits** and **Non-Qualified Deferred Compensation Plans** on **pages 58** and **59**, respectively.

PERQUISITES AND OTHER PERSONAL BENEFITS

We provide limited perquisites and other personal benefits to our senior management that we believe are moderate and consistent with our overall compensation program. We provide monthly parking benefits to a subset of our senior management group, including Mr. Duffy and Ms. Holzrichter. Additionally, all of our senior level employees are entitled to an annual physical examination. From time to time, we may pay the cost, if any, for an executive's or board member's guest to attend a CME Group business-related event where such attendance is expected or customary. In addition, occasionally, family members of our Chairman and Chief Executive Officer may accompany him on business-related travel, provided there is no incremental cost. The aggregate value of all perquisites received by each named executive officer in 2018 did not exceed \$10,000. To the extent that perquisites result in imputed income to the individual, we do not provide gross-up payments to cover the personal income tax due on such imputed income.

POST-EMPLOYMENT COMPENSATION

Our employment contracts contain reasonable provisions and ensure continuity of leadership

Our philosophy is to enter into employment contracts and retention agreements on a very selective basis in light of the particular facts and circumstances involved in the individual employment relationship, such as whether the employment arrangement would be necessary to recruit and/or retain necessary talent with compensation terms that we believe are in accordance with our overall compensation program. Employment agreements typically are for a period of three to five years, include non-compete and non-solicitation provisions, do not provide for cash severance payments in excess of two times annual base salary, do not provide

for gross-up payments (except in connection with certain self-insured supplemental life insurance payments that would be paid to Mr. Duffy's beneficiaries under his agreement) and include a requirement that the executive execute a release agreement before becoming entitled to receive severance payments. All contractual compensation terms within the employment agreements for our senior management group are reviewed and approved by the compensation committee. We believe that our existing employment contract with Mr. Duffy contains compensation terms in line with our overall compensation program and philosophy. A description of the agreement is set forth in the section entitled **Potential Payments Upon Termination or Change-in-Control—Employment Agreements and other Compensation Arrangements with Named Executive Officers** beginning on **page 59**.

We have reasonable change-in-control and other termination provisions

Change-in-control provisions assist us with retention during rumored and actual change of control activity when management continuity is key to preserving the value of the business. We also provide other severance benefits in connection with terminations other than for misconduct. We believe these benefits allow us to facilitate changes with key employees, as needed, and to ensure minimal disruption to the business in exchange for non-competition and non-solicitation benefits for CME Group along with a general release.

A description of our severance policies and practices and the estimated amounts that would be payable to our named executive officers under certain circumstances are set forth under the section entitled **Potential Payments Upon Termination or Change-in-Control** beginning on **page 59**.

OTHER COMPENSATION POLICIES

We have established stock ownership guidelines to ensure alignment of interests with our shareholders

The committee has established the following stock ownership guidelines for the members of our senior management group:

- The Chairman and Chief Executive Officer: shares with a value equal to at least a multiple of five times base salary.
- Other named executive officers: shares with a value equal to at least a multiple of three times their respective base salary.

Each individual has five years from the date of hire or promotion to achieve their ownership guideline. As of the 2018 review, all of our named executive officers had satisfied the guidelines.

The compensation committee monitors compliance with these stock ownership guidelines on an annual basis. Generally, shares that are deemed “owned” for purposes of Section 16 of the SEC regulations are counted towards satisfaction of these guidelines. Shares are valued based upon the greater of (i) the fair market value at the time of the assessment and (ii) the actual value at the time of acquisition or, in the case of restricted stock or performance shares, at the time of vesting.

We prohibit derivative transactions and hedging of ownership risk of our securities and have adopted a policy restricting the pledging of our Class A shares

To ensure alignment of interests between our employees and board members and our shareholders and to further ensure that such individuals share in the risks and rewards of the ownership of our stock, we prohibit our employees and members of the board from engaging in any derivative or hedging transactions relative to their ownership of our stock. The board also has adopted a policy prohibiting pledging of our Class A shares. In connection with the adoption of the policy, the board elected to grandfather in the existing pledging arrangements of certain directors based on the fact that:

- The aggregate number of shares pledged was significantly less than 0.1% of our outstanding Class A common stock.
- The secured parties each had undertaken not to sell such pledged shares during any period in which the board members were restricted from trading under our compliance policies.
- The board members agreed to own shares not subject to any pledging arrangement with a value that meets their applicable stock ownership guidelines.
- The pledging arrangements were related to such individual's derivatives trading activities at CME Group.

Since the approval of the policy, only one of the grandfathered arrangements remains in existence.

Our compensation committee and board annually review the total compensation of our senior management

To ensure the committee members are informed of the potential compensation levels of our senior management group, the committee reviews on an annual basis all components of their compensation package and total compensation. This review includes annual base salary, annual cash bonus, value of annual equity awards, in-the-money value of all historic equity grants including monetized gains, the value of retirement contributions under our qualified and non-qualified plans, and potential change-in-control payments. The committee provides an annual report on the results of this review to the board during an executive session. For more information on the operation of our compensation committee see **page 35**.

We have implemented a recoupment policy

In furtherance of our philosophy to ensure the interests of our senior management are aligned with those of our shareholders, effective as of 2010, the compensation committee recommended, and the board approved, a recoupment policy. This policy provides the board with the discretion to recoup annual bonus payments to our employees at the level of managing director and above in the event of a financial restatement, the effect of which is that such incentive payments were not otherwise earned by an individual under our bonus programs based upon the restated calculation of our cash earnings or any other performance metric in effect at the time. In July 2015, the SEC proposed rules to implement the recoupment provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act. We plan to amend our recoupment policy as necessary to comply with the final rules.

The compensation committee reviewed and discussed the **Compensation Discussion and Analysis** with our management. After such discussions, the committee recommended to the board of directors that the **Compensation Discussion and Analysis** be included in this proxy statement and incorporated by reference into our 2018 Annual Report on Form 10-K.

The Compensation Committee—2018

Daniel R. Glickman, *Chairman*

Jeffrey M. Bernacchi

Timothy S. Bitsberger

Ana Dutra

Martin J. Gepsman

William R. Shepard

SUMMARY COMPENSATION TABLE

The following table provides information regarding the compensation earned during the three years ending December 31, 2018 by our named executive officers. In 2018, “salary” accounted for approximately 13% of the total compensation of the named executive officers as a whole and “non-equity incentive plan compensation” accounted for approximately 30% of such total compensation.

Name and Principal Position	Year	Salary (\$)	Stock Awards (\$) ⁽¹⁾	Non-Equity Incentive Plan Compensation (\$) ⁽²⁾	Change in Pension Value and Non-Qualified Deferred Compensation Earnings (\$) ⁽³⁾	All Other Compensation (\$) ⁽⁴⁾	Total (\$)
Terrence A. Duffy Chairman and Chief Executive Officer ⁽⁵⁾	2018	1,500,000	6,829,181	4,591,913	26,445	469,126	13,416,665
	2017	1,500,000	6,714,284	3,467,511	42,850	418,210	12,142,855
	2016	1,500,000	4,969,693	2,898,443	36,555	343,641	9,748,332
John W. Pietrowicz Chief Financial Officer	2018	550,000	2,141,551	960,433	12,330	92,722	3,757,036
	2017	500,000	1,704,004	659,208	50,652	81,157	2,995,021
	2016	450,000	1,490,732	581,179	38,343	88,608	2,648,862
Bryan T. Durkin President	2018	900,000	3,504,344	1,963,757	— ⁽⁹⁾	220,282	6,588,383
	2017	800,000	2,726,645	1,317,781	97,322	151,323	5,093,071
	2016	700,000	2,319,131	904,056	96,904	162,834	4,182,925
Julie Holzrichter Chief Operating Officer ⁽⁶⁾	2018	475,000	1,849,742	830,077	2,091	79,037	3,235,947
Sean P. Tully Global Head of Financial and OTC Products	2018	450,000	1,752,380	787,185	18,001	76,270	3,083,836
	2017	450,000	1,533,699	594,431	33,094	75,450	2,686,674
	2016	450,000	1,490,732	579,192	26,421	74,654	2,620,999

(1) The amounts reflected in the “Stock Awards” column reflect the aggregate grant date fair value computed in accordance with Financial Accounting Standards Board ASC Topic 718 without giving effect to estimated forfeitures. See note 17 of the notes to consolidated financial statements of CME Group Inc. and subsidiaries for more details on the assumptions made in the valuation of stock awards. The fair value of the restricted stock grants was calculated using the closing price on March 15, 2018 of \$165.39 and September 14, 2018 of \$173.15. The fair value of performance shares based on TSR relative to the S&P 500 was calculated using a value of \$276.32 for December 31, 2018, which was derived from a Monte-Carlo simulation. This column includes the following aggregate amounts with respect to performance share awards granted to our named executive officers in 2018 based on achievement of target performance levels: Mr. Duffy: \$4,189,011; Mr. Pietrowicz: \$1,316,665; Mr. Durkin: \$2,154,467; Ms. Holzrichter: \$1,137,057; and Mr. Tully: \$1,077,095.

