

**SUBMISSION COVER SHEET**

**IMPORTANT:** Check box if Confidential Treatment is requested

**Registered Entity Identifier Code (optional):** 16-290 (2 of 2)

**Organization:** Chicago Mercantile Exchange Inc. ("CME")

**Filing as a:**  DCM  SEF  DCO  SDR

**Please note - only ONE choice allowed.**

**Filing Date (mm/dd/yy):** 08/12/2016 **Filing Description:** Initial Listing of S&P 500 Total Return Index Futures and S&P 500 Carry-Adjusted Total Return Index Futures Contracts

**SPECIFY FILING TYPE**

**Please note only ONE choice allowed per Submission.**

**Organization Rules and Rule Amendments**

- |                          |                                     |            |
|--------------------------|-------------------------------------|------------|
| <input type="checkbox"/> | Certification                       | § 40.6(a)  |
| <input type="checkbox"/> | Approval                            | § 40.5(a)  |
| <input type="checkbox"/> | Notification                        | § 40.6(d)  |
| <input type="checkbox"/> | Advance Notice of SIDCO Rule Change | § 40.10(a) |
| <input type="checkbox"/> | SIDCO Emergency Rule Change         | § 40.10(h) |

**Rule Numbers:**

**New Product**

**Please note only ONE product per Submission.**

- |                                     |                                       |            |
|-------------------------------------|---------------------------------------|------------|
| <input checked="" type="checkbox"/> | Certification                         | § 40.2(a)  |
| <input type="checkbox"/>            | Certification Security Futures        | § 41.23(a) |
| <input type="checkbox"/>            | Certification Swap Class              | § 40.2(d)  |
| <input type="checkbox"/>            | Approval                              | § 40.3(a)  |
| <input type="checkbox"/>            | Approval Security Futures             | § 41.23(b) |
| <input type="checkbox"/>            | Novel Derivative Product Notification | § 40.12(a) |
| <input type="checkbox"/>            | Swap Submission                       | § 39.5     |

**Official Product Name:** See filing.

**Product Terms and Conditions (product related Rules and Rule Amendments)**

- |                          |   |                      |
|--------------------------|---|----------------------|
| <input type="checkbox"/> | Certification   | § 40.6(a)            |
| <input type="checkbox"/> | Certification Made Available to Trade Determination     | § 40.6(a)            |
| <input type="checkbox"/> | Certification Security Futures                          | § 41.24(a)           |
| <input type="checkbox"/> | Delisting (No Open Interest)                            | § 40.6(a)            |
| <input type="checkbox"/> | Approval  | § 40.5(a)            |
| <input type="checkbox"/> | Approval Made Available to Trade Determination          | § 40.5(a)            |
| <input type="checkbox"/> | Approval Security Futures                               | § 41.24(c)           |
| <input type="checkbox"/> | Approval Amendments to enumerated agricultural products | § 40.4(a), § 40.5(a) |
| <input type="checkbox"/> | "Non-Material Agricultural Rule Change"                 | § 40.4(b)(5)         |
| <input type="checkbox"/> | Notification  | § 40.6(d)            |

**Official Name(s) of Product(s) Affected:**

**Rule Numbers:**

August 12, 2016

**VIA ELECTRONIC PORTAL**

Mr. Christopher J. Kirkpatrick  
Office of the Secretariat  
Commodity Futures Trading Commission  
3 Lafayette Center  
1155 21<sup>st</sup> Street NW  
Washington, DC 20581

**Re: CFTC Regulation 40.2(a) Notification Regarding the Initial Listing of S&P 500 Total Return Index Futures and S&P 500 Carry-Adjusted Total Return Index Futures Contracts.  
CME Submission No. 16-290 (2 of 2)**

Dear Mr. Kirkpatrick:

Chicago Mercantile Exchange Inc. (“CME” or “Exchange”) hereby notifies the Commodity Futures Trading Commission (“CFTC” or “Commission”) that it is self-certifying terms and conditions of S&P 500 Total Return Index Futures and S&P 500 Carry Adjusted Total Return Index futures (collectively, the “Contracts”) for trading on the CME Globex electronic trading platform (“CME Globex”) and for submission of block trades for clearing via CME ClearPort on Sunday, August 28, 2016, for first trade date of Monday, August 29, 2016.

- Section 1 summarizes Contracts’ terms and conditions.
- Section 2 describes administration and governance of the Contracts.
- Section 3 establishes that the Contracts are not narrow-based according to standards set forth Section 1a(25) of the Commodity Exchange Act (“CEA” or “Act”).
- Section 4 delineates standards for block trading in the Contracts.
- Section 5 addresses compliance of CME Rules and Rule amendments certified herein with the pertinent Core Principles for Designated Contract Markets (“Core Principles”) set forth in the Act.

Appendix A sets forth the product chapters of the Contracts. Appendix B addresses Contract position limits and reportable position levels pursuant to CME Rulebook Chapter 5. Appendixes C and D, respectively, set forth CME Globex non-reviewable trading ranges as prescribed in CME Rule 588.H., and special price fluctuation limits pursuant to CME Rule 589. Appendix E sets forth the Exchange Fee schedule.

## Section 1a – Contract Specifications for S&P 500 Total Return Index Futures

(Times referred to herein shall refer to and indicate Chicago time, unless otherwise noted.)

<b>Trading Unit</b>	\$25 x S&P 500 Total Return Index				
<b>Delivery Months</b>	Five nearest months in March Quarterly cycle (March, June, September, and December).  Delivery months for initial listing: Dec 2016, Mar 2017, Jun 2017, Sep 2017, Dec 2017				
<b>Price Basis and Minimum Price Increment</b>	Prices are quoted and traded in Index points. Minimum price increments --  Outright: 0.50 Index points, equal to \$12.50 per contract. Basis Trade at Index Close (BTIC): 0.10 Index points, equal to \$2.50 per contract.				
<b>Price Limits</b>	There shall be no trading in S&P 500 Total Return Index futures when trading is halted in the Primary Futures Contract Month for E-mini S&P 500 Index futures pursuant to Rule 35802.1				
<b>Termination of Trading</b>	Trading in expiring contracts terminates at close of CME Globex trading on the Exchange business day first preceding the 3 <sup>rd</sup> Friday of contract delivery month.				
<b>Delivery</b>	Delivery is by cash settlement by reference to Final Settlement Price. The Final Settlement Price shall be a special opening quotation of the Index. Such special opening quotation shall be determined on the third Friday of such delivery month and shall be based on opening prices of the component stocks of the Index. If the Index is not scheduled to be published on the third Friday of the contract month, the Final Settlement Price shall be determined on the first earlier day for which the Index is scheduled to be published.				
<b>Position Limits and Reportability Thresholds</b>	Position Reportability: 25 contracts  All-Month Position Limit: 60,000 S&P 500 Stock Price Index (SP) futures equivalents, subject to aggregation with SP futures and E-mini S&P 500 Stock Price Index (ES) futures. 5 S&P 500 Total Return futures = 1 SP futures equivalent.				
<b>Minimum Block Trade Threshold Level</b>	500 contracts (BTIC only)				
<b>CME Globex Matching Algorithm</b>	F: First In, First Out (FIFO)				
<b>Trading Hours and Venue</b>	CME Globex: 5pm to 3pm, Sun-Fri, Mon-Fri. CME ClearPort: 5pm to 4pm, Sun-Fri, Mon-Fri.				
	<table border="1"> <tr> <td><b>Product Code</b></td> <td><b>TRI</b></td> </tr> <tr> <td><b>BTIC Code</b></td> <td><b>TRB</b></td> </tr> </table>	<b>Product Code</b>	<b>TRI</b>	<b>BTIC Code</b>	<b>TRB</b>
<b>Product Code</b>	<b>TRI</b>				
<b>BTIC Code</b>	<b>TRB</b>				
	The price basis for all CME Globex or block transactions shall be BTIC only.				
	CME Rulebook Chapter 357				

## Section 1b – Contract Specifications for S&P 500 Carry Adjusted Total Return Index Futures

(Times referred to herein shall refer to and indicate Chicago time, unless otherwise noted.)

