May 7, 2020

VIA ELECTRONIC PORTAL

Assistant Secretary of the Commission for FOIA
Privacy and Sunshine Acts Compliance
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, NW
Washington, DC 20581

> RE: SMFE 2020-003 – Freedom of Information Act ("FOIA") Confidential Treatment Request Pursuant to Commission Regulation 145.9

Dear Sir or Madam,

On this date, Small Exchange, Inc. ("Small Exchange") has submitted to Christopher J. Kirkpatrick, Secretary of the Commodity Futures Trading Commission (the "Commission"), a certification, pursuant to CFTC Regulation 40.2(a), of an initial listing of the Small Stocks 75 Index Futures Contracts.

Pursuant to Commission Regulation 145.9, we hereby request confidential treatment of the attached Exhibits E, F, G, H and J of the Filing (the "Confidential Submission"). Confidential treatment is requested on the grounds that disclosure of such materials would reveal trade secrets and/or confidential commercial or financial information of Small Exchange. In addition to violating the exchanges' proprietary rights, the disclosure of the Confidential Submission would grant competitors an unfair competitive advantage and/or compromise the competitive advantages possessed by Small Exchange.

Small Exchange requests that, if the Commission receives a FOIA request, pursuant 5 U.S.C. 552, for the Confidential Submission, such information not be disclosed. In accordance with Commission Regulation 145.9(d)(5), Small Exchange also hereby requests that the Confidential Submission be afforded confidential treatment in perpetuity.

Small Exchange further understands that, if the Commission receives a FOIA request for the Confidential Submission, Small Exchange will be notified of such request in accordance with the Commission's regulations and be asked to submit, within ten business days, a detailed written justification for confidential treatment of the Confidential Submission. See Commission Regulation 149.5(e)(1); see also Executive Order 12600, 52 Fed. Reg. 23781 (June 23, 1987) (detailing pre-disclosure notification procedures under FOIA). In such event, we request that Commission staff telephone or e-mail the undersigned rather than rely upon United States mail for such notice.

If the Commission or its staff transmits any of the Confidential Submission to another federal agency, we request that you forward a copy of this letter to any such agency with the Confidential Submission and further request that you advise any such agency that we requested that this material be accorded confidential treatment.

The requests set forth in the preceding paragraphs also apply to any memoranda, notes, transcripts or other writings of any sort whatsoever that are made by, or at the request of, any employee of the Commission (or any other federal agency) and which: (i) incorporate, include or relate to any aspect of the Confidential Submission; or (ii) refer to any conference, meeting, or telephone conversation between the Small Exchange, their current or former employees, representatives, agents, auditors or counsel on the one hand and employees of the Commission (or any other government agency) on the other, relating to the Confidential Submission. Further, the Small Exchange requests that the Commission notify the

undersigned at the provided contact information below upon receiving any FOIA request for any of the Confidential Information provided.

Finally, the Small Exchange requests that the Commission notify it in the event the Commission intends to disclose the Confidential Information provided to a federal or state governmental agency or department.

If you have any questions or require any further information please contact the undersigned at (312) 761-1660.

Sincerely,

/s/ Peter D. Santori
Chief Regulatory Officer

Appendix E: Small Stocks 75 Index Methodology
Appendix F: Small Stocks 75 Index Components and Weights
Appendix G: Corporate Actions Methodology
Appendix H: Settlement Day, Value, and Process
Appendix J: Historical Data

Appendix E: Small Stocks 75 Index Methodology

Description

The Small Stocks 75 Index ("Index") comprises five sectors with each sector containing 15 stocks. The determination of the stocks within each sector are assessed using the following scoring: 50% through volatility, 35% through capitalization, and 15% through liquidity (i.e., notional traded volume). The components are re-evaluated annually.