(2) The amounts included in the “Non-Equity Incentive Plan Compensation” column reflect awards to the named executive officers under our bonus plans, which are discussed on [page 45](#) under the “Bonus” heading. No other bonuses were paid.

(3) The amounts reflected in the “Change in Pension Value and Non-Qualified Deferred Compensation Earnings” column reflect only the change in the pension value during the particular year. Under our non-qualified deferred compensation plans, participants may invest in one or more market investments that are available from time to time. This is the only return that they receive and, therefore, no above-market earnings are reflected in this table. For more information on our deferred compensation plans, see the section entitled **Non-Qualified Deferred Compensation Plans** on [page 58](#).

(4) Amounts included in the “All Other Compensation” column for 2018 are as follows:

	401(k) Company Contribution	Supplemental Plan ⁽⁷⁾	Other ⁽⁸⁾	Total
Terrence A. Duffy	\$8,250	\$459,076	\$ 1,800	\$469,126
John W. Pietrowicz	8,250	82,987	1,485	92,722
Bryan T. Durkin	4,731	193,600	21,951	220,282
Julie Holzrichter	8,250	69,504	1,283	79,037
Sean P. Tully	8,250	66,805	1,215	76,270

(5) As discussed under the section entitled **Potential Payments upon Termination or Change-in-Control—Employment Agreements and other Compensation Arrangements with Named Executive Officers** on [page 59](#), we have agreed to self-insure supplemental life and long-term disability coverage for Mr. Duffy and to gross up his beneficiaries for any additional taxes incurred as a result of the supplemental life coverage. Because no actual payments were made or liabilities incurred as a result of this coverage, no amounts have been included in Mr. Duffy’s compensation in respect of such coverage.

(6) Ms. Holzrichter was not a named executive officer prior to 2018.

- (7) The items included in the “Supplemental Plan” column are 401(k) make-whole and pension make-whole contributions. Make-whole contributions are company contributions for individuals whose compensation has exceeded the statutory compensation limit identified in Section 401(a)(17) of the Code and thus must be excluded from consideration in qualified retirement plans.
- (8) The items included in the “Other” column include life insurance premiums paid by us for the benefit of the named executive officer as well as tax equalization payments made for business-related travel, as applicable. Mr. Durkin received a tax equalization payment of \$20,151 related to business travel that occurred in 2017. The company provides such tax equalization payments for business-related travel to all impacted employees regardless of level.
- (9) Actual change in pension value and nonqualified deferred compensation earnings is (\$16,286).

GRANTS OF PLAN-BASED AWARDS

The following table shows the possible payouts to our named executive officers in 2018 for awards made under the Amended and Restated CME Group Incentive Plan for Named Executive Officers (Messrs. Duffy, Durkin, Tully and Ms. Holzrichter) and our bonus plan for other employees (Mr. Pietrowicz) and the equity awards granted under our Omnibus Stock Plan in 2018. For additional information on our equity and bonus programs, see the section of this proxy statement entitled **Compensation Discussion and Analysis**.

Name	Type of Award ⁽¹⁾	Grant Date	Approval Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards ⁽²⁾			Estimated Future Payouts Equity Incentive Plan Awards ⁽³⁾			All Other Stock Awards: Number of Shares of Stock	Grant Date Fair Value of Stock Awards
				Threshold	Target	Maximum	Threshold (#)	Target (#)	Maximum (#)		
Terrence A. Duffy	Bonus	N/A	N/A	\$984,375	\$2,625,000	\$5,250,000					
	RS	3/15/18	2/7/18							92	\$ 15,216
	PS-TSR	12/31/18	9/5/18				7,580	15,160	30,320		4,189,011
	RS	9/14/18	9/5/18							15,160	2,624,954
John W. Pietrowicz	Bonus	N/A	N/A	206,250	550,000	1,100,000					
	PS-TSR	12/31/18	9/5/18				2,383	4,765	9,530		1,316,665
	RS	9/14/18	9/5/18							4,764	824,887
Bryan T. Durkin	Bonus	N/A	N/A	421,875	1,125,000	2,250,000					
	PS-TSR	12/31/18	9/5/18				3,899	7,797	15,594		2,154,467
	RS	9/14/18	9/5/18							7,796	1,349,877
Julie Holzrichter	Bonus	N/A	N/A	178,125	475,000	950,000					
	PS-TSR	12/31/18	9/5/18				2,058	4,115	8,230		1,137,057
	RS	9/14/18	9/5/18							4,116	712,685
Sean P. Tully	Bonus	N/A	N/A	168,750	450,000	900,000					
	PS-TSR	12/31/18	9/5/18				1,949	3,898	7,796		1,077,095
	RS	9/14/18	9/5/18							3,900	675,285

- (1) “Bonus” refers to 2018 annual bonus opportunity, “PS-TSR” refers to performance shares tied to total shareholder return relative to the S&P 500 and “RS” refers to time-vested restricted stock awards. Performance shares are granted at the target level and adjusted based on actual performance.
- (2) The amounts shown in the “Threshold,” “Target” and “Maximum” columns reflect the bonus opportunity for our named executive officers based upon their annual bonus target as discussed on **page 46** under the “2018 bonus awards” heading and are dependent upon the level of cash earnings achieved.
- (3) Under our equity program, eligible employees, including members of our senior management group, typically receive annual equity awards in September of each year. Employees promoted to the senior management group after the September awards are made are eligible for a prorated promotional award in March. In addition, Mr. Duffy is eligible for a performance-based restricted stock award based on exceptional one-year total shareholder return and cash earnings achievement as described on **page 49**. On September 5, 2018, our compensation committee met and approved our annual equity awards for our executive officers based on our pre-established formulas under our equity program as described on **page 47**. These awards of performance shares and time-vested restricted stock were made on September 14, 2018. The amounts in the “Threshold,” “Target” and “Maximum” columns reflect the performance share opportunity awarded in 2018 tied to total shareholder return relative to the S&P 500 during 2019-2021. On February 5, 2018, our compensation committee met and approved the performance-based restricted stock award for Mr. Duffy that was granted on March 15, 2018.

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR END

The following table summarizes the number of securities underlying outstanding plan awards as of December 31, 2018 for each named executive officer.

Name	Grant Date	Option Awards			Stock Awards			
		Number of Securities Underlying Unexercised Options Exercisable ⁽¹⁾	Option Exercise Price	Option Expiration Date	Number of Shares of Stock That Have Not Vested ⁽¹⁾	Market Value of Shares of Stock That Have Not Vested ⁽²⁾	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Rights That Have Not Vested ⁽¹⁾	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested ⁽²⁾
Terrence A. Duffy	12/31/2018	—	\$ —	—	—	\$ —	7,580 ⁽³⁾	\$1,425,950
	9/14/2018	—	—	—	15,160	2,851,899	—	—
	3/15/2018	—	—	—	92	17,307	—	—
	12/31/2017	—	—	—	—	—	9,998 ⁽⁴⁾	1,880,824
	9/15/2017	—	—	—	14,994	2,820,672	—	—
	3/15/2017	—	—	—	4,509	848,233	—	—
	12/31/2016	—	—	—	—	—	10,296 ⁽⁵⁾	1,936,884
	9/15/2016	—	—	—	10,294	1,936,507	—	—
	12/31/2015	—	—	—	—	—	26,248 ⁽⁶⁾	4,937,774
John W. Pietrowicz	12/31/2018	—	\$ —	—	—	\$ —	2,383 ⁽³⁾	\$ 448,290
	9/14/2018	—	—	—	4,764	896,204	—	—
	12/31/2017	—	—	—	—	—	2,856 ⁽⁴⁾	537,271
	9/15/2017	—	—	—	4,284	805,906	—	—
	12/31/2016	—	—	—	—	—	3,088 ⁽⁵⁾	580,915
	9/15/2016	—	—	—	3,088	580,915	—	—
	12/31/2015	—	—	—	—	—	9,448 ⁽⁶⁾	1,777,358
	9/15/2015	—	—	—	1,181	222,170	—	—
	3/16/2015	—	—	—	341	64,149	—	—
	9/15/2011	5,000	54.37	9/15/2021	—	—	—	—
	9/15/2010	12,060	54.30	9/15/2020	—	—	—	—
	3/15/2010	1,740	62.83	3/15/2020	—	—	—	—
	9/15/2009	4,160	56.87	9/15/2019	—	—	—	—
Bryan T. Durkin	12/31/2018	—	\$ —	—	—	\$ —	3,899 ⁽³⁾	\$ 733,480
	9/14/2018	—	—	—	7,796	1,466,584	—	—
	12/31/2017	—	—	—	—	—	4,570 ⁽⁴⁾	859,708
	9/15/2017	—	—	—	6,855	1,289,563	—	—
	12/31/2016	—	—	—	—	—	4,804 ⁽⁵⁾	903,728
	9/15/2016	—	—	—	4,804	903,728	—	—
	12/31/2015	—	—	—	—	—	14,700 ⁽⁶⁾	2,765,364
	9/15/2015	—	—	—	1,837	345,576	—	—
Julie Holzrichter	12/31/2018	—	\$ —	—	—	\$ —	2,058 ⁽³⁾	\$ 387,151
	9/14/2018	—	—	—	4,116	774,302	—	—
	12/31/2017	—	—	—	—	—	2,572 ⁽⁴⁾	483,845
	9/15/2017	—	—	—	3,855	725,203	—	—
	12/31/2016	—	—	—	—	—	2,918 ⁽⁵⁾	548,934
	9/15/2016	—	—	—	2,916	548,558	—	—
	12/31/2015	—	—	—	—	—	8,924 ⁽⁶⁾	1,678,783
	9/15/2015	—	—	—	1,116	209,942	—	—