<b>Trading Unit</b>	\$25 x S&P 500 Carry Adjusted Total Return Index				
<b>Delivery Months</b>	Five nearest months in March Quarterly cycle (March, June, September, and December). Delivery months for initial listing: Dec 2016, Mar 2017, Jun 2017, Sep 2017, Dec 2017				
<b>Price Basis and Minimum Price Increment</b>	Prices are quoted and traded in Index points. Minimum price increments -- Outright: 0.50 Index points, equal to \$12.50 per contract. Basis Trade at Index Close (BTIC): 0.10 Index points, equal to \$2.50 per contract.				
<b>Price Limits</b>	There shall be no trading in S&P 500 Carry-Adjusted Total Return Index futures when trading is halted in the Primary Futures Contract Month for E-mini S&P 500 Index futures pursuant to Rule 35802.1				
<b>Termination of Trading</b>	Trading in expiring contracts terminates at close of CME Globex trading on the Exchange business day first preceding the 3 <sup>rd</sup> Friday of contract delivery month				
<b>Delivery</b>	Delivery is by cash settlement by reference to Final Settlement Price. The Final Settlement Price shall be a special opening quotation of the Index. Such special opening quotation shall be determined on the third Friday of such delivery month and shall be based on opening prices of the component stocks of the Index. If the Index is not scheduled to be published on the third Friday of the contract month, the Final Settlement Price shall be determined on the first earlier day for which the Index is scheduled to be published.				
<b>Position Limits and Reportability Thresholds</b>	Position Reportability: 25 contracts All-Month Position Limit: 60,000 S&P 500 Stock Price Index (SP) futures equivalents, subject to aggregation with SP futures and E-mini S&P 500 Stock Price Index (ES) futures. 5 S&P 500 Total Return futures = 1 SP futures equivalent.				
<b>Minimum Block Trade Threshold Level</b>	500 contracts (BTIC only)				
<b>CME Globex Matching Algorithm</b>	F: First In, First Out (FIFO)				
<b>Trading Hours and Venue</b>	CME Globex: 5pm to 3pm, Sun-Fri, Mon-Fri. CME ClearPort: 5pm to 4pm, Sun-Fri, Mon-Fri.				
	<table border="0"> <tr> <td><b>Product Code</b></td> <td><b>CTR</b></td> </tr> <tr> <td><b>BTIC Code</b></td> <td><b>CTB</b></td> </tr> </table>	<b>Product Code</b>	<b>CTR</b>	<b>BTIC Code</b>	<b>CTB</b>
<b>Product Code</b>	<b>CTR</b>				
<b>BTIC Code</b>	<b>CTB</b>				
	The price basis for all CME Globex or block transactions shall be BTIC only.				
	CME Rulebook Chapter 357A				

## Section 2 – Index Definition, Administration, Governance, and Characteristics

### Index Definition: S&P 500 index<sup>1</sup>

The S&P 500 index is administered, calculated, and published by S&P Dow Jones Indices LLC (“S&P DJI”), a part of McGraw Hill Financial. Created in 1957, it was the first US market-capitalization-weighted stock price index. The index is rebalanced after close of trading in US equity markets on the third Friday of every March Quarterly month. Each index constituent firm must meet the following criteria at the time of such rebalancing:

Listing Universe	US company
Market Capitalization	At least \$5.3 bln
Tradable Supply	At least 50% of shares outstanding must be available for trading.
Financial Viability	Positive as-reported earnings, both for the most recent quarter and for the most recent four quarters in aggregate
Liquidity and Price	Highly tradable common stock, with active and deep markets.

As of June 30, 2016, the index comprises 505 constituent firms, with aggregate market capitalization of \$19.086 trillion. The following statistics describe the distribution of index constituents in terms of their individual market capitalizations (in \$ blns):

Maximum	523.642
Average	37.794
Median	18.126
Minimum	2.329

The largest single constituent signifies 2.9% of index weight. The largest 10 constituents represent 17.8% of index weight.

The formula for calculation of the S&P 500 index is:<sup>2</sup>

$$IndexLevel = \frac{(\sum_i P_i(t) * Q_i(t))}{Divisor}$$

where

$i$  is the running variable that denotes each constituent stock. Currently,  $i = 1, 2, \dots, 505$

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<sup>1</sup> All statistics referenced herein are drawn from the S&P 500<sup>®</sup> Factsheet as of June 30, 2016, S&P Dow Jones Indices, McGraw-Hill Financial, 2016, available at: [http://us.spindices.com/idsenhancedfactsheet/file.pdf?calcFrequency=M&force\\_download=true&hostIdentifier=48190c8c-42c4-46af-8d1a-0cd5db894797&indexId=340](http://us.spindices.com/idsenhancedfactsheet/file.pdf?calcFrequency=M&force_download=true&hostIdentifier=48190c8c-42c4-46af-8d1a-0cd5db894797&indexId=340)

<sup>2</sup> The following paragraphs on index methodology are adapted from S&P U.S. Indices Methodology, S&P Dow Jones Indices, McGraw-Hill Financial, October 2015, available at: [http://us.spindices.com/documents/methodologies/methodology-sp-us-indices.pdf?force\\_download=true](http://us.spindices.com/documents/methodologies/methodology-sp-us-indices.pdf?force_download=true)

$P_i(t)$  is price per share of stock  $i$  at time  $t$ .

$Q_i(t)$  is the number of shares of stock  $i$  that enters into calculation of the index value for time  $t$ .

The numerator in the expression on the right hand side is the price of each index constituent stock multiplied by the number of shares used in the index calculation, summed across all index constituents.

The formula may be viewed as a modified Laspeyres price index. A Laspeyres price index would use quantities – equity share counts in this case – for an arbitrarily chosen base period (time 0) to calculate a weighted average price for its index constituents. Thus, for prices as of time  $t$ , indexed on the basis of prices as of time 0 (such that  $0 < t$ ), the Laspeyres index would be:

$$IndexLevel_t = \frac{(\sum_i P_i(t) * Q_i(0))}{(\sum_i P_i(0) * Q_i(0))}$$

In the modification that implements the S&P 500 index, the quantity measure in the numerator,  $Q_i(0)$ , is replaced by  $Q_i(t)$ . Thus, the S&P 500 index represents the aggregate of current market valuations of its constituent firms, indexed on the basis of the aggregate of market values of constituent stocks at time 0:

$$IndexLevel_t = \frac{(\sum_i P_i(t) * Q_i(t))}{(\sum_i P_i(0) * Q_i(0))}$$

The term in the denominator is replaced by the *Divisor* shown above, which represents the initial aggregate of market values and which sets the index normalizing value. In its role as the index normalizing factor, the *Divisor* incorporates a variety of adjustments, including additions of companies to the index, deletions of companies from the index, reduction of an index constituent's outstanding shares to account for floating supply (ie, exclusion of closely held shares), exclusion of an index constituent's shares that are subject to foreign ownership restrictions, and adjustments due to corporate actions such as mergers or spin-offs.

#### Index Definition: S&P 500 Total Return index<sup>3</sup>

The total return construction differs from the price index and builds the index from the price index and daily total dividend returns. The first step is to calculate the total dividend paid on a given day and convert this figure into points of the price index:

$$TotalDailyDividend = \sum_i Dividend_i * Shares_i$$

Where *Dividend* is the dividend per share paid for stock  $i$  and *Shares* are the shares. This is done for each trading day.  $Dividend_i$  is generally zero except for four times a year when it goes ex-dividend for the quarterly dividend payment. Some stocks do not pay a dividend and *Dividend* is always zero. *TotalDailyDividend* is measured in dollars. This is converted to index points by dividing by the divisor for the underlying price index:

$$IndexDividend = \frac{TotalDailyDividend}{Divisor}$$

The next step is to apply the usual definition of a total return from a financial instrument to the price index:

$$Total Return = \left( \frac{P_t + D_t}{P_{t-1}} \right) - 1$$

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<sup>3</sup> Adapted from <http://us.spindices.com/documents/methodologies/methodology-index-math.pdf>, page 30  
300 Vesey Street New York, NY 10282 T 212 299 2200 F 212 299 2299 christopher.bowen@cmegroup.com cmegroup.com

$$DTR_t = \left( \frac{IndexLevel_t + IndexDividend_t}{IndexLevel_{t-1}} - 1 \right)$$

Where *Total Return* and the daily total return for the index,  $DTR_t$ , is stated as a decimal. The  $DTR_t$  is used to update the total return index from one day to the next:

$$TotalReturnIndex_t = TotalReturnIndex_{t-1} * (1 + DTR_t)$$

#### Index Definition: S&P 500 Carry Adjusted Total Return index<sup>4</sup>

The S&P 500 Carry-Adjusted Total Return Index seeks to replicate the economic performance of a total return swap on the gross dividends reinvested in the S&P 500®.