5 Sectors with 15 Stocks in Each Sector
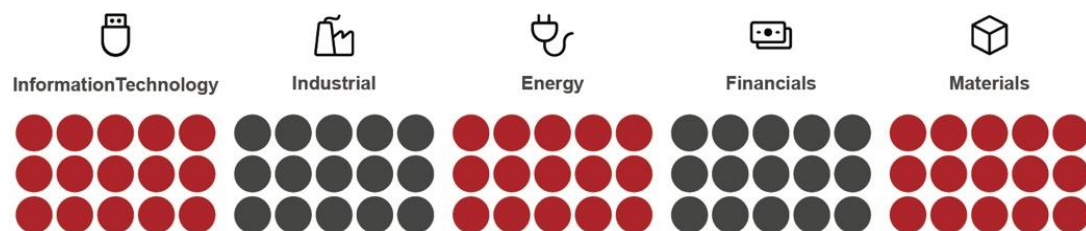
Inputs for the algorithm include: symbols, sector classification, capitalization, volume, and historical volatility. Definitions for each of the inputs are in the "Data Used in the Calculation" section.

Current Components

The current stocks and weights of each symbol can be found in Appendix F.

Data Used in the Calculation

Symbols

Symbols are from the CBOE's "Symbol Directory – Equity, Index & LEAPS Options." From this list, the Index selects only non-ADR stocks that include both LEAPS and weekly expirations. Using this reduced pool of symbols, each symbol is organized into different sectors as shown below.

Sector Classification

The stocks in the Index are represented by these five sectors:

- **Information Technology** – Companies that produce application software, electronic gaming, communication equipment, computer hardware, data storage, electronic components, and online media.
- **Industrial** – Companies engaged with capital goods, aerospace and defense, building products, construction and engineering, electrical equipment, industrial conglomerates, machinery, and trading companies and distributors, both commercial and professional.
- **Energy** - Companies that produce or refine oil, gas, or consumable fuels and those that provide equipment, energy and equipment services, oil field services, and pipeline operators.

- **Financial** – Companies that provide financial services including banks, savings and loans, asset management companies, credit services, investment brokerage firms, and insurance companies.
- **Materials** – Companies involved with chemicals, construction materials, containers and packaging, metals and mining, and paper and forest products.

Each sector is represented by 15 stocks that are picked by a unique ranking algorithm. The algorithm is detailed in the "Calculating the Index" section.

Capitalization
Capitalization is calculated using the daily capitalizations for each stock, s, and then multiplying the shares outstanding by the last price on day t.

$$Capitalization_s = Shares\ Outstanding_{s_t} \times Price_{s_t}$$

The capitalizations are calculated for each stock, s, during the three-month evaluation period. This reduces outlier movements from having too much influence on the Index.

Volume
Volume is calculated by the daily notional traded volume for each stock (using the consolidated volume), s, and then multiplying the volume by the last price on day t:

$$Notional\ Volume_s = Volume\ Shares\ Traded_{s_t} \times Price_{s_t}$$

The notional traded volume for each stock is calculated during the three-month evaluation period. This evaluation period takes place during January, February, and March.

Historical Volatility
Historical volatility is calculated using the average of the rolling annualized historical volatility of log returns. The daily log returns are calculated over a rolling three-month period. This provides the standard deviation (SD) of those returns. This is done daily during the three-month evaluation period (January, February, and March) using the previous three-months of prices (*P*):

$$Rolling\ Ann.Hist.Vol._{s_t} = SD\left[ln\left(\frac{P_{s_t}}{P_{s_{t-1}}}\right), ln\left(\frac{P_{s_{t-1}}}{P_{s_{t-2}}}\right), \ldots, ln\left(\frac{P_{s_{t-n}}}{P_{s_{t-n-1}}}\right)\right] \times \sqrt{252}$$

The final volatility number used is an average of the historical volatilities during the three-month evaluation period:

$$Volatility_s = \frac{\sum Rolling\ Annualized\ Historical\ Volatility_{s_t}}{n}$$

Calculating the Index

Calculating the Index follows a four-step approach:

1) Determine eligibility of symbols.
2) Create ranking, by sector, of each symbol using a combination of volatility, capitalization, and notional traded volume.
3) Calculate the weighted rankings and capture the top 15 ranked symbols from each of the five sectors.
4) Derive the shares of each symbol to be held constant (absent of any corporate action) until the next rebalance.