Name	Grant Date	Option Awards			Stock Awards			
		Number of Securities Underlying Unexercised Options ⁽¹⁾	Option Exercise Price	Option Expiration Date	Number of Shares of Stock That Have Not Vested ⁽¹⁾	Market Value of Shares of Stock That Have Not Vested ⁽²⁾	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Rights That Have Not Vested ⁽¹⁾	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested ⁽²⁾
Sean P. Tully	12/31/2018	—	\$ —	—	—	\$ —	1,949 ⁽³⁾	\$ 366,646
	9/14/2018	—	—	—	3,900	733,668	—	—
	12/31/2017	—	—	—	—	—	2,572 ⁽⁴⁾	483,845
	9/15/2017	—	—	—	3,855	725,203	—	—
	12/31/2016	—	—	—	—	—	3,088 ⁽⁵⁾	580,915
	9/15/2016	—	—	—	3,088	580,915	—	—
	12/31/2015	—	—	—	—	—	7,348 ⁽⁶⁾	1,382,306
	9/15/2015	—	—	—	919	172,882	—	—
	3/16/2015	—	—	—	328	61,703	—	—
	9/15/2011	4,120	54.37	9/15/2021	—	—	—	—

(1) Subject to acceleration or termination in certain circumstances, stock option and restricted stock awards generally vest over a four-year period, with 25% vesting one year after the grant date and an additional 25% vesting on each anniversary date thereafter. Performance awards and special awards may have differing vesting schedules specific to the award purpose.

(2) Market value was determined using the closing price on December 31, 2018 of \$188.12.

(3) Reflects performance shares awarded in September 2018 tied to TSR relative to the S&P 500 during 2019-2021, which will vest in full, if earned, following the completion of the three-year performance period; payout value shown assumes achievement of the threshold performance level.

(4) Reflects performance shares awarded in September 2017 tied to TSR relative to the S&P 500 during 2018-2020, and growth in net income margin relative to the diversified financial services index within the S&P 500 during 2018-2020, which will vest in full, if earned, following the completion of the three-year performance period; payout value shown assumes achievement of the threshold performance level.

(5) Reflects performance shares awarded in September 2016 tied to TSR relative to the S&P 500 during 2017-2019, and growth in net income margin relative to the diversified financial services index within the S&P 500 during 2017-2019, which will vest in full, if earned, following the completion of the three-year performance period; payout value shown assumes achievement of the threshold performance level.

(6) Reflects performance shares awarded in September 2015 tied to TSR relative to the S&P 500 during 2016-2018, and growth in net income margin relative to the diversified financial services index within the S&P 500 during 2016-2018; payout value shown reflects actual performance results whereby 200% of target TSR shares and 200% of target growth in net income margin shares were earned. These performance shares vested in March 2019.

OPTION EXERCISES AND STOCK VESTED

The following table summarizes stock option exercises by our named executive officers and the vesting of their stock awards in 2018.

Name	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise	Value Realized on Exercise	Number of Shares Acquired on Vesting	Value Realized on Vesting
Terrence A. Duffy	—	\$ —	40,358	\$6,753,535
John W. Pietrowicz	—	—	13,991	2,352,625
Bryan T. Durkin	—	—	24,794	4,168,316
Julie Holzrichter	—	—	15,279	2,567,571
Sean P. Tully	—	—	12,189	2,050,250

PENSION BENEFITS

We maintain a non-contributory defined benefit cash balance pension plan for eligible employees. To be eligible, an employee must have completed a continuous 12-month period of employment with us and have reached the age of 21. Our funding goal is to have the pension plan 100% funded on a projected benefit obligation basis, while also satisfying any minimum required contributions and maximizing tax deductible contribution requirements.

Participants are fully vested in their accounts after three years of service. Once an employee becomes a participant in the pension plan, their notional pension account is credited with an amount equal to an age-based percentage of that individual's earnings plus the greater of 4% interest or the December yield on one-year constant maturity yield for U.S. Treasury notes. During 2018, the pension plan interest rate was 4%. The pension account is portable and vested balances may be paid out in a lump sum when participants end their employment with us. Alternatively, upon retirement, a participant may elect to receive the balance in the account in the form of one of various monthly annuities.

The following is the schedule of employer contributions based on age and percentage of pensionable pay (including base salary, regular annual bonuses and merit lump sum payments) under our pension plan. Pensionable pay is limited by the Code, which imposed a limit of \$275,000 in 2018:

Age	Employer Contribution Percentage
Under 30	3%
30–34	4
35–39	5
40–44	6
45–49	7
50–54	8
55 or greater	9

The following table below sets forth the estimated payments under our pension plan for our named executive officers upon retirement based upon the present value of the benefits expected to be paid in the future.

Name	Number of Years Credited Service	Present Value of Accumulated Benefit ⁽¹⁾	Payments During Last Fiscal Year
Terrence A. Duffy	11	\$294,393	\$ —
John W. Pietrowicz	14	308,449	—
Bryan T. Durkin	36 ⁽²⁾	820,879	—
Julie Holzrichter	12	341,439	—
Sean P. Tully	6	141,945	—

(1) In calculating the present value of the accumulated benefit, the following assumptions were used: assumed retirement age of 65; discount rate of 4.4% as of December 31, 2018; and projected future investment crediting rate assumption of 4% as of December 31, 2018. The normal retirement age as defined in our pension plan is 65 years of age with 5 years of service. Under the terms of our pension plan, years of service for purposes of the plan are credited beginning on the first day of the calendar quarter on or after attaining one year of service with CME Group. Therefore, years of credited service under the plan are less than an employee's actual period of service with CME Group.

(2) Includes Mr. Durkin's prior service with the CBOT and benefits previously accrued under the legacy CBOT pension plan.

NON-QUALIFIED DEFERRED COMPENSATION PLANS

All of our senior level employees, including our named executive officers, are eligible to defer up to 50% of their annual base salary and up to 100% of their bonus into our Senior Management Supplemental Deferred Savings Plan. The contributions made by our named executive officers under this plan in 2018 are shown in the table below under "Executive Contributions." Deferrals may be invested in one or more market-based investments offered by the plan from time to time at the choice of the individual. The return on their investment choice is the only return they will receive on the contributions under the plan. We do not provide any guaranteed rate of return. There is no limitation on their ability to change investments. Distributions will be on a fixed date, at termination or six months after termination, depending upon the time of the distribution election and the requirements of applicable law.

The deferred savings plan also includes 401(k) make-whole and pension make-whole contributions. Make-whole contributions are company contributions for individuals whose compensation has exceeded the statutory compensation limit identified in the Code and thus must be excluded from consideration in qualified retirement plans. These amounts are included in the table below under “Registrant Contributions.” The aggregate balance at year end in the table below includes the balance the named executive officer may have in the Senior Management Supplemental Deferred Savings Plan.

	Executive Contributions in Last Fiscal Year ⁽¹⁾	Registrant Contributions in Last Fiscal Year ⁽²⁾	Aggregate Earnings in Last Fiscal Year ⁽³⁾	Aggregate Withdrawals/Distributions	Aggregate Balance at 12/31/18
Terrence A. Duffy	\$ —	\$459,076	\$ 22,206	\$ —	\$3,784,211
John W. Pietrowicz	98,881	82,987	(133,553)	114,347	1,667,598
Bryan T. Durkin	—	193,600	(83,312)	—	1,592,377
Julie Holzrichter	—	69,504	(35,602)	—	483,518
Sean P. Tully	—	66,805	(19,229)	—	328,954

(1) All amounts included under “Executive Contributions” are also included in the “Salary” or “Non-Equity Incentive Plan Compensation” columns of the **Summary Compensation Table** on **page 54**.

(2) The amounts included under the “Registrant Contributions” column consist of 401(k) make-whole and pension make-whole contributions and are included in the “All Other Compensation” column of the **Summary Compensation Table**.

(3) “Aggregate Earnings” are based on the investment selection of the individuals from one or more market-based investments that the plan offers from time to time and are the only return on contributions made by the named executive officer and CME Group. “Aggregate Earnings” represent amounts earned on contributions made in 2018 as well as prior contributions. Such earnings are not included in the **Summary Compensation Table** because they were not above market.