The index consists of two components:

1. Equity Component: This consists of the S&P 500 total return index (“S&P 500 TR”).

2. Funding Component: This consists of floating rate payments and uses a reference rate (three-month USD Libor) that is applied to the notional value of the index (as observed at the most recent reference observation) for the days since the last reset (calculated on a settlement date basis). The index is reset quarterly, consistent with standard total return swap treatment. The reset of the reference S&P 500 TR index level is observed on the Tuesday prior to the third Friday of the months of March, June, September, and December. This aligns the reset behavior of the index with the quarterly expiry of certain futures contracts which may be used as hedging instruments. It should be noted, that due to different settlement conventions between equity markets (generally T+3) and interest rate products (generally T+2), the new three-month USD Libor rate is observed on the Wednesday following the Tuesday reset.

The index seeks to replicate the economic performance of a total return swap on the gross dividends reinvested in the S&P 500. The index consists of two components: 1) the S&P 500 TR and 2) three-month USD Libor.

Index Calculations: The index value at time  $t = T(I_T)$  is calculated as follows:

$$I_T = I_0 \left( \frac{S_T}{S_0} \right) - I_0 \left( \frac{r_0 * d_{0-T}}{360} \right) \quad (1)$$

where:

$I_T$  = The S&P 500 CATR index level at time  $t = T$

$I_0$  = The S&P 500 CATR closing index level on the Tuesday prior to the third Friday

$S_T$  = The S&P 500TR index level at time  $t = T$

$S_0$  = The S&P 500TR closing index level on the Tuesday prior to the third Friday

$r_0$  = The three-month USD Libor rate on Wednesday prior to the third Friday

$d_{0-T}$  = The number of calendar days from  $t = 0$  to  $t = T$

It should be noted that the subscript ‘0’ refers to the most recent quarterly (March, June, September, and December) reference observations.

<sup>4</sup> Adapted from <http://us.spindices.com/indices/equity/sp-500-carry-adjusted-total-return-index>  
300 Vesey Street New York, NY 10282 T 212 299 2200 F 212 299 2299 christopher.bowen@cmegroup.com cmegroup.com

It can be seen that the right hand side of equation (1) can be split into two components:

$I_0 \left( \frac{S_T}{S_0} \right)$  corresponds to the equity leg and is the percentage change in the S&P 500TR from  $t = 0$  to  $t = T$ .  
 $I_0 \left( \frac{r_0 * d_{0-T}}{360} \right)$  is the floating leg and reflects the funding of the index (notional at  $t = 0$ ) for the number of calendar days from  $t = 0$  to  $t = T$ .

#### Index Values for CME Futures Contract Final Settlements

Final settlement prices of expiring CME S&P Total Return futures and CME S&P Carry Adjusted Total Return futures are based on the Special Opening Quotation (SOQ) of the S&P 500 Total Return index and the S&P 500 Carry Adjusted Total Return index respectively on the day of futures contract expiration.<sup>5</sup> The Index and Carry Adjusted Index SOQ is calculated on the basis of the official opening price of each index constituent stock, as established according to the rules of that constituent's primary listing exchange. Such official opening prices are received by S&P DJI from two independent pricing vendors and are matched to ensure accuracy. The vendors receive such opening prices from the primary listing exchanges. If a primary listing exchange is unable to provide an official opening price for an index constituent, the opening price as reported on the Regulation NMS "consolidated tape" is used instead. If such opening price is not available on the "consolidated tape," then the SOQ is calculated on the basis of the previous closing price for such index constituent stock, adjusted for corporate actions.

#### Index Administration and Governance

The index administrator, S&P DJI, was formed in June 2012 as a joint venture between S&P Indices and Dow Jones Indexes. Headquartered in New York, S&P DJI employs over 390 persons operating in 20 offices worldwide.

In July 2015, S&P DJI issued a Statement of Alignment with respect to the recommendations made by the International Organization of Securities Commissions ("IOSCO") in its Principles for Financial Benchmarks Final Report ("IOSCO Principles"). In this connection, S&P DJI engaged Ernst & Young LLP "to perform a reasonable assurance examination of S&P DJI's assertion of their alignment with the IOSCO Principles." The Statement of Alignment, including the findings of the reasonable assurance examination by Ernst & Young LLP, may be found among "IOSCO Documents" at <http://us.spindices.com/resource-center/index-policies/>

"S&P DJI's overall governance and control framework is comprised of a variety of components that, together, protect the integrity and quality of its Benchmarks. These components include:

- a) A corporate structure that isolates the S&P DJI Benchmark business into a single corporate entity.
- b) An organizational/operating structure that separates commercial, operational and editorial/analytical functions into distinct reporting lines.
- c) An independent Benchmark governance body (Index Committees) with documented Benchmark governance policies and procedures.
- d) A control framework to ensure a sound process for developing, calculating and distributing its Benchmarks.
- e) An oversight function that monitors and enforces, among other things, S&P DJI's compliance with its various conflicts of interest policies.

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<sup>5</sup> The discussion of the Special Opening Quotation is adapted from Equity Indices Policies & Practices Methodology, S&P Dow Jones Indices, McGraw-Hill Financial, December 2015, available at: [http://us.spindices.com/documents/methodologies/methodology-sp-equity-indices-policies-practices.pdf?force\\_download=true](http://us.spindices.com/documents/methodologies/methodology-sp-equity-indices-policies-practices.pdf?force_download=true)



- f) Processes with designated individuals and teams to work with and oversee the various third parties involved in the Benchmark determination process.”<sup>6</sup>

## Section 3 – Index Evaluation

The CEA requires that security futures products, defined to comprise single stock futures and futures on narrow-based security indexes, shall be subject to the joint jurisdiction of the CFTC and the Securities Exchange Commission (“SEC”). Futures products for which the underlying references are broad-based security indexes remain under the sole jurisdiction of the CFTC.

Section 1a(25) of the Act defines a narrow-based index to be an index

- (i) which has nine (9) or fewer component securities; or
- (ii) in which any component security comprises more than 30 percent of the index’s weighting; or
- (iii) in which the 5 highest weighted component securities in the aggregate represent more than 60 percent of the index’s weighting; or
- (iv) in which the lowest weighted component securities comprising, in the aggregate, 25 percent of the index’s weighting have an aggregate dollar value of average daily trading volume of less than USD 50,000,000 (or in the case of an index with 15 or more component securities, less than USD 30,000,000).

The Contracts fail to meet any criterion for consideration as a narrow-based index. *The Exchange has determined, therefore, that the Contracts shall be listed for trading under the sole jurisdiction of the CFTC.*

In respect of criterion (i), the number of Index and Carry Adjusted Index components is the same 505 securities, which exceeds the 9-security minimum threshold.

In respect of criteria (ii), (iii), and (iv), Exhibit 1 displays summary statistics of daily data for the 9-month interval 1 October 2015 through 30 June 2016. Results are based on the S&P 500 Index, which has identical components for the S&P Total Return Index and the S&P Carry Adjusted Total Return Index.

For criterion (ii), test results appear in the left-hand panel. For each index, the entire empirical distribution of daily outcomes resides far below the 30 percent threshold that would signify a narrow-based index. At no point does any index’s largest component stock account for more than 4 percent of index weight.

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<sup>6</sup> Quoted passages in this section are drawn from *Management Statement of Alignment with the IOSCO Principles for Financial Benchmarks*, Section 1, pg 2, S&P Dow Jones Indices, McGraw Hill Financial, 21 July 2015, available at <http://us.spindices.com/resource-center/index-policies/>

**Exhibit 1**  
**CEA Section 1a(25) Narrow-Based Index Tests for the S&P 500 Index**

Quantiles of empirical distributions of daily measures of index characteristics, 1 October 2015 to 30 June 2016.