Eligibility of Symbol

To be eligible for the Index, a stock must meet the following criteria:

- Non-ADR, non-CEF common stock
- 3-month average price during the evaluation period must be greater than $10
- 3-month average capitalization during the evaluation period must be greater than $1 billion
- Publicly traded for the entire 3-month evaluation period

The remaining symbols are then evaluated according to their Weighted Scores through a unique ranking system (shown below). The 15 symbols with the highest scoring from each sector are selected for the Index accordingly.

Creation of Ranking

Each stock has three inputs: **Volatility$_s$**, **Capitalization$_s$**, and **NotionalVolume$_s$**.

Using these inputs, the algorithm creates a statistical ranking between 0 and 1 for each symbol with respect to volatility, capitalization, and notional traded volume. All stocks are ranked by taking the maximum and minimum from each input. For example, to arrive at a statistical ranking for the volatility of stock s, use the largest volatility for all the symbols within the sector, **MAX(Volatility$_{all}$),** and also the smallest volatility for all symbols within the sector, **MIN(Volatility$_{all}$).** From this, create the rank:

$$\frac{Volatility_s - MIN(Volatility_{all})}{MAX(Volatility_{all}) - MIN(Volatility_{all})}$$

More explicitly, this becomes:

$$RankVolatility_s = \frac{Volatility_s - MIN(Volatility_{all})}{MAX(Volatility_{all}) - MIN(Volatility_{all})}$$

$$RankCap_s = \frac{Capitalization_s - MIN(Capitalization_{all})}{MAX(Capitalization_{all}) - MIN(Capitalization_{all})}$$

$$RankNotionalVol_s = \frac{NotionalVolume_s - MIN(NotionalVolume_{all})}{MAX(NotionalVolume_{all}) - MIN(NotionalVolume_{all})}$$

Combining the Rankings

After this is determined, each stock is scored using: 50% volatility, 35% capitalization, and 15% notional traded volume.

$$WeightedScore_s = (0.50 \times RankVolatility_s) + (0.35 \times RankCap_s) + (0.15 \times RankNotionalVol_s)$$

If a stock has two or more classes (e.g., GOOG and GOOGL), the Index will include the one with the greater weighted score.

Deriving the Shares Required

The largest 15 stocks from each sector are then chosen for the Index. Each symbol is equally weighted, with each sector also receiving an equal initial weight. Therefore, the Small Stocks 75 Index is "equal-dollar weighted" (i.e., the dollar value of each Index component is the same at inception and at each re-balancing).

The formula for determining the shares needed for each $symbol_x$ can be seen below:

$$Index\ Shares_{symbol_x} = \frac{Starting\ Value\ of\ Index \times \frac{1}{75}}{Price_{symbol_x}}$$

These shares are kept constant until the next rebalance (absent of any corporate action).

Corporate Actions

Corporate actions and their impact on the index are covered in Appendix G.

Rebalancing Timespans

Timespans are broken into an evaluation period, an announcement period, and a rebalance period.
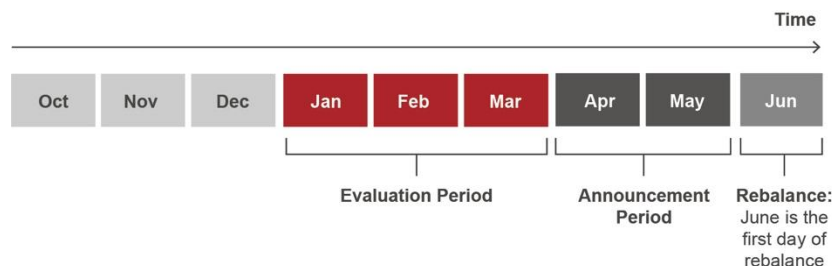
The **Evaluation Period** is the three-month period where data is collected to determine which stocks belong in the Index. Because the Index uses rolling three-month averages within the algorithm, this time period may also include parts of October, November, and December.