POTENTIAL PAYMENTS UPON TERMINATION OR CHANGE-IN-CONTROL

In 2018, we had an employment agreement in place with Mr. Duffy. The contractual commitments under this agreement are summarized below. For our named executive officers other than Mr. Duffy, their employment relationships are governed by our policies and practices that we have in place for other employees from time to time, including members of senior management. In addition, for the named executive officers other than Mr. Duffy, their post-employment benefits are governed by the Senior Management Severance Protection Agreements that were put in place in 2016 and described on **page 60**. Estimated termination payments to our named executive officers under our employment and severance protection agreements and general policies are shown in the table beginning on **page 62**.

Employment Agreements and other Compensation Arrangements with Named Executive Officers

Duffy Employment Agreement

As discussed in the **Compensation Discussion and Analysis** section, our philosophy is to enter into employment contracts or other agreements on a very selective basis in light of the particular facts and circumstances involved in the individual employment relationship. The following is a summary of the key terms of our employment agreement with Mr. Duffy, which was most recently amended and restated on May 8, 2018. The summary is qualified in its entirety by the complete text of the employment agreement, which was filed with the SEC on a Current Report on Form 8-K on May 9, 2018.

Agreement Term: December 31, 2022.

Minimum Base Salary: \$1,500,000 per year.

Annual Bonus and Equity Compensation: Effective January 1, 2017, the annual target opportunity under our bonus incentive plan was increased to 175% of base salary paid in the plan year. Effective January 1, 2017, for our equity incentive plan, the annual target grant date value opportunity was increased to 350% of base salary.

Termination Provisions: In the event of a termination of employment by the company without cause, as defined in the agreement, in addition to his accrued benefits, the executive is entitled to a one-time lump sum severance payment equal to two times his then current base salary, subject to the executive’s timely execution and delivery of a general release. Additionally, upon such a termination all outstanding unvested time-vesting equity awards that were granted after November 4, 2010 will automatically vest and, in the case of stock options and stock appreciation rights, will remain exercisable for a period of four years from the date of

termination (but not beyond the maximum term of the award). Also, upon such a termination, all outstanding performance-based equity awards shall become vested or be forfeited solely based on actual performance measured over the full performance term.

In the event of executive's death or disability, as defined in the agreement, all unvested time-vesting equity awards granted after November 4, 2010 will vest and, in the case of stock options and stock appreciation rights, will remain exercisable for a period of four years from the date of the event (but not beyond the maximum term of the award) and all performance-based equity awards shall become vested at the target level and become payable within 30 days following the date of death or termination for disability.

Change of Control: In the event of a change of control, as defined in the agreement, prior to termination of employment, all of the executive's unvested time-vesting equity awards shall become vested and all of the executive's performance-based equity awards shall become vested or be forfeited solely based on actual performance measured over the full performance term (unless a more favorable treatment is provided in the agreement evidencing the particular award or applies to the award pursuant to the operation of the applicable plan under which the award was granted, in which case such more favorable treatment will apply). If executive is involuntarily terminated without cause within 60 days prior to a change of control, all of his unvested time-vesting equity awards that would have been outstanding had he been employed on the date of the change of control will become vested and all performance-based equity awards shall become vested or be forfeited solely based on actual performance measured over the full performance term (unless a more favorable treatment is provided in the agreement evidencing the particular award or applies to the award pursuant to the operation of the applicable plan under which the award was granted, in which case such more favorable treatment will apply).

Non-Compete Provision: The agreement also contains a provision prohibiting the executive during the term of his employment, and for one year thereafter, from being employed in an executive or managerial capacity by, or providing, whether as an employee, partner, independent contractor, consultant or otherwise, any services of an executive or managerial nature, or any services similar to those provided by him to the company, to a competing business.

Treatment of Equity at Expiration: If employed by the company on December 31, 2020, all outstanding unvested time-vesting equity awards granted to the executive after November 11, 2015 will vest and all performance-based equity awards shall become vested or be forfeited solely based on actual performance measured over the full performance term, which vesting is subject to executive's timely execution and delivery of a general release. Further, if employed by the company on December 31, 2022, all outstanding unvested time-vesting equity awards granted to the executive will vest and all performance-based equity awards shall become vested or be forfeited solely based on actual performance measured over the full performance term, which vesting is subject to executive's timely execution and delivery of a general release.

Treatment of Annual Bonus at Expiration: If employed by the company on December 31, 2022, then executive shall be entitled to a bonus opportunity under our bonus incentive plan and any continued employment requirement of the applicable bonus award or its payment shall be waived subject to executive's timely execution and delivery of a general release.

Additional Benefits: In the event of executive's disability or following any termination of employment by him voluntarily or by the company without cause, the executive will also be entitled to receive insurance and health benefits until the earlier to occur of (i) the fourth anniversary of the expiration or termination, as applicable, or (ii) the date the executive is covered by comparable insurance and health benefits. In the event that life insurance coverage results in taxable income to executive's beneficiaries, CME Group will provide a gross up.

Severance Protection Agreements

In December 2016, the committee approved enhancements to the severance benefits offered to our named executive officers (other than Mr. Duffy, who is party to the agreement described above) to better align severance benefits with competitive levels, strengthening leadership continuity during organizational change. We entered into severance protection agreements with the named executive officers other than Mr. Duffy, which provide for the following benefits in the event of a termination without cause (as defined in the agreement) through December 31, 2018, subject to the executive executing a release of claims in favor of the company:

- a lump sum severance payment equal to 150% of the executive's annual base salary;
- accelerated vesting of time-vesting restricted shares scheduled to vest during the 18-month period following termination;

- continued eligibility to vest in performance shares for which the performance period ends during the 18-month period following termination (with vesting to be based on actual performance results);
- company payment of COBRA premiums for 18 months following termination; and
- six months of outplacement services.

The description above is only a summary of the terms of the severance protection agreements and is qualified in its entirety by the complete text of the form agreement filed with the SEC on a Current Report on Form 8-K on December 9, 2016.

Other CME Policies and Practices

The following is a summary of our other plans in place that provide for benefits upon termination of employment and/or in the event of a change of control.

Annual Performance Bonuses. In accordance with the terms of our bonus plans, in the event an employee dies or becomes disabled, he or she or his or her beneficiaries will be entitled to receive a pro rata bonus, subject to actual performance.

Equity Plans. We make equity grants to our employees under the Omnibus Stock Plan. All of the outstanding awards for our named executive officers follow the terms and conditions of the Omnibus Stock Plan. The terms of the employment agreement for Mr. Duffy govern his equity awards.

In the event of death, the employee's beneficiaries would vest in any outstanding equity awards, with outstanding performance shares vesting at the target level. In the event of termination due to disability, outstanding restricted stock awards become vested and outstanding performance shares become vested at the target level. Awards automatically vest upon a change of control (as defined in the Omnibus Stock Plan), with performance shares vesting at the greater of actual performance at the time of the change of control or the target level.

POTENTIAL PAYMENTS TO NAMED EXECUTIVE OFFICERS

The following table sets forth the estimated benefits and payments upon termination of our named executive officers as of year-end, under various circumstances. These payments assume a termination or change of control effective upon December 31, 2018 in accordance with their contractual provisions in effect at such time. Unless otherwise specified, payments and benefits that would be generally available to all employees, including accrued benefits, are not included in the amounts below.