	<i>Criterion (ii)</i>	<i>Criterion (iii)</i>	<i>Criterion (iv)</i>
	<i>Index weight of largest index component (pct)</i>	<i>Aggregate index weight of largest 5 index components (pct)</i>	<i>Trading volume of smallest index components aggregating to 25 pct of index weight (\$ blns/day)</i>
<i>Maximum</i>	3.8	11.2	66.55
<i>75 Pctl</i>	3.6	11.0	24.07
<i>Median</i>	3.3	10.9	24.08
<i>25 Pctl</i>	3.2	10.7	21.93
<i>Minimum</i>	2.8	10.4	9.10

Data Source: Bloomberg LLC

Similar results obtain for criterion (iii), shown in the middle panel. In each case, the distribution of aggregate weight of the index's largest five component stocks lies well below 60 percent. Nowhere do the largest five members of the index account for more than 12 percent of index weight.

Summary statistics for distributions of trading volume, shown in Exhibit 1's right-hand panel, demonstrate that the Index is not narrow-based in the sense of criterion (iv). The test procedure is to rank each of the Index's component stocks from smallest market capitalization to largest, then to identify components with smallest market capitalizations in sufficient number to account for 25 percent of Index weight. If the representative aggregate daily trading volume of such identified index components were less than USD 30 mln, then the Index would be considered narrow-based.

During the 9-month sample analyzed here, daily values of trading volume in the Index's bottom-quartile constituent stocks reside in the neighborhood \$24 bln per day. The minimum observed daily trading volume is \$9.1 bln, which exceeds the test threshold by at least two orders of magnitude.

## Section 4 – Block Trading Standards

Standards for block trading in the Contracts shall be comparable to established standards that apply to other equity index futures products that the Exchange now lists for trading. The minimum size threshold for a Basis Trade at Index Close (“BTIC”) block transaction in the Contracts for a given delivery month shall be 500 contracts.

## Section 5 -- Compliance with Core Principles

The Exchange has reviewed the designated contract market core principles (“Core Principles”) as set forth in the Act and has identified that the new product terms and conditions certified herein may bear upon the following Core Principles:

### **Core Principle 2 – Compliance with Rules**

Trading in the contracts certified herein shall be subject to CME Rulebook Chapter 4, which includes prohibitions against fraudulent, noncompetitive, unfair, and abusive practices. Additionally, trading in these contracts shall be subject to the Exchange’s trade practice rules, the majority of which are contained in Chapter 5 and Chapter 8 of the Rulebook. Trading activity in this contract shall be subject to monitoring and surveillance by CME Group’s Market Regulation Department, which has the authority to exercise its investigatory and enforcement power where potential rule violations are identified.

### **Core Principle 3 – Contracts Not Readily Subject to Manipulation**

For the futures contracts certified herein, the underlying reference Indexes are sufficiently broad in definition and scope, and adequately large in terms of market capitalization and level of trading activity of Index constituents, to satisfy the requirement that such futures contracts are not readily susceptible to attempted cornering or manipulation.

As of 30 June 2016, the S&P Total Return Index and the S&P Carry Adjusted Total Return Index each comprised the same 505 component stocks with approximate aggregate market capitalization of \$19.086 trillion.<sup>7</sup> During the interval 1 October 2015 to 30 June 2016, the representative pace of turnover is approximately \$33.7 bln per day. (See Exhibit 2.)

### **Exhibit 2 - Scale Measures for S&P 500 Index**

Left-hand panel: Quantiles of empirical distributions of daily trading volume, 1 October 2015 to 30 June 2016.

	<i>Aggregate trading value of index components (USD blns/day)</i>	<i>Aggregate market capitalization on 30 Jun 2016 (USD blns)</i>
<i>Maximum</i>	95.52	19,086
<i>75 Pctl</i>	38.60	
<i>Median</i>	33.67	
<i>25 Pctl</i>	30.30	
<i>Minimum</i>	12.92	

Data Source: Bloomberg LLC

Whether S&P Carry Adjusted Total Return Index is susceptible to manipulation rests additionally on the integrity of 3-month US dollar ICE LIBOR. The following paragraphs review the administration, definition, calculation, and regulatory oversight of ICE LIBOR.

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<sup>7</sup> S&P Indices

### **Administration and Oversight of LIBOR**

Since mid-2012, the CFTC, the UK Financial Conduct Authority (FCA) and its predecessor, the UK Financial Services Authority (FSA), and other financial regulators have brought enforcement actions against several commercial banks and interbank brokerage firms in connection with misconduct in respect of Libor and other short-term interest rate benchmarks. To date, such enforcement actions undertaken by the FSA, and latterly the FCA, and the corresponding financial penalties, are as follows<sup>8</sup> --

Jun 2012	Barclays Bank plc	£59.5 mln
Dec 2012	UBS AG	£160.0 mln
Feb 2013	Royal Bank of Scotland plc	£87.5 mln
Sep 2013	ICAP Europe Ltd	£14.0 mln
Oct 2013	Rabobank BA	£105.0 mln
May 2014	Martin Brokers (UK) Ltd	£630,000
Jul 2014	Lloyds Bank plc/Bank of Scotland plc	£105.0 mln

The FCA continue “to take enforcement action in relation to benchmark misconduct.”<sup>9</sup>

In July 2012, the Chancellor of the Exchequer commissioned the Wheatley Review of Libor to perform an independent review of the setting and use of Libor.<sup>10</sup> Among the Wheatley Review’s recommendations was that a legislative framework should be enacted for regulation of financial market benchmarks, such as Libor. The elements of the recommended framework included the creation of two new regulated activities: (i) administering a specified benchmark; and (ii) providing information in relation to a specified benchmark. The recommended regulatory regime became law through amendments to Financial Services and Markets Act of 2000 (via passage of the Financial Services Act of 2012) and to the associated Regulated Activities Order. In consequence, the laws of England now require that firms that either contribute to or administer any ‘specified benchmark’ named by HM Government in secondary legislation must be authorized by the FCA. Moreover, any firm so authorized may face sanctions, including financial penalties, suspensions, and censures, if it breaches any of the FCA’s rules and principles. The Financial Services Act of 2012 identified Libor as a ‘specified benchmark.’

Another of the principal recommendations of the Wheatley Review of Libor was that the incumbent Libor administrator, BBA Libor Ltd, should cede responsibility for management of Libor to a newly appointed administrator. For this purpose, on 25 February 2013 HM Government empaneled the independent Hogg Tendering Advisory Committee for Libor (Committee), which was mandated by HM Treasury and the FSA to oversee selection of a new Libor administrator and to recommend its selection to the British Bankers’ Association (BBA) as a replacement for BBA Libor Ltd.

<sup>8</sup> See <http://www.fca.org.uk/firms/being-regulated/enforcement/fines/2013>,

<http://www.fca.org.uk/firms/being-regulated/enforcement/fines>,

UK Financial Services Authority, Enforcement Annual Performance Account 2012/13, 1 July 2013, available at <https://www.google.com/url?q=http://www.fca.org.uk/static/documents/annual-report/fsa-enforcement-performance-account-2012-13.pdf&sa=U&ei=mHotVOurlS3yATxiYCQAQ&ved=0CA0QFjAE&client=internal-uds-cse&usq=AFQjCNH3ZJEBsYE16FyZirJ2aQQ0uU2Y-Q>, and

UK Financial Conduct Authority, Enforcement Annual Performance Account, 1 July 2014, available at <https://www.google.com/url?q=http://www.fca.org.uk/static/documents/corporate/enforcement-annual-performance-account-13-14.pdf&sa=U&ei=mHotVOurlS3yATxiYCQAQ&ved=0CAwQFjAD&client=internal-uds-cse&usq=AFQjCNHHQccs4QLbS6ivYWohUd7mlo1fCw>

<sup>9</sup> See, eg, UK Financial Conduct Authority, Enforcement Annual Performance Account, 1 July 2014, *ibid*.

<sup>10</sup> Wheatley, Martin, et al. The Wheatley Review of Libor: Final Report, 28 September 2012, available at [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/191762/wheatley\\_review\\_libor\\_finalreport\\_280912.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/191762/wheatley_review_libor_finalreport_280912.pdf)

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On 17 April 2013, the Committee published an Invitation to Tender (ITT). After assessing the bid responses in light of the criteria in the ITT, the Committee concluded that NYSE Euronext Rate Administration Ltd was best placed among them to achieve an orderly transition to an effective new regime for management of Libor and to restore Libor's credibility. On 9 July 2013 it was announced that the BBA, which supported the appointment of the Committee and the tender process, had accepted the Committee's recommendation that NYSE Euronext Rate Administration Ltd should be the new Libor administrator.