The **Announcement Period** is a roughly 60-day period to allow Participants to update any models and to prepare for any new stocks in the Index. This takes place in April and May.

The **Rebalance Period** is the last day of the announcement period for the rebalanced Index. The rebalanced Index will begin trading on the first trading day of June.

Appendix F: Small Stocks 75 Index Components and Weights

The Small Stocks 75 Index ("Index") comprises five equally weighted sectors with each sector containing 15 stocks. These sectors include information technology, industrial, energy, financials, and materials.

5 Sectors with 15 Stocks in Each Sector

InformationTechnology Industrial Energy Financials Materials
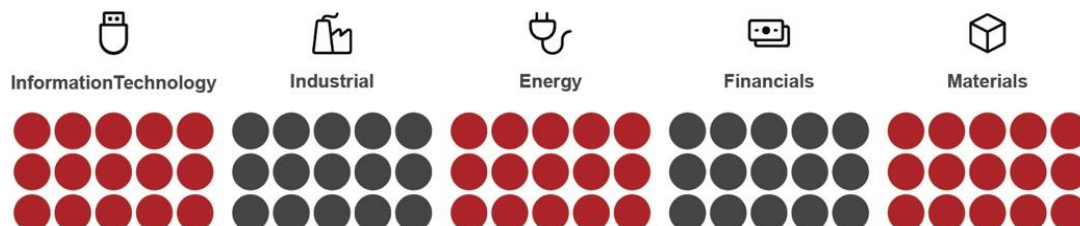
Components

The following are the current components for the period June 1, 2019 to May 31, 2020. These values are calculated using the methodology calculation and are kept constant until the next annual rebalance period.

Information Tech.		Industrial		Energy		Financials		Materials	
Symbol	Shares	Symbol	Shares	Symbol	Shares	Symbol	Shares	Symbol	Shares
AAPL	0.00327524	AAL	0.02091959	APA	0.02216743	AIG	0.01139824	AA	0.02732376
AMD	0.02063460	ARNC	0.02652711	APC	*Cash*	APO	0.01949633	ADM	0.01523006
AMZN	0.00032451	BA	0.00168857	CLR	0.01634335	BAC	0.02175781	CC	0.02674046
FB	0.00325321	CAT	0.00483219	COP	0.00982425	C	0.00929260	CF	0.01453912
GOOGL	0.00052247	FLR	0.02068383	CVX	0.00506928	COF	0.00665052	DD	0.00638061
INTC	0.01297921	GT	0.04293582	DVN	0.02274488	GS	0.00315190	FCX	0.05950402
MDB	0.00412498	HTZ	0.04109718	EOG	0.00696505	JPM	0.00548581	IP	0.01413401
MSFT	0.00468709	MMM	0.00362781	HAL	0.02692386	KEY	0.03615083	KMB	0.00450814
NFLX	0.00167475	NAV	0.01869567	HES	0.01023268	KKR	0.02580619	LYB	0.00764718
NTNX	0.02084345	RCII	0.02422916	MRO	0.04359122	MA	0.00230972	MOS	0.02744064
NVDA	0.00420820	SWK	0.00450571	NOV	0.02767028	MS	0.01415900	NEM	0.01764875
QCOM	0.00865489	TSLA	0.00307028	PXD	0.00406337	PYPL	0.00527566	NUE	0.01200607
STMP	0.01716467	UNP	0.00350218	SLB	0.01666386	SCHW	0.01387724	PPG	0.00548914
TTD	0.00289671	URI	0.00519077	WLL	0.03132638	V	0.00360115	WY	0.02543310
Z	0.01338413	UTX	*Cash*	XOM	0.00814665	WFC	0.01300143	X	0.04827028

Where CASH is the leftover from the APC merger, equal to 0.00819553 x the last sale of 72.77 and the UTX merger, equal to 0.00460418 x the last sale of 86.01. This amounts to a current cash position of 0.99239424 for the Index.