	Termination Due to:						
	Involuntary for Cause	Voluntary	Voluntary for Good Reason	Involuntary Not for Cause	Change In Control	Death	Disability
Terrence A. Duffy							
Total Cash Severance ⁽¹⁾	\$ —	\$ —	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ —	\$ —
Value of Equity Subject to Accelerated Vesting ⁽²⁾	—	—	23,898,953	23,898,953	23,898,953	23,898,953	23,898,953
Continuation of Health & Welfare Benefits ⁽³⁾	—	144,859	144,859	144,859	144,859	—	—
Other Accrued Pay and Benefits ⁽⁴⁾	—	—	—	—	—	4,591,913	4,591,913
Total:	\$ —	\$ 144,859	\$ 27,043,812	\$ 27,043,812	\$ 27,043,812	\$ 28,490,866	\$ 28,490,866
John W. Pietrowicz							
Total Cash Severance ⁽¹⁾	\$ —	\$ —	\$ —	\$ 825,000	\$ 825,000	\$ —	\$ —
Value of Equity Subject to Accelerated Vesting ⁽²⁾	—	—	—	4,008,649	7,479,463	7,479,463	7,479,463
Continuation of Health & Welfare Benefits ⁽³⁾	—	—	—	—	—	—	—
Other Accrued Pay and Benefits ⁽⁴⁾	—	—	—	—	—	960,433	960,433
Total:	\$ —	\$ —	\$ —	\$ 4,833,649	\$ 8,304,463	\$ 8,439,896	\$ 8,439,896
Bryan T. Durkin							
Total Cash Severance ⁽¹⁾	\$ —	\$ —	\$ —	\$ 1,350,000	\$ 1,350,000	\$ —	\$ —
Value of Equity Subject to Accelerated Vesting ⁽²⁾	—	—	—	6,166,762	11,764,460	11,764,460	11,764,460
Continuation of Health & Welfare Benefits ⁽³⁾	—	—	—	34,169	34,169	—	—
Other Accrued Pay and Benefits ⁽⁴⁾	—	—	—	—	—	1,963,757	1,963,757
Total:	\$ —	\$ —	\$ —	\$ 7,550,931	\$ 13,148,629	\$ 13,728,217	\$ 13,728,217
Julie Holzrichter							
Total Cash Severance ⁽¹⁾	\$ —	\$ —	\$ —	\$ 712,500	\$ 712,500	\$ —	\$ —
Value of Equity Subject to Accelerated Vesting ⁽²⁾	—	—	—	3,695,806	6,775,706	6,775,706	6,775,706
Continuation of Health & Welfare Benefits ⁽³⁾	—	—	—	20,363	20,363	—	—
Other Accrued Pay and Benefits ⁽⁴⁾	—	—	—	—	—	830,077	830,077
Total:	\$ —	\$ —	\$ —	\$ 4,428,669	\$ 7,508,569	\$ 7,605,783	\$ 7,605,783
Sean P. Tully							
Total Cash Severance ⁽¹⁾	\$ —	\$ —	\$ —	\$ 675,000	\$ 675,000	\$ —	\$ —
Value of Equity Subject to Accelerated Vesting ⁽²⁾	—	—	—	3,494,329	6,519,110	6,519,110	6,519,110
Continuation of Health & Welfare Benefits ⁽³⁾	—	—	—	20,363	20,363	—	—
Other Accrued Pay and Benefits ⁽⁴⁾	—	—	—	—	—	787,185	787,185
Total:	\$ —	\$ —	\$ —	\$ 4,189,692	\$ 7,214,473	\$ 7,306,295	\$ 7,306,295

(1) Cash severance represents contractual amount for Mr. Duffy in accordance with his employment agreement. Cash severance for Mr. Pietrowicz, Mr. Durkin, Ms. Holzrichter and Mr. Tully is pursuant to the terms of their severance protection agreements.

(2) Amounts shown for the "Value of Equity Subject to Accelerated Vesting" are based on the applicable stock plan, severance plan and contractual provisions in place and include accelerated vesting of outstanding options, restricted stock and performance shares as applicable. For purposes of this analysis, for performance awards tied to performance periods ending on or before December 31, 2018, the actual number of shares earned was used in the calculations for applicable scenarios; for outstanding performance awards tied to performance beyond 2018, the target number of shares was used in the calculations. The values were determined using the closing price on December 31, 2018 of \$188.12.

(3) Amounts shown for the "Continuation of Health and Welfare Benefits" reflect our contractual agreements with named executive officers in effect during 2018. Mr. Pietrowicz does not participate in the company's medical plans and therefore is not eligible for continued coverage through COBRA. Mr. Duffy's continuing benefits do not reflect the additional amounts that CME Group may incur in connection with the self-insurance of certain benefits as previously described because such amounts were granted for the purposes of providing Mr. Duffy with the disability insurance benefits based on two-thirds of base salary (subject to plan maximums) and life insurance benefits based on three times base salary (subject to plan maximums) consistent with benefits provided to other employees on a broad basis.

(4) Amounts shown for the "Other Accrued Pay and Benefits" in event of death or disability include accrued bonus payments pursuant to our bonus plans based on actual bonus amounts for 2018.

CHIEF EXECUTIVE OFFICER PAY RATIO

As required by Section 953(b) of the Dodd-Frank Wall Street Reform and Consumer Protection Act, and Item 402(u) of Regulation S-K, for 2018:

- the median annual total compensation of our employees (other than Mr. Duffy, who serves in the role of Chief Executive Officer) was \$137,287;
- the annual total compensation of Mr. Duffy, as reported in the **Summary Compensation Table**, was \$13,416,665; and
- as a result, the annual total compensation of Mr. Duffy is estimated to be 98 times that of the median annual total compensation of our employees (other than Mr. Duffy).

Per the SEC rules, we have chosen to utilize the same median employee as last year, given there have been no significant changes in either our employee population or compensation arrangements that we reasonably believe would impact our calculation. Further, the individual previously selected as the median employee did not receive a promotion or above market pay raise, we did not make changes to any of our compensation programs impacting our broader employee population and we did not experience significant turnover in our employee population over the past 12 months.

It is important to note that CME Group did complete an acquisition of NEX in November 2018, which has significantly changed our employee population and will require us to identify a new median employee next year. However, SEC rules allow for a transition period for companies that are completing an acquisition in the fiscal year in which the transaction becomes effective, which allowed us to exclude these employees for purposes of the above calculation. For reference, the approximate number of employees acquired and excluded is 1,750.

Consistent with the prior year methodology, we selected a measurement date of December 31, 2018, our fiscal year-end. As of that date, our global employee population consisted of approximately 2,950 staff, with 73% (2,165) of these employees working in the United States and the remaining 27% (795) working in our various non-U.S. locations (Australia, Brazil, Canada, China, Hong Kong, India, Japan, Singapore, South Korea and the United Kingdom).

Under the “de minimis exemption” adjustment permitted under the SEC rules, the following countries and employee counts were again excluded from our median employee determination: Australia (1), Brazil (2), Canada (1), China (3), Hong Kong (19), Japan (3), Singapore (52) and South Korea (3). Our employee population, after taking the “de minimis exemption” into account, consisted of approximately 2,875 individuals.

Our median employee calculation aggregates actual base salary earnings in 2018, overtime earnings paid in 2018 for employees eligible to earn overtime, bonus awards earned in 2018 and paid in March 2019 and the grant date value of any equity awards granted in 2018. The sum of these amounts represents our “consistently applied compensation measure,” used in identifying the median employee. We do not apply a cost of living adjustment to the data.

The total annual compensation for the “median employee” was determined using the **Summary Compensation Table** methodology, which included the change in pension value for the median employee and 401(k) contributions made by the firm in 2018.

This pay ratio is a reasonable estimate calculated in a manner consistent with SEC rules based on our payroll and employment records and the methodology described above. The SEC rules for identifying the median employee and calculating the pay ratio based on that employee’s annual total compensation allow companies to adopt a variety of methodologies, to apply certain exclusions, and to make reasonable estimates and assumptions that reflect their compensation practices. As such, the pay ratio reported by other companies may not be comparable to the pay ratio reported above, as other companies may have differing employment and compensation practices and may use different methodologies, exclusions, estimates and assumptions in calculating their pay ratios.

Our directors play a critical role in guiding our strategic direction and overseeing management. Developments in corporate governance and financial reporting have resulted in an increased demand for highly qualified directors. We provide compensation commensurate with our directors' workload, risk and opportunity costs. In addition, to satisfy our self-regulatory responsibilities, we have established a number of functional exchange committees of which certain of our directors are members. Our compensation program for our non-executive directors is designed to compensate our directors based on their respective levels of board participation and responsibilities, including service on board committees and functional exchange committees.

Similar to our philosophy on management pay, we generally target the 50th percentile of the competitive market for compensation of the board of directors. We also review the range of values around the median, including the 25th and 75th percentiles. The primary components of our board member compensation package consist of an annual cash stipend, committee meeting fees, an annual equity stipend, chairperson retainers for our non-executive chairs, additional meeting fees for certain committee chairs and a stipend for our independent Lead Director. Non-executive board members are eligible to participate in our Director Deferred Compensation Plan.

During our annual review of director pay in 2018, we determined that pay had fallen below the 25th percentile of our peer group. (See **page 43** for the companies within our peer group.) As a result, the compensation committee conducted a formal review of director pay across each component, including our cash stipend, equity stipend and approach to meeting fees. Following a review by the committee's advisor, Meridian Compensation Partners, LLC, the committee sought to increase both the cash stipend and equity stipend to position overall pay at the 25th percentile. The compensation committee recommended, and the board approved, an increase in the compensation for our non-executive directors: cash stipend (increase from \$60,000 to \$80,000) and equity stipend (increase from \$100,000 in value to \$120,000). The increase was effective as of September 1, 2018.

The compensation of our board members is set forth in the table entitled **Director Compensation Table** on **page 65**.

FEES AND COMPENSATION PLANS FOR CME GROUP NON-EXECUTIVE DIRECTORS

The compensation committee is responsible for reviewing and recommending to the board the compensation for the non-executive directors of CME Group. Only non-executive directors receive compensation for their service as a director. Our non-executive director compensation includes:

Annual Stipends	
Annual cash stipend ⁽¹⁾	\$ 80,000
Annual retainer for non-executive directors serving as a committee chair	\$ 20,000
Annual equity stipend ⁽²⁾	\$120,000
Annual Lead Director stipend	\$ 25,000
Meeting Fees	
Meeting fees for audit, clearing house oversight, compensation, executive, finance, governance, market regulation oversight, nominating and risk committees ⁽³⁾	\$ 1,500
Additional meeting fee for non-executive directors serving as chair of the foregoing committees	\$ 500
Meeting fee for the strategic steering, clearing house risk, interest rate swap risk and credit default swap risk committees and for other functional exchange committees ⁽³⁾⁽⁴⁾	\$ 1,000

(1) Directors have the option to elect to receive some or the entire portion of their annual cash stipend, which is paid pro-rata on a monthly basis, in shares of stock valued at the closing price on the date of grant. If a director who elects to receive additional stock leaves the board prior to the next annual meeting, such director will be responsible for repaying us for the amount of the unearned stipend that otherwise would have been paid in cash.