NYSE Euronext Rate Administration Ltd was subsequently reorganized as ICE Benchmark Administration Ltd, following the acquisition of NYSE Euronext by the Intercontinental Exchange (ICE) on 13 November 2013. On 17 January 2014 the UK Financial Conduct Authority (FCA) confirmed formal authorization for ICE Benchmark Administration Limited to succeed BBA Libor Ltd as the administrator of Libor. On 1 February 2014, ICE Benchmark Administration Limited, a UK-based company regulated in the UK by the FCA, commenced operating as the administrator of Libor.

### **ICE LIBOR**

Despite past misdeeds having cast doubt upon Libor's integrity, ICE LIBOR remains the primary gauge of the prevailing rate at which a leading bank can obtain unsecured funding in the London interbank market.<sup>11</sup>

For daily settings of US dollar Libor, ICE Benchmark Administration Limited relies upon a Contributor Panel of 18 Contributor Banks. Since 1 December 2011, these Contributor Banks are:

Bank of America	JP Morgan Chase
Bank of Tokyo-Mitsubishi UFJ Ltd	Lloyds Banking Group
Barclays Bank plc	Norinchukin Bank
BNP Paribas	Rabobank
Citibank NA	Royal Bank of Canada
Credit Agricole CIB	Royal Bank of Scotland Group
Credit Suisse	Société Générale
Deutsche Bank AG	Sumitomo Mitsui Banking Corporation
HSBC	UBS AG

### **ICE LIBOR Defined**

The ICE LIBOR Code of Conduct defines ICE LIBOR for any given term to maturity as the rate at which a Contributor Bank could borrow funds at that term to maturity, were it to do so by asking for and then accepting interbank offers in reasonable market size just prior to 11 am London time. (See Section 3.1 of ICE LIBOR Code of Conduct at [https://www.theice.com/publicdocs/IBA\\_Code\\_of\\_Conduct.pdf](https://www.theice.com/publicdocs/IBA_Code_of_Conduct.pdf).) This definition is legally required to undergo regular review by an Oversight Committee, which ICE Benchmark Administration Limited is legally required to empanel and to regularly convene. (See Chapter 8 of FCA Market Conduct Sourcebook at <http://fshandbook.info/FS/html/handbook/MAR/8>.) Since 1 February 2014, the Oversight Committee includes a representative of CME Group.

The methodological framework and standards that LIBOR Contributor Banks are legally required to uphold is set forth in the Submission Methodology Annex of the ICE LIBOR Code of Conduct. (See pp 12-13 and pp 24-27 of ICE LIBOR Code of Conduct, available at [https://www.theice.com/publicdocs/IBA\\_Code\\_of\\_Conduct.pdf](https://www.theice.com/publicdocs/IBA_Code_of_Conduct.pdf).)

### **Calculation of ICE LIBOR**

Data submitted by Contributor Banks are received and processed by Thomson Reuters, which remains the designated calculation agent for ICE LIBOR, and are used to calculate ICE LIBOR according to guidelines set forth in the ICE LIBOR Code of Conduct.

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<sup>11</sup> For a recent and definitive survey of the extent of US dollar Libor's use, and of the breadth of purpose to which market practitioners apply it, see Duffie, Darrell, et al. Market Participants Group on Reforming Interest Rate Benchmarks – Final Report, Chapters 1 and 2, Financial Stability Board, March 2014, available at [http://www.financialstabilityboard.org/publications/r\\_140722b.htm](http://www.financialstabilityboard.org/publications/r_140722b.htm)

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A Thomson Reuters communication software application is installed at each Contributor Bank, enabling it to make its rate submissions confidentially. Each morning, during a submission interval between 11:00am and 11:10am London time, a Benchmark Manager responsible for the Contributor Bank's formulation of its rate submissions transmits them via the application to a rate-setting team at Thomson Reuters.

Under the regulations enforced by the FCA, the role of Benchmark Manager is recognized as a Controlled Function (CF40). Accordingly, the Benchmark Manager must be a natural person approved by the FCA to exercise the controlled function relating to the oversight of the respective Contributor Bank's compliance with Section 8.2 of the FCA Market Conduct Sourcebook (MAR), as required by MAR Section 8.2.3R. (See ICE LIBOR Code of Conduct, especially Section 1 and Section 2. See also FCA Market Conduct Sourcebook, Chapter 8, at <http://fshandbook.info/FS/html/handbook/MAR/8>.)

No Contributor Bank can see other Contributor Bank rate submissions during the submission interval. Before sending a Contributor Bank's rate submissions for calculation, Thomson Reuters perform a battery of automated and manual diagnostic tests to identify data points requiring scrutiny. These tests include filters to detect the following potential anomalies:

Any rate submission (for a given currency denomination and tenor) that moves more than 4 basis points per annum from the previous corresponding rate submission.

Any rate submission that "crosses the quote," ie, a rate submission that is below the preliminary ICE LIBOR value for today, but for which the previous corresponding rate submission was above the previous day's ICE LIBOR value (or vice versa).

Any rate submission that signifies a spike up or down relative to a linear interpolation of adjacent points on the term structure of the Contributor Bank's set of rate submissions for a given currency denomination.

Thomson Reuters analysts are instructed to confirm with the pertinent Contributor Bank any data point that these filters identify as unusual or anomalous.

With the primary data having been thus filtered and checked, each Libor value is calculated as an interquartile mean. That is, for any given interest rate tenor and currency denomination, Thomson Reuters rank the corresponding submitted values in descending order, then trim out approximately the highest and lowest quartiles. For US dollar Libor the trimming process is as follows:

Number of Contributor Banks: 18

Trimming Methodology: Exclude 4 highest rates, and exclude 4 lowest rates.

Number of Contributor Banks on which US Dollar ICE LIBOR is based: 10

Remaining Contributor Bank rate submissions – approximately those within the interquartile range – are arithmetically averaged to create that day's Libor value.

At the conclusion of the process, results are published via Thomson Reuters and other licensed data vendors, generally around 11:45am London time.

#### ***Core Principle 4 – Prevention of Market Disruption***

Trading in the Contracts shall be subject to CME Rulebook Chapters 4 and 7, which include prohibitions on manipulation, price distortion, and disruption to the expiration and assignment process. As with any new product listed for trading on a CME Group designated contract market, trading activity in the contracts certified herein shall be subject to monitoring and surveillance by CME Group's Market Regulation Department.

### ***Core Principle 5 – Position Limits or Accountability***

Each of the Contracts shall be subject to a Position Reporting Level of 25 contracts.

Both new futures products shall be subject, moreover, to an all-month position limit of 60,000 net long or short S&P 500 Stock Price Index (SP) futures equivalents, aggregated with S&P 500 Stock Price Index futures and E-mini S&P 500 Stock Price Index futures. Five S&P 500 Total Return Index futures shall signify one SP futures equivalent, and Five S&P 500 Carry Adjusted Total Return Index futures shall signify one SP futures equivalent.

Both requirements are broadly comparable to standards that apply to US equity index futures products currently listed for trading by the Exchange. To place the prescribed Position Limits in context, consider market conditions on 30 June 2016. With the closing value of the S&P Total Return Index at 3,968.21, the notional value of a hypothetical 60,000-contract limit position in S&P Total Return Index futures would have been approximately \$5.95 billion (equal to (3,968.21 Index points) x (\$25 per Index point per contract) x (60,000 contracts)). This represents approximately .31% percent of the Index's closing market capitalization of \$19 trillion.

### ***Core Principle 7 – Availability of General Information***

The Exchange shall disseminate a Special Executive Report ("SER") that sets forth information in regard to specifications, terms, and conditions of the Contracts. In addition to such SER, daily trading volume, open interest, and price information for such futures contracts shall be published on the Exchange's website.

### ***Core Principle 8 – Daily Publication of Trading Information***

The Exchange shall publish contract trading volumes, open interest levels, and price information daily on its website and through quote vendors.