As of March 25, 2020, the capitalization percentiles are as follows:

Percentile	Smallest	25th	50th	75th	Largest
Capitalization	$88M	$6.3B	$21B	$95B	$1.2T

The average capitalization is $109 billion, the median (50th percentile) is $21 billion, the largest is $1.2 trillion (MSFT), and the smallest $89 million (WLL). While there is a $1 billion capitalization requirement, a minimum constraint once the stock is included in the Index does not exist.

Appendix G: Corporate Actions Methodology

Introduction

The purpose of this document is to clarify the treatment and provide transparency of corporate events and their effect on the Small Stocks 75 Index ("Index").

These guidelines do not serve as definitive rules for all circumstances. Local practices may dominate major decisions, and the Small Exchange's Index Calculation Agent ("ICA"), under its obligations, will determine the most appropriate course of action under the circumstances especially in complex circumstances or those not contemplated by this document.

Use of Synthetic Pricing

In special complex situations, the ICA, under its obligations, may use *synthetic prices* to "carry forward" the last sale of the symbol. The use of a synthetic price mechanism can be thought of as carrying a cash position in an equivalent notional value to the symbol(s) being delisted. For example, XYZ stock ceases trading and is delisted. The last price in XYZ is then carried forward until the next rebalance period. By minimizing the need for a special rebalancing, the ICA is simplifying the calculation and reducing complexity for hedgers. This means the Index may have less than the original starting number of symbols in the Index at times.

In the case of a symbol removal, the ICA will create a synthetic price based on the last sale price of the stock and keep that constant. For example in Figure 1, on April 3 and April 5, symbols S74 and S3, respectively, are missing prices due to being delisted. In these scenarios, the prices for such symbols are held stable in the Index with the last sale carried forward. This is demonstrated in Figure 2, with the last value of S3, 36.22 carried forward and the last value of S74, 18.92, carried forward, until the next rebalance.

	S_1	S_2	S_3	S_4	...	S_{74}	S_{75}
1-Apr-19	10.21	25.22	40.01	52.12	...	18.77	19.01
2-Apr-19	10.30	24.78	39.81	51.23	...	18.92	19.98
3-Apr-19	10.28	24.19	37.87	50.48	...		19.78
4-Apr-19	10.39	24.89	36.22	50.29	...		19.22
5-Apr-19	10.10	25.27		49.78	...		18.77

S_3 delisted

S_{74} delisted

Figure 1 Delisted symbols missing prices.

	S₁	S₂	S₃	S₄	...	S₇₄	S₇₅	Delisted Symbols
1-Apr-19	10.21	25.22	40.01	52.12	...	18.77	19.01	
2-Apr-19	10.30	24.78	39.81	51.23	...	18.92	19.98	
3-Apr-19	10.28	24.19	37.87	50.48	...	18.92	19.78	S₇₄
4-Apr-19	10.39	24.89	36.22	50.29	...	18.92	19.22	S₇₄
5-Apr-19	10.10	25.27	36.22	49.78	...	18.92	18.77	S₇₄, S₃

synthetic price

Figure 2 Creating a synthetic price of S3 and S74. These symbols are excluded.

Additions and Deletions

Additions and deletions can occur for a number of reasons. As fluctuations may occur due to delistings, mergers, acquisitions, takeovers, bankruptcies or other corporate reasons, the number of symbols within the Index may deviate from the initial starting number of symbols during the course of one year.

Initial Public Offerings

Initial public offerings cannot be added to the Index; they do not fall under the constraint of "publicly traded for the entire 3-month evaluation period."

Delistings

Symbol delistings, whether through mergers and acquisitions, bankruptcies, or other business combinations, are among the most common corporate events that have an impact on the Index. In the case of a delisting, the symbol ceases to trade on a public exchange.