(2) Shares received are granted under our Director Stock Plan and are not subject to any vesting restrictions.

(3) The fee for telephonic participation in a regularly scheduled CME Group board committee meeting is 50% of that for in-person participation. However, it is within the discretion of the particular committee chairman to determine if it is appropriate to pay the full meeting fee, taking into consideration the member's ability to participate based upon the particular circumstances. It is within the discretion of a committee to create a subcommittee to address a specific issue and to determine whether members of such subcommittee should receive fees up to the amount of the regular committee meeting fee for their participation in such subcommittee.

(4) The strategic steering committee was disbanded in August 2018 and the credit default swap risk committee was disbanded in March 2018.

Non-executive directors may participate in our Director Deferred Compensation Plan in the market investments that the plan offers from time to time. The return on the investments selected by the directors is the only return they will receive on their deferred compensation. We do not provide any pension, health benefit or other benefit programs to our non-executive directors.

The following table provides information regarding the compensation earned during the year ended December 31, 2018 by each of our current directors, except for Mr. Duffy, and for directors who retired during 2018. The compensation for Mr. Duffy as a named executive officer is set forth in the **Summary Compensation Table** on **page 54**.

DIRECTOR COMPENSATION TABLE

Director	Fees Earned or Paid in Cash ⁽¹⁾	Stock Awards ⁽²⁾	All Other Compensation	Total
Jeffrey M. Bernacchi	\$ 96,667	\$115,164	\$ —	\$211,831
Timothy S. Bitsberger	122,667	115,164	—	237,831
Charles P. Carey	12,634	190,030	—	202,664
Dennis H. Chookaszian	127,667	115,164	—	242,831
Elizabeth A. Cook	72,167	115,164	—	187,331
Ana Dutra	29,384	190,030	—	219,414
Martin J. Gepsman	130,167	115,164	—	245,331
Larry G. Gerdes	80,134	190,030	—	270,164
Daniel R. Glickman	132,833	115,164	—	247,997
Gedon Hertshten	8,134	190,030	—	198,164
William W. Hobert ⁽³⁾	5,734	190,030	—	195,764
Deborah J. Lucas ⁽³⁾	50,667	115,164	—	165,831
Leo Melamed ⁽⁴⁾	35,333	—	945,604 ⁽⁵⁾	980,937
Ronald A. Pankau	92,667	115,164	—	207,831
Alex J. Pollock	47,134	190,030	—	237,164
John F. Sandner ⁽⁴⁾	29,000	—	645,604 ⁽⁶⁾	674,604
Terry L. Savage	93,667	115,164	—	208,831
William R. Shepard	60,467	190,030	—	250,497
Howard J. Siegel	69,134	190,030	—	259,164
Michael A. Spencer ⁽⁷⁾	—	—	159,649 ⁽⁷⁾	159,649
Dennis A. Suskind	168,417	115,164	—	283,581
David J. Wescott	51,667	115,164	—	166,831

- (1) The amounts reflected in the “Fees Earned or Paid in Cash” consist of annual cash stipends, cash payments made due to share rounding of the stock award, committee meeting fees (board, functional and subcommittee) and annual retainers for the committee chairs, including amounts deferred under our Director Deferred Compensation Plan. Board committee and functional committee meeting fees are subject to an overall cap of \$100,000 per year.
- (2) The amounts reflected in the “Stock Awards” column reflect the aggregate grant date fair value computed in accordance with the Financial Accounting Standards Board ASC Topic 718. See note 17 of the notes to consolidated financial statements of CME Group Inc. and subsidiaries for more details on the assumptions made in the valuation of stock awards. The value of 2018 stock awards was calculated using the closing price on June 25, 2018 of \$166.49 and on September 25, 2018 of \$173.60. The awards represent our annual grant to our non-executive board members, which are not subject to any vesting restrictions. The amounts include the pro rata grant in connection with the increase in the equity stipend, which was made in September. Awards in excess of \$115,164 are due to the director’s election to receive additional shares in lieu of all or a portion of his or her annual cash stipend. No other awards were made to our non-executive board members in 2018. See the table entitled **Directors, Director Nominees and Executive Officers** on **page 67** for the complete stock ownership of our board members.
- (3) Appointed to the board in May 2018.
- (4) Retired from the board in May 2018.
- (5) Consists of consulting fees. Does not include amounts reimbursed by CME Group for Mr. Melamed’s expenses submitted in connection with his consulting arrangement described on **page 66**.
- (6) Consists of consulting fees.
- (7) Represents compensation earned since our acquisition of NEX and Mr. Spencer’s appointment to the board. For the avoidance of doubt, payments related to the close of the transaction have not been included in this figure. He has served as Special Advisor, which is not an executive officer role, since the close of the transaction. Mr. Spencer does not receive additional compensation for his service on the board. The figure listed is based on an exchange rate of 1.2734 USD/GBP. A copy of the Amendment of Deed, dated November 2, 2018, by and among CME Group Inc., NEX Group plc and Michael Spencer was filed with the SEC on a Current Report on Form 8-K on November 8, 2018.

DIRECTOR STOCK PLAN

Our Director Stock Plan provides for the issuance of up to 625,000 shares of Class A common stock (subject to adjustment in the event of a merger, reorganization or similar corporate event involving us) through awards of non-qualified stock options, restricted stock and shares of common stock. The plan is administered by the compensation committee, which has the responsibility for recommending to the board the annual equity stipend for our non-executive directors.

STOCK OWNERSHIP GUIDELINES

Our non-executive board members are subject to stock ownership guidelines valued at two times the total annual retainer (representing 5 times the cash portion of the retainer, or \$400,000). Each member has five years from May 2008 or election to the board, whichever is later, to achieve this stock ownership guideline. As of the 2018 review, all of our board members with five or more years of board service had satisfied the guideline.

CONTRACTUAL RELATIONSHIPS WITH CERTAIN FORMER DIRECTORS

Mr. Melamed. During 2018, we had two written consulting agreements with Mr. Melamed. One applied during the time he served on our board and the other applies from his retirement from the board on May 9, 2018 with a term through the end of his lifetime.

In accordance with the terms of the written agreement in effect during his board service, Mr. Melamed provided us with consulting services relating to the financial services industry and related matters within Mr. Melamed's areas of expertise. For these services, Mr. Melamed received \$300,000 per annum plus all reasonable and necessary out-of-pocket travel and other expenses incurred in connection with the consulting services and up to \$190,000 annually for non-travel expenses, including office and secretarial expenses. Under the agreement, Mr. Melamed may not, without our prior written consent, render services to any competitor or otherwise compete with us throughout the term of the agreement and for one year thereafter. Mr. Melamed also received compensation for his service on our board.

Under the terms of the written agreement that took effect on May 9, 2018 until his death or until his termination of the agreement, Mr. Melamed provides us with similar consulting services and receives \$300,000 per annum plus reimbursement for all reasonable and necessary out-of-pocket travel and other expenses incurred relating to his service. We will also provide office and secretarial support during the term of the agreement. Mr. Melamed may not render services to any competitor or otherwise compete with us during the term of the agreement without our prior written consent. In the event the agreement is terminated during Mr. Melamed's lifetime he will continue to be subject to the non-compete provisions for one year after such termination.

For the two-year period following Mr. Melamed's retirement from the board, he will receive additional compensation for his consulting services in the amount of \$1 million per year.

Mr. Sandner. Mr. Sandner, who retired from the board on May 9, 2018, serves as a consultant to the board for which he receives compensation of \$1 million per year. This arrangement is expected to continue until at least the two-year anniversary of his retirement from the board.

The following tables show the amount of common stock owned by each of our directors, director nominees and by each executive officer who is not also a director named in the **Summary Compensation Table** on **page 54** of this proxy statement, and by all directors and executive officers as a group and the amount of common stock beneficially owned by individuals owning more than five percent of our Class A common stock as of March 11, 2019 unless otherwise noted. In general, “beneficial ownership” includes those shares over which a person has the power to vote, or the power to transfer, and stock options that are currently exercisable or will become exercisable within 60 days of March 11, 2019. Except as otherwise noted, the persons named in the table below have sole voting and investment power with respect to all shares shown as beneficially owned by them. None of our directors, director nominees or executive officers beneficially own more than one percent of any class of common stock. Shares have been rounded to the nearest full amount.