### ***Core Principle 9 – Execution of Transactions***

The Contracts shall be listed for trading on CME Globex, which provides for efficient, competitive, and open execution of transactions. Additionally, CME Globex affords the benefits of reliability and global connectivity. The applicable CME Globex non-reviewable trading ranges shall be as set forth in Appendix D.

### ***Core Principle 10 – Trade Information***

All requisite trade information shall be included in the audit trail and will suffice for the Market Regulation Department to monitor for market abuse.

### ***Core Principle 11 – Financial Integrity of Transactions***

The Contracts shall be cleared by CME Clearing, which is registered with the Commission as a derivatives clearing organization, and which is subject to all CFTC regulations related thereto.

### ***Core Principle 12 – Protection of Markets and Market Participants***

CME Rulebook Chapters 4 and 5 set forth multiple strictures that preclude intermediaries from disadvantaging their customers. These Rules apply to trading in all of the Exchange's competitive trading venues and will apply to transactions in the contracts certified herein.

### ***Core Principle 13 – Disciplinary Procedures***

CME Rulebook Chapter 4 provides for the Exchange to discipline, suspend, or expel members or market participants who violate the rules of the Exchange. Trading in the Contracts shall be subject to these provisions. The Exchange's Market Regulation Department has the authority to exercise its powers of enforcement, in the event that rule violations in these products are identified.

### ***Core Principle 14 – Dispute Resolution***

Disputes in respect of the Contracts shall be subject to the arbitration provisions set forth in CME Rulebook Chapter 6, which allow all nonmembers to submit to arbitration claims for financial loss resulting from



transactions on the Exchange. Pursuant to these provisions, any member named as a respondent in any such claim submitted by a nonmember is required to participate in arbitration proceedings. Additionally, the Exchange requires members to resolve via arbitration all disputes concerning transactions on the Exchange.

The Exchange certifies that the Contracts certified herein comply with the Act including all regulations thereunder. There were no substantive opposing views to this proposal.

The Exchange certifies that this submission has been concurrently posted on the Exchange's website at <http://www.cmegroup.com/market-regulation/rule-fillings.html>.

Should you have any questions concerning the above, please contact the undersigned at (212) 299-2200 or [CMEGSubmissionInquiry@cmegroup.com](mailto:CMEGSubmissionInquiry@cmegroup.com).

Sincerely,

/s/ Christopher Bowen  
Managing Director and Chief Regulatory Counsel

Attachments:	Appendix A	CME Rulebook Chapters 357 and 357A
	Appendix B	Position Limit, Position Accountability, and Reportable Level Table in Chapter 5 of the CME Rulebook (attached under separate cover)
	Appendix C	CME Rule 588.H. – Globex Non-Reviewable Trading Ranges Table
	Appendix D	CME Rule 589. – Special Price Fluctuation Limits
	Appendix E	Exchange Fee Schedule



## **Appendix A**

### **Chapter 357 S&P 500 Total Return Index Futures**

#### **35700. SCOPE OF CHAPTER**

This chapter is limited in application to S&P 500 Total Return Index futures (“futures”). In addition to this chapter, futures shall be subject to the general rules and regulations of the Exchange as applicable.

Unless otherwise specified, times referenced herein shall refer to and indicate Chicago time.

##### **35700.A. Market Decline**

For the purposes of this chapter a Market Decline shall be as defined in New York Stock Exchange Rule 80B for Trading Halts Due to Extraordinary Volatility or in Nasdaq Stock Market Rule 4121 for Trading Halts Due to Extraordinary Volatility.

##### **35700.B. Primary Listing Exchange**

For the purposes of this chapter a Primary Listing Exchange shall be as defined in the “Plan to Address Extraordinary Market Volatility Submitted to the Securities and Exchange Commission Pursuant to Rule 608 of Regulation NMS Under the Securities Exchange Act of 1934” approved 31 May 2012 by the U.S. Securities and Exchange Commission (“SEC”), as amended from time to time (SEC, SRO Rulemaking, National Market System Plans, File 4-631).

##### **35700.C. Regulatory Halt**

For the purposes of this chapter a Regulatory Halt shall be as defined in the “Plan to Address Extraordinary Market Volatility Submitted to the Securities and Exchange Commission Pursuant to Rule 608 of Regulation NMS Under the Securities Exchange Act of 1934” approved 31 May 2012 by the SEC, as amended from time to time (SEC, SRO Rulemaking, National Market System Plans, File 4-631) and as implemented under New York Stock Exchange Rule 80B for Trading Halts Due to Extraordinary Volatility or under Nasdaq Stock Market Rule 4121 for Trading Halts Due to Extraordinary Volatility.

#### **35701. CONTRACT SPECIFICATIONS**

Each futures contract shall be valued at \$25.00 times the S&P 500 Total Return Index (“Index”).

#### **35702. TRADING SPECIFICATIONS**

##### **35702.A. Trading Schedule**

Futures contracts shall be scheduled for trading during such hours and for delivery in such months as may be determined by the Exchange, *provided that* there shall be no trading in futures contracts when trading is halted in the Primary Futures Contract Month for E-mini S&P 500 Stock Price Index futures pursuant to Rule 35802.I.

##### **35702.B. Trading Unit**

The unit of trading shall be \$25.00 times the Index.

##### **35702.C. Price Increments**

Bids and offers shall be quoted in Index points, subject to the Interpretations & Special Notices Relating to Chapter 357.

##### **35702.D. Position Limits, Exemptions, Position Accountability and Reportable Levels**

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

**35702.E. [Reserved]**

**35702.F. [Reserved]**

**35702.G. Termination of Trading**

Subject to the Interpretations & Special Notices Relating to Chapter 357, there shall be no trading of expiring futures contracts after the open of the Primary Listing Exchange on the day of Final Settlement Price determination for such contracts (Rule 35703.A).

**35702.H. [Reserved]**

**35702.I. [Reserved]**

**35703. SETTLEMENT PROCEDURES**

Delivery shall be by cash settlement.

**35703.A. Final Settlement Price**

For a futures contract for a given delivery month, the Final Settlement Price shall be a special opening quotation of the Index. Such special opening quotation shall be determined on the third Friday of such delivery month and shall be based on opening prices of the component stocks of the Index.

If the Index is not scheduled to be published on the third Friday of the contract delivery month, then such Final Settlement Price shall be scheduled for determination on the first preceding Business Day on which the Index is scheduled to be published.

If the Primary Listing Exchange for a component stock of the Index does not open on the day scheduled for determination of such Final Settlement Price, then for the purpose of calculating such Final Settlement Price the price of such component stock shall be its opening price on the next following day on which its Primary Listing Exchange is open for trading.

If a component stock of the Index does not trade on the day scheduled for determination of such Final Settlement Price, and the Primary Listing Exchange for such stock is open for trading, then for the purpose of calculating such Final Settlement Price the price of such stock shall be its last sale price, provided that the Exchange in its sole discretion may instruct that the price of such stock shall be its opening price on the next following day that it is traded on its Primary Listing Exchange.

**35703.B. Final Settlement**

Clearing members holding open positions in an expiring futures contract at its termination of trading (Rule 35702.G.) shall make payment to or receive payment from the Clearing House in accordance with normal variation margin procedures based on such expiring contract's Final Settlement Price (Rule 35703.A.).

**35704. [RESERVED]**

**35705. [RESERVED]**

**35706. BASIS TRADE AT INDEX CLOSE (“BTIC”) TRANSACTIONS**

Futures shall be eligible for BTIC transactions.

For any BTIC transaction in futures on a given Trading Day, the price shall be based on the Index closing price on such Trading Day, adjusted by an admissible futures price increment (“basis adjustment”) above or below such Index closing price, in accordance with Rule 35706.C. The magnitude of such basis adjustment must be fair and reasonable in light of factors such as, but not limited to, financing rates, expected dividend income, and time remaining until futures contract expiration.

**35706.A. BTIC Block Trade Requirements**

A BTIC transaction in futures may be executed as a block trade, *provided that* such block trade is executed in accordance with CME Rule 526.

Both the size of such block trade and any applicable basis adjustment shall be reported to the Exchange within five (5) minutes after agreement by the parties to such trade.