Directors, Director Nominees and Executive Officers

Name of Beneficial Owner ⁽¹⁾	Class of Common Stock				
	A	B-1	B-2	B-3	B-4
Terrence A. Duffy ⁽²⁾	95,652	1	—	—	1
Steve A. Beitler	—	1	—	—	—
Jeffrey M. Bernacchi ⁽³⁾	42,004	1	—	—	—
Timothy S. Bitsberger	10,121	—	—	—	—
Charles P. Carey ⁽⁴⁾	25,673	1	1	1	1
Dennis H. Chookaszian ⁽⁵⁾	14,431	—	—	—	—
Elizabeth A. Cook ⁽⁶⁾	21,621	—	—	1	—
Ana Dutra	4,567	—	—	—	—
Martin J. Gepsman ⁽⁷⁾	42,799	—	—	1	1
Larry G. Gerdes	33,739	—	—	—	—
Bradley S. Glass ⁽⁸⁾	145,979	1	—	—	—
Daniel R. Glickman ⁽⁹⁾	16,587	—	—	—	—
Yra G. Harris	1,104	—	1	—	—
Gedon Hertshten ⁽¹⁰⁾	134,734	4	4	4	2
William W. Hobert ⁽¹¹⁾	118,807	2	6	7	—
Daniel G. Kaye	—	—	—	—	—
Phyllis M. Lockett	—	—	—	—	—
Deborah J. Lucas	688	—	—	—	—
Patrick J. Mulchrone ⁽¹²⁾	49,391	1	1	1	1
Ronald A. Pankau ⁽¹³⁾	3,600	—	1	—	—
Alex J. Pollock ⁽¹⁴⁾	21,559	—	—	—	—
Terry L. Savage ⁽¹⁵⁾	16,521	—	—	—	—
William R. Shepard ⁽¹⁶⁾	194,865	5	5	2	1
Howard J. Siegel	84,373	1	—	1	—
Michael A. Spencer ⁽¹⁷⁾	3,010,283	—	—	—	—
Dennis A. Suskind	5,747	—	—	—	—
Robert J. Tierney ⁽¹⁸⁾	7,500	1	1	1	1
David J. Wescott ⁽¹⁹⁾	75,253	1	1	3	1
John W. Pietrowicz ⁽²⁰⁾	37,720	—	—	—	—
Bryan T. Durkin	69,186	—	—	—	—
Julie Holzrichter	45,627	—	—	—	—
Sean P. Tully ⁽²⁰⁾	35,042	—	—	—	—

- (1) The address for all persons listed in the table is CME Group Inc., 20 South Wacker Drive, Chicago, IL 60606.
- (2) Includes 495 Class A shares and 1 Class B-4 share to which Mr. Duffy shares joint ownership and has voting power.
- (3) Includes 1 Class B-1 share assigned to one of our members firms in connection with our exchange rules.
- (4) Mr. Carey owns 1,532 Class A shares indirectly through a trust. He also owns 24,141 Class A shares, 1 share of Class B-1, 1 share of Class B-2, 1 share of Class B-3 and 1 share of Class B-4 indirectly through a trading firm for purposes of meeting certain share requirements established by the rules of our derivatives exchanges for member fee purposes.
- (5) Includes 12,934 Class A shares held in the name of Mr. Chookaszian's spouse.
- (6) All Class A shares held in trust.
- (7) Includes 495 Class A shares and 1 Class B-4 share to which Mr. Gepsman shares joint ownership and has voting power. Includes 12,950 Class A shares that have been used as a capital contribution to a limited liability company which is a holding company to one of our clearing firms.
- (8) Mr. Glass directly owns 4 Class A shares and 1 Class B-1 share held in trust. Mr. Glass' Class B-1 share is assigned to one of our member firms in connection with our exchange rules. Includes 145,975 Class A shares beneficially owned as trustee of a family trust.
- (9) Includes 2,100 Class A shares held in trust.
- (10) Mr. Hertshten owns 34,678 Class A shares directly. He also owns 100,056 Class A shares and all Class B shares through a firm in which he is the owner.
- (11) Mr. Hobert owns 78,807 Class A shares directly. He also owns 40,000 Class A shares, 2 Class B-1 shares, 6 Class B-2 shares and 7 Class B-3 shares held through a firm of which Mr. Hobert is a majority shareholder.
- (12) Includes 12,350 Class A shares assigned to one of our member firms in connection with our exchange rules.
- (13) Includes 1 Class B-2 share assigned to one of our member firms in connection with our exchange rules.
- (14) Includes 2,719 Class A shares held in the name of Mr. Pollock's spouse.
- (15) All Class A shares held in trust.
- (16) Includes 495 Class A shares and 1 Class B-4 share as to which Mr. Shepard shares joint ownership and has voting power. All shares held in trust.
- (17) Mr. Spencer owns 217,385 Class A shares directly. He also indirectly owns 2,353 Class A shares held by his spouse and 2,790,545 Class A shares held through a firm.
- (18) Mr. Tierney owns 7,500 Class A shares through a firm of which he is the owner.
- (19) Does not include ownership of 495 shares of Class A common stock of which beneficial ownership is in dispute.
- (20) Class A shares for Mr. Pietrowicz and Mr. Tully include an aggregate of 5,000 and 4,120 stock options, respectively, that are currently exercisable or would be exercisable within 60 days of March 11, 2019.

Directors and Executive Officers as a Group (32 persons)

Class of Common Stock	Total Shares	Percent of Class A ⁽¹⁾
Class A ⁽²⁾	4,426,246	1.2%
Class B-1	16	2.6%
Class B-2	18	2.2%
Class B-3	20	1.6%
Class B-4	7	1.7%
Total Classes (A & B)	4,426,307	1.2%

* Less than 1%.

- (1) Based on 357,835,836 shares of Class A common stock; 625 shares Class B-1 common stock; 813 shares of Class B-2 common stock; 1,287 shares of Class B-3 common stock, and 413 shares of Class B-4 common stock outstanding as of March 11, 2019.
- (2) Total shares of Class A common stock include an aggregate of 46,850 options to purchase shares of Class A common stock that are currently exercisable or become exercisable within 60 days of March 11, 2019.

Shareholders Owning More Than Five Percent

Name	Number of Class A Shares	Percent of Vote as a Single Class ⁽¹⁾
Capital World Investors ⁽²⁾	32,717,706	9.1%
The Vanguard Group ⁽⁴⁾	27,271,512	7.6%
BlackRock, Inc. ⁽³⁾	24,251,607	6.8%
State Street Corporation ⁽⁵⁾	16,497,809	4.6%

(1) Percentage is based on the aggregate of 357,835,836 shares of Class A and Class B common stock outstanding as of March 11, 2019, voting together as a single class. Other than with respect to the election of Class B directors and some matters relating to trading rights associated with Class B shares, holders of both classes of common stock will vote together as a single class on all matters to be presented to a vote of shareholders, unless otherwise required by law.

(2) Capital World Investors, a division of Capital Research and Management Company, filed a Schedule 13G/A on February 14, 2019, which states that its address is 333 South Hope Street, Los Angeles, CA 90071, and that it has sole voting power of 32,694,681 shares of Class A common stock and sole dispositive power of 32,717,706 shares of Class A common stock.

(3) BlackRock, Inc. filed a Schedule 13G/A on February 4, 2019, which states that its address is 55 East 52nd Street, New York, NY 10055, and that it has sole voting power of 20,366,177 shares of Class A common stock and sole dispositive power of 24,251,607 shares of Class A common stock.

(4) The Vanguard Group filed a Schedule 13G/A on February 11, 2019, which states that its address is 100 Vanguard Blvd., Malvern, PA 19355, and that it has sole voting power of 416,138 shares of Class A common stock, shared voting power of 86,344 shares of Class A common stock, sole dispositive power of 26,777,840 shares of Class A common stock and shared dispositive power of 493,672 shares of Class A common stock.

(5) State Street Corporation filed a Schedule 13G/A on February 12, 2019, which states that its address is State Street Financial Center, One Lincoln Street, Boston, MA 02111, and that it has shared voting power of 15,017,128 and shared dispositive power of 16,091,741 shares of Class A common stock.

CERTAIN BUSINESS RELATIONSHIPS WITH RELATED PERSONS

Our audit committee has adopted a written policy for the review of related party transactions. A copy of our related party transaction approval policy is available on our website. Related party transactions are transactions in which we are a participant, the amount involved exceeds \$120,000, and a related party has or will have a direct or indirect material interest. Related parties consist of our directors (including nominees for election as directors), executive officers, holders of more than five percent of our outstanding Class A common stock, and the immediate family members of these individuals, as defined in the policy. Our Office of the Secretary, in consultation with management and outside counsel, as appropriate, will review potential related party transactions to determine if they are subject to our related party transactions policy. Certain transactions, including compensation and ordinary course trading activity on any of our exchanges, are considered pre-approved and thus do not require specific approval under the policy.

In determining whether to approve a related party transaction, the audit committee will consider, among other factors, the fairness of the proposed transaction, whether there are compelling business reasons to proceed, and whether the transaction would impair the independence of a non-management director or present an improper conflict of interest for a director or executive officer, taking into account the size of the transaction, the overall financial position of the related person, the direct or indirect nature of his or her interest in the transaction, the ongoing nature of any proposed relationship, and any other factors the committee deems relevant. The policy also provides that certain engagements by us of a large firm in which an immediate family member of a director or executive officer is a general partner of such firm will not be considered a related party transaction; provided certain factors are met, including that such family member did not have any involvement in the selection or engagement process, does not receive any compensation or credit in connection with the engagement other than that provided to the other unaffiliated partners and that no other facts or circumstances exist suggesting that the immediate family member has any direct or indirect material interest in the transaction.

We do not consider the amounts involved in the transactions described in this section to be material to our business or material in relation to the businesses of such other companies or the interests of the individuals involved. We recognize the need for transparency and additional disclosure regarding transactions between an issuer and its insiders. However, we do not believe that these disclosures should be a substitute for the overall independence test for determining whether a material relationship exists.

Transactions Relating to Trading Activity in 2018

We are a unique organization stemming from our evolution from a member-owned organization to a public company. In connection with such transition, we recognized the need to maintain the deep industry knowledge of members of our trading community as board members. As a result, some of our board members continue to participate in our markets from which we derive revenue. Payments relating to trading activity include clearing and transaction fees, market data and information services fees and connection fees. A substantial portion of our clearing and transaction fees is received directly from our clearing firms which include charges for trades executed and cleared on behalf of their customers, some of whom may be members of our board or Class B director nominees. Payments received directly by clearing firms in which a board member or Class B director nominee has a significant affiliation are based upon our financial records. Other payments, which are not derived from our financial records because they are processed indirectly through a clearing firm, are set forth below but the actual amounts are not included.

- Mr. Beitler is the founder of one of our member firms that made aggregate payments to us indirectly through its clearing firm in excess of \$120,000.
- Mr. Carey is a principal of two member firms that made aggregate payments to us indirectly through their clearing firm in excess of \$120,000.
- Mr. Hertshten is the owner of a clearing firm that made net payments to us of approximately \$108 million and the owner of a member firm that made net payments to us in excess of \$120,000. Mr. Hertshten's brother-in-law is also a member of our exchange and made aggregate payments to us indirectly through a clearing firm in excess of \$120,000.
- Mr. Hobert owns a majority interest in one of our member firms that made payments to us indirectly through its clearing firm in excess of \$120,000.

- Mr. Mulchrone is the founder of a clearing firm that made net payments to us of approximately \$54 million.
- Mr. Shepard owns a minority interest in one of our clearing firms that made net payments to us of approximately \$147 million and owns a trading firm that made payments to us indirectly through its clearing firm in excess of \$120,000.
- Mr. Siegel made payments to us indirectly through his clearing firm in excess of \$120,000.
- Mr. Tierney is the owner of one of our member firms that made payments to us indirectly through its clearing firm in excess of \$120,000.
- Mr. Wescott is part owner in one of our member firms that made payments to us indirectly through its clearing firm in excess of \$120,000.

The fees we charge our customers, including any of our board members, are based on published fee schedules and no benefits or discounts are provided to our board members that are not otherwise made available to similarly situated customers. We, therefore, do not believe that such transactions impair the independence of such individuals and any potential conflicts are handled appropriately under our director conflict of interest policy, a copy of which is available on our website. Our other board members and director nominees who participate in our markets also incur trading fees, but such fees were below \$120,000 during 2018. The foregoing transactions relating to trading activity are considered pre-approved under the audit committee's related party transaction approval policy.

Other Relationships

Ms. Lockett is the Chief Executive Officer of LEAP Innovations. LEAP Innovations received a grant of \$250,000 from the CME Group Foundation in 2018. In 2018, the board of the CME Group Foundation approved the renewal of the three-year grant to LEAP Innovations: \$250,000 in 2019; \$250,000 in 2020 and \$250,000 in 2021. As these charitable contributions were entered into prior to Ms. Lockett's nomination, the terms were not submitted to the audit committee for its approval in accordance with its policy on related party transactions.

An in-law of Mr. Pankau is employed by us in a non-officer position. The employment relationship occurred prior to Mr. Pankau's service on our board. The employee received aggregate compensation in 2018 of approximately \$305,000 (part of which included an annual equity award) and other benefits provided to employees at the same level. The compensation is in accordance with our standard compensation practices applicable to similarly-situated employees. The audit committee previously ratified this related party transaction and receives annual reports on the compensation arrangements as part of its review of ongoing related party transactions.

Mr. Sandner, who retired from the board in May 2018, sub-leases his office space from us. In 2018, we received lease payments of approximately \$180,000. The original sub-lease was negotiated on an arm's length basis and was on terms consistent with our overall master lease and other existing leases at the location at the time of execution. The audit committee reviewed and approved the original sub-leasing relationship. The term of the original sub-lease was extended in 2015. The audit committee ratified the extension in 2016.

Mr. Spencer, who was appointed to the board in November 2018 in connection with our acquisition of NEX, has the following investments:

- *Exotix Holdings Ltd.* Mr. Spencer (through IPGL (Holdings) Limited (**IPGL**), a private investment company controlled by Mr. Spencer) owns approximately 87% of Exotix Holdings Ltd (**Exotix**) and NEX Group Limited, a subsidiary in the CME Group organization, owns approximately 4% of Exotix. Exotix is a London-based provider of trade and investment services in emerging markets around the world. As of December 31, 2018, there was an outstanding balance of £0.5 million due from Exotix to NEX Group Limited. As the loan was entered into prior to Mr. Spencer's appointment, the terms were not submitted to the audit committee for its approval in accordance with its policy on related party transactions.
- *Gain Capital Holdings, Inc.* Mr. Spencer (through IPGL) owns 12.6% of GAIN Capital Holdings, Inc. (**GAIN**) as well as \$52.2 million of convertible debt issued by GAIN. GAIN is a US-based, Nasdaq-listed provider of online trading services and provides market access and trade execution services in foreign exchange, contracts for difference and exchange-based products to retail investors. During 2018, the Company collected revenue of \$1.9 million from

GAIN. As the Company's relationship with GAIN was entered into prior to Mr. Spencer's appointment, the terms were not submitted to the audit committee for its approval in accordance with its policy on related party transactions.

CHARITABLE AND CIVIC CONTRIBUTIONS

We believe that it is both a responsibility and a privilege to give back to the global communities where we live and work. Through our charitable programs and foundations, we are able to put change in motion that will positively impact the lives of those in need. Through our corporate foundation, CME Group Community Foundation, we made charitable grants focused on the locations where we do business and provided support to three primary areas of concern: children in need, education, and health and human services. Certain members of our board also serve on the CME Group Foundation. Our board members and executive officers may have affiliations with organizations that have received donations from these foundations. None of the donations made by these foundations were deemed to impact the independence of any of our board members or director nominees, other than Ms. Lockett as previously discussed as it related to support provided in 2016.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires our officers and directors and persons who own more than 10% of a registered class of our equity securities to file reports of ownership and changes in ownership with the SEC. Officers, directors and greater than 10% beneficial owners are required by SEC regulations to furnish us with copies of all Section 16(a) forms that they file. Based solely on our review of the copies of the forms we have received, all of our officers and directors complied with their Section 16(a) filing requirements during 2018.

CATEGORICAL INDEPENDENCE STANDARDS

A director who satisfies the independence requirements of the applicable listing standards and meets all of the following categorical standards shall be presumed to be “independent”:

- The director does not (directly or indirectly as a partner, shareholder or officer of another company) provide consulting, legal or financial advisory services to the company or the company’s present or former auditors.
- Neither the director nor any member of his or her immediate family is a significant shareholder in the company’s Class A Common Stock or Class B Common Stock. For purposes of this categorical standard, a shareholder shall be considered significant if the ownership of shares of Class A Common Stock is greater than five percent (5%) of the outstanding Class A Common Stock or if the ownership of shares of any series of Class B Common Stock is greater than five percent (5%) of the outstanding Class B Common Stock in such series.
- Neither the director nor any member of his or her immediate family serves as an executive officer of a civic or charitable organization that receives financial contributions from us or the CME Group Community Foundation (excluding payments pursuant to a matching gift program) or the CME Group Foundation in excess of \$200,000 or five percent (5%) of that entity’s total annual charitable receipts and other revenues, whichever is greater, per year. The Board shall also consider whether any charitable donations made to a civic or charitable organization in which a director or member of his or her immediate family serves as a director, trustee or employed fundraiser impact the particular director’s independence; provided, however, donations less than \$200,000 per year shall be presumed to be insignificant and, therefore, not impact such director’s independence.

In addition, the Board of Directors has determined that a director who acts as a floor broker, floor trader, employee or officer of a futures commission merchant, clearing member firm or other similarly situated person that intermediates transactions in or otherwise uses CME Group products and services shall be presumed to be “independent,” if he or she otherwise satisfies all of the above categorical standards and the independence requirements of the applicable listing standards and such transactions are made in the ordinary course of business of the company on terms consistent with those prevailing at the time for corresponding transactions by similarly situated, unrelated third parties.