For a BTIC block trade that is executed on a given Trading Day and reported to the Exchange at least 10 minutes prior to the scheduled close of the Primary Listing Exchange, the corresponding futures price

shall be made by reference to the Index closing price for the current Trading Day. For such BTIC block trade that is reported to the Exchange later than 10 minutes prior to the scheduled close of the Primary Listing Exchange, the corresponding futures price shall be made by reference to the Index closing price for the next following Trading Day.

#### **35706.B. Price Assignment Procedure for BTIC Futures**

The price of a BTIC transaction shall be determined by the Exchange at 3:45 p.m. (or within 45 minutes after the close of the Primary Listing Exchange in the case of an early scheduled close of the Primary Listing Exchange). Such price determination shall be deemed final.

Where an order for a BTIC block trade would result in a futures price lower than the respective 20% Price Limit (Rule CCC02.1.), such BTIC block trade order shall be cancelled.

#### **35706.C. BTIC Order Minimum Price Increment**

The minimum price increment shall be 0.10 Index points, equal to \$2.50 per contract, for any basis adjustment that is applied to an Index closing price to establish a BTIC transaction price.

#### **35706.D. BTIC Orders Prohibited on Last Day of Trading**

Orders for BTIC transactions in expiring futures may not be initiated on the day of Final Settlement Price determination in such expiring futures (Rule 35702.G.).

#### **35706.E. Market Disruption Events**

In the event of disruption in the Primary Listing Exchange, all orders for BTIC block trades in futures shall be cancelled. Such event of disruption shall be declared by the Exchange, in its sole discretion, and may include without limitation:

1. unscheduled early closure of the primary securities market, or
2. a NYSE Rule 80B trading halt declared in response to a Level 3 (20%) decline in the S&P 500 Index, necessitating early close of the Primary Listing Exchange.

### **INTERPRETATIONS & SPECIAL NOTICES RELATING TO CHAPTER 357**

#### **1. Trading Specifications**

Until such time as the Exchange shall enable outright trading in futures contracts made under these Rules, trading shall be permitted only where such futures contracts are traded through Basis Trade at Index Close transactions pursuant to CME Rules 524.B. (Basis Trade at Index Close ("BTIC") Transactions) and Rules 35706 of this Chapter.

Accordingly, pursuant to Rule 35706.A. of this Chapter, trading in an expiring futures contract shall terminate at 10 minutes prior to the scheduled close of the Primary Listing Exchange on the Exchange business day first preceding the day of Final Settlement Price determination for such futures contract.

### **DISCLAIMER**

Standard & Poor's, a division of the McGraw-Hill Companies, Inc. ("S&P"), licenses the Exchange to use various S&P stock indices ("S&P Stock Indices") in connection with the trading of futures contracts and options on futures contracts based upon such indices. S&P shall have no liability for damages, claims, losses or expenses caused by any errors or delays in calculating or disseminating the S&P Stock Indices.

Standard & Poor's, a division of the McGraw-Hill Companies, Inc. ("S&P"), does not guarantee the accuracy and/or completeness of the S&P Stock Indices or any data included therein. S&P makes no warranty, express or implied, as to the results to be obtained by any person or any entity from the use of the S&P Stock Indices or any data included therein in connection with the trading of futures contracts, options on futures contracts and any other use. S&P makes no express or implied warranties, and expressly disclaims all warranties of merchantability or fitness for a particular purpose or use with respect to the S&P Stock Indices or any data included therein. Without limiting any of the foregoing, in no event shall S&P have any liability for any special, punitive, indirect or consequential damages (including lost profits), even if notified of the possibility of such damages.

## Chapter 357A

### S&P 500 Carry Adjusted Total Return Index Futures

#### **357A00. SCOPE OF CHAPTER**

This chapter is limited in application to S&P 500 Carry Adjusted Total Return Index futures (“futures”). In addition to this chapter, futures shall be subject to the general rules and regulations of the Exchange as applicable.

Unless otherwise specified, times referenced herein shall refer to and indicate Chicago time.

##### **357A00.A. Market Decline**

For the purposes of this chapter a Market Decline shall be as defined in New York Stock Exchange Rule 80B for Trading Halts Due to Extraordinary Volatility or in Nasdaq Stock Market Rule 4121 for Trading Halts Due to Extraordinary Volatility.

##### **357A00.B. Primary Listing Exchange**

For the purposes of this chapter a Primary Listing Exchange shall be as defined in the “Plan to Address Extraordinary Market Volatility Submitted to the Securities and Exchange Commission Pursuant to Rule 608 of Regulation NMS Under the Securities Exchange Act of 1934” approved 31 May 2012 by the U.S. Securities and Exchange Commission (“SEC”), as amended from time to time (SEC, SRO Rulemaking, National Market System Plans, File 4-631).

##### **357A00.C. Regulatory Halt**

For the purposes of this chapter a Regulatory Halt shall be as defined in the “Plan to Address Extraordinary Market Volatility Submitted to the Securities and Exchange Commission Pursuant to Rule 608 of Regulation NMS Under the Securities Exchange Act of 1934” approved 31 May 2012 by the SEC, as amended from time to time (SEC, SRO Rulemaking, National Market System Plans, File 4-631) and as implemented under New York Stock Exchange Rule 80B for Trading Halts Due to Extraordinary Volatility or under Nasdaq Stock Market Rule 4121 for Trading Halts Due to Extraordinary Volatility.

#### **357A01. CONTRACT SPECIFICATIONS**

Each futures contract shall be valued at \$25.00 times the S&P 500 Carry Adjusted Total Return Index (“Index”).

#### **357A02. TRADING SPECIFICATIONS**

##### **357A02.A. Trading Schedule**

Futures contracts shall be scheduled for trading during such hours and for delivery in such months as may be determined by the Exchange, *provided that* there shall be no trading in futures contracts when trading is halted in the Primary Futures Contract Month for E-mini S&P 500 Stock Price Index futures pursuant to Rule 35802.I.

##### **357A02.B. Trading Unit**

The unit of trading shall be \$25.00 times the Index.

##### **357A02.C. Price Increments**

Bids and offers shall be quoted in Index points, subject to the Interpretations & Special Notices Relating to Chapter 357A.

##### **357A02.D. Position Limits, Exemptions, Position Accountability and Reportable Levels**

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

##### **357A02.E. [Reserved]**

**357A02.F. [Reserved]**

**357A02.G. Termination of Trading**

Subject to the Interpretations & Special Notices Relating to Chapter 357A, there shall be no trading of expiring futures contracts after the open of the Primary Listing Exchange on the day of Final Settlement Price determination for such contracts (Rule 357A03.A.)

**357A02.H. [Reserved]**

**357A02.I. Price Limits and Trading Halts**

Futures trading shall be subject to Price Limits as set forth in Rule 35802.I.

**357A03. SETTLEMENT PROCEDURES**

Delivery shall be by cash settlement.

**357A03.A. Final Settlement Price**

For a futures contract for a given delivery month, the Final Settlement Price shall be a special opening quotation of the Index. Such special opening quotation shall be determined on the third Friday of such delivery month and shall be based on opening prices of the component stocks of the Index.

If the Index is not scheduled to be published on the third Friday of the contract delivery month, then such Final Settlement Price shall be scheduled for determination on the first preceding Business Day on which the Index is scheduled to be published.

If the Primary Listing Exchange for a component stock of the Index does not open on the day scheduled for determination of such Final Settlement Price, then for the purpose of calculating such Final Settlement Price the price of such component stock shall be its opening price on the next following day on which its Primary Listing Exchange is open for trading.

If a component stock of the Index does not trade on the day scheduled for determination of such Final Settlement Price, and the Primary Listing Exchange for such stock is open for trading, then for the purpose of calculating such Final Settlement Price the price of such stock shall be its last sale price, provided that the Exchange in its sole discretion may instruct that the price of such stock shall be its opening price on the next following day that it is traded on its Primary Listing Exchange.

**357A03.B. Final Settlement**

Clearing members holding open positions in an expiring futures contract at its termination of trading (Rule 357A02.G.) shall make payment to or receive payment from the Clearing House in accordance with normal variation margin procedures based on such expiring contract's Final Settlement Price (Rule 357A03.A.).

**357A04. [RESERVED]**

**357A05. [RESERVED]**

**357A06. BASIS TRADE AT INDEX CLOSE (“BTIC”) TRANSACTIONS**

Futures shall be eligible for BTIC transactions.

For any BTIC transaction in futures on a given Trading Day, the price shall be based on the Index closing price on such Trading Day, adjusted by an admissible futures price increment (“basis adjustment”) above or below such Index closing price, in accordance with Rule 357A06.C. The magnitude of such basis adjustment must be fair and reasonable in light of factors such as, but not limited to, financing rates, expected dividend income, and time remaining until futures contract expiration.

**357A06.A. BTIC Block Trade Requirements**

A BTIC transaction in futures may be executed as a block trade, *provided that* such block trade is executed in accordance with CME Rule 526.

Both the size of such block trade and any applicable basis adjustment shall be reported to the Exchange within five (5) minutes after agreement by the parties to such trade.

For a BTIC block trade that is executed on a given Trading Day and reported to the Exchange at least 10 minutes prior to the scheduled close of the Primary Listing Exchange, the corresponding futures price shall be made by reference to the Index closing price for the current Trading Day. For such BTIC block trade that is reported to the Exchange later than 10 minutes prior to the scheduled close of the Primary Listing Exchange, the corresponding futures price shall be made by reference to the Index closing price for the next following Trading Day.

**357A06.B. Price Assignment Procedure for BTIC Futures**

The price of a BTIC transaction shall be determined by the Exchange at 3:45 p.m. (or within 45 minutes after the close of the Primary Listing Exchange in the case of an early scheduled close of the Primary Listing Exchange). Such price determination shall be deemed final.

Where an order for a BTIC block trade would result in a futures price lower than the respective 20% Price Limit (Rule CCC02.I.), such BTIC block trade order shall be cancelled.

**357A06.C. BTIC Order Minimum Price Increment**

The minimum price increment shall be 0.10 Index points, equal to \$2.50 per contract, for any basis adjustment that is applied to an Index closing price to establish a BTIC transaction price.

**357A06.D. BTIC Orders Prohibited on Last Day of Trading**

Orders for BTIC transactions in expiring futures may not be initiated on the day of Final Settlement Price determination in such expiring futures (Rule 357A02.G.).

**357A06.E. Market Disruption Events**

In the event of disruption in the Primary Listing Exchange, all orders for BTIC block trades in futures shall be cancelled. Such event of disruption shall be declared by the Exchange, in its sole discretion, and may include without limitation:

1. unscheduled early closure of the Primary Listing Exchange, or
2. a NYSE Rule 80B trading halt declared in response to a Level 3 (20%) decline in the S&P 500 Index, necessitating early close of the the Primary Listing Exchange.

**INTERPRETATIONS & SPECIAL NOTICES RELATING TO CHAPTER 357A**

1. Trading Specifications

Until such time as the Exchange shall enable outright trading in futures contracts made under these Rules, trading shall be permitted only where such futures contracts are traded through Basis Trade at Index Close transactions pursuant to CME Rules 524.B. (Basis Trade at Index Close ("BTIC") Transactions) and Rules 357A06 of this Chapter.

Accordingly, pursuant to Rule 357A06.A. of this Chapter, trading in an expiring futures contract shall terminate at 10 minutes prior to the scheduled close of the Primary Listing Exchange on the Exchange business day first preceding the day of Final Settlement Price determination for such futures contract.

**DISCLAIMER**

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**Appendix B**

**Position Limit, Position Accountability, and Reportable Level Table in Chapter 5  
of the CME Rulebook**

(Attached under separate cover)



## Appendix C

### **CME Rule 588.H. – Globex Non-Reviewable Trading Ranges**

(Additions are underlined.)

Instrument Name	Globex Symbol	Globex Non-Reviewable Ranges (NRR)	NRR: Globex Format	NRR: Ticks
<u>BTIC on S&amp;P 500 Total Return Index futures</u>	<u>TRB</u>	<u>6 index points</u>	<u>600</u>	<u>60</u>

Instrument Name	Globex Symbol	Globex Non-Reviewable Ranges (NRR)	NRR: Globex Format	NRR: Ticks
<u>BTIC on S&amp;P 500 Carry Adjusted Total Return Index futures</u>	<u>CTB</u>	<u>6 index points</u>	<u>600</u>	<u>60</u>

## Appendix D

### CME Rule 589. – Special Price Fluctuation Limits

(Additions are underlined.)

Product	Rulebook Chapter	Commodity Code	Primary/Associated	Associated With	Base in Real Economic Value	Level
<u>S&amp;P 500 Total Return Index futures</u>	<u>357</u>	<u>TRI</u>	<u>Primary</u>			See Rulebook Chapter
<u>BTIC on S&amp;P 500 Total Return Index futures</u>	<u>357</u>	<u>TRB</u>	<u>Associated</u>	<u>TRI</u>		See Rulebook Chapter

Product	Rulebook Chapter	Commodity Code	Primary/Associated	Associated With	Base in Real Economic Value	Level
<u>S&amp;P 500 Carry Adjusted Total Return Index futures</u>	<u>357A</u>	<u>CTR</u>	<u>Primary</u>			See Rulebook Chapter
<u>BTIC on S&amp;P 500 Carry Adjusted Total Return Index futures</u>	<u>357A</u>	<u>CTB</u>	<u>Associated</u>	<u>CTR</u>		See Rulebook Chapter

## Appendix E

### Fee Schedule

Membership	Venue / Fee Type	Fee
Individual Members Clearing Equity Member Firms Rule 106.J Equity Member Firms & Rule 106.J Qualified Subsidiaries Rule 106.I Member Firms & Rule 106.I Qualified Affiliates Rule 106.S Member Approved Funds	Delivery	<b>\$0.09</b>
	CME Globex	<b>\$0.35</b>
	CME Globex – BTIC	<b>\$1.84</b>
	EFP EFR Block	<b>\$1.84</b>
	Exercise Assign Future From	<b>\$0.14</b>
Rule 106.D Lessees Rule 106.F Employees	Delivery	<b>\$0.21</b>
	CME Globex	<b>\$0.47</b>
	CME Globex - BTIC	<b>\$1.96</b>
	EFP EFR Block	<b>\$1.96</b>
	Exercise Assign Future From	<b>\$0.26</b>
Rule 106.R Electronic Corporate Member <i>(For other than CME Globex - See Non-Members)</i>	CME Globex	<b>\$0.50</b>
	Globex - BTIC	<b>\$2.14</b>
Rule 106.H and 106.N Firms Clearing Non-Equity Member Firms	Delivery	<b>\$0.39</b>
	CME Globex	<b>\$0.50</b>
	CME Globex - BTIC	<b>\$2.14</b>
	EFP EFR Block	<b>\$2.14</b>
	Exercise Assign Future From	<b>\$0.44</b>
International Incentive Program (IIP) Participants International Volume Incentive Program (IVIP) Participants <i>(For other than CME Globex - See Non-Members)</i>	CME Globex	<b>\$0.51</b>
	CME Globex - BTIC	<b>\$2.16</b>
Central Bank Incentive Program (CBIP) Participants	CME Globex	<b>\$0.76</b>

Emerging Markets Bank Incentive Program (EMBIP) Participants Latin American Fund Manager Incentive Program (FMIP) Participants Latin American Proprietary Trading Incentive Program (LAPTIP) Participants <i>(For other than CME Globex - See Non-Members)</i>	CME Globex – BTIC	<b>\$2.15</b>
CBOE Members <i>(For S&amp;P Products Only)</i>	Delivery	<b>\$0.35</b>
	CME Globex - Outrights	<b>\$1.12</b>
	CME Globex - Spreads	<b>\$0.70</b>
	CME Globex - BTIC	<b>\$2.10</b>
	EFP EFR Block	<b>\$2.10</b>
	Exercise Assign Future From	<b>\$0.40</b>
Members Trading Outside of Division <i>(For other than CME Globex During ETH - See Non-Members)</i>	CME Globex - During ETH Only	<b>\$0.66</b>
Non-Members <i>(Including: Latin American Commercial Incentive Program (LACIP) Participants &amp; CTA/Hedge Fund Incentive Program Participants)</i>	Delivery	<b>\$0.40</b>
	CME Globex - Outrights	<b>\$1.17</b>
	CME Globex - Spreads	<b>\$0.75</b>
	CME Globex - BTIC	<b>\$2.15</b>
	EFP EFR Block	<b>\$2.15</b>
	Exercise Assign Future From	<b>\$0.45</b>