With the addition of corporate events, delistings, etc., the number of symbols within the Index may become more or less than the initial starting Index symbol count. According to analysis, the Index could experience one (1) to four (4) delistings per year, with the probability of a delisting increasing as an Index component's market capitalization decreases.

Use of Synthetics for Removals

In the case of a delisting, the symbol is dropped from the Index and the last sale price is kept constant until the next rebalance period. This is referred to as using *synthetic prices*, which is simply "carrying forward" the last sale of the symbol. The concept is the same as synthetically selling out of the position and carrying that position in cash. By minimizing the need for special rebalancing periods, the ICA is simplifying the calculation and reducing complexity.

An example of this process in practice existed in April 2019, with the symbol RDC (Rowan Companies). Pursuant to an agreement on October 7, 2018, Ensco plc acquired the shares of RDC and, as a result, RDC ceased to trade in the open market, effective April 10, 2019, having a closing price of 10.93. The price of RDC along with the shares (0.047124) remained constant until the next rebalance date or a special rebalance. The synthetic price in this example is 10.93 – this price being carried forward can be seen in Figure 3.

	S₁	S₂	RDC	S₄	...	S₇₄	S₇₅
10-Apr-19	10.21	25.22	10.93	52.12	...	18.77	19.01
11-Apr-19	10.30	24.78	*Price is*	51.23	...	18.92	19.98
12-Apr-19	10.28	24.19	*synthetically*	50.48	...		19.78
15-Apr-19	10.39	24.89	*carried* *forward until*	50.29	...		19.22
16-Apr-19	10.10	25.27	*rebalance.*	49.78	...		18.77

Figure 3 Using a synthetic price for RDC.

As a reminder to how the Index shares were calculated, it is a sum of the shares multiplied by the price. Each symbol comprises an equal fraction of the Index, $\frac{1}{count}$, where *count* is the number of symbols within the Index on the initial rebalance date. The formula for the calculation of the shares for each symbol *n*, $Index\ Shares_{S_n}$, is as follows:

$$Index\ Shares_{S_1} = \frac{Starting\ Value\ of\ Index}{Price_{S_1}} \times \frac{1}{count}\ Index\ Shares_{S_2}$$

$$= \frac{Starting\ Value\ of\ Index}{Price_{S_2}} \times \frac{1}{count}\ ...\ ...\ ...\ Index\ Shares_{S_n}$$

$$= \frac{Starting\ Value\ of\ Index}{Price_{S_n}} \times \frac{1}{count}$$

where $Price_{S_n}$ is the closing price of the symbol *n* prior to the rebalance date.

As an example of how the shares of RDC were determined originally, assume the closing value of the Index was 38.63, which is the day before the June 1, rebalance. The number of shares in the Index for symbol, RDC is therefore, $\frac{38.63}{10.93} \times \frac{1}{75} = 0.047124$, where 10.93 is the closing price of RDC the day before the rebalance period.

More information related to the methodology can be found in Appendix E.

Losing a Large Number of Components
In the case of the Index losing 20% of its symbols after the rebalance period, the ICA, under its obligations, may hold a special rebalance to get the number back to the (in the case of the Small Stocks 75 Index, 75) symbol threshold. The special rebalance would replace the missing symbols with the appropriate number from each sector using the methodology ranking process. Complex problems may require an additional course of action that is not covered under this document. In such circumstances, the ICA, under its obligations, will determine the most appropriate action.

Mergers and Acquisitions

Mergers and acquisitions refer to the combination of two or more companies through a financial transaction; these can be structured through a variety of ways. In a merger, the two companies cease to

exist, and a new company is created. In an acquisition, the acquirer company takes over the interest of the acquired company. In most cases, the acquired company ceases to exist.

In the case of a merger, where the Index component symbol ceases to exist, the last sale will remain constant until the next rebalance date and a synthetic price is created. In the case of an acquisition, where the symbol within the Index is acquired, a synthetic price is created using the last sale of the acquired company. Examples of the creation of synthetic prices can be found in the section titled, "Use of Synthetic Pricing."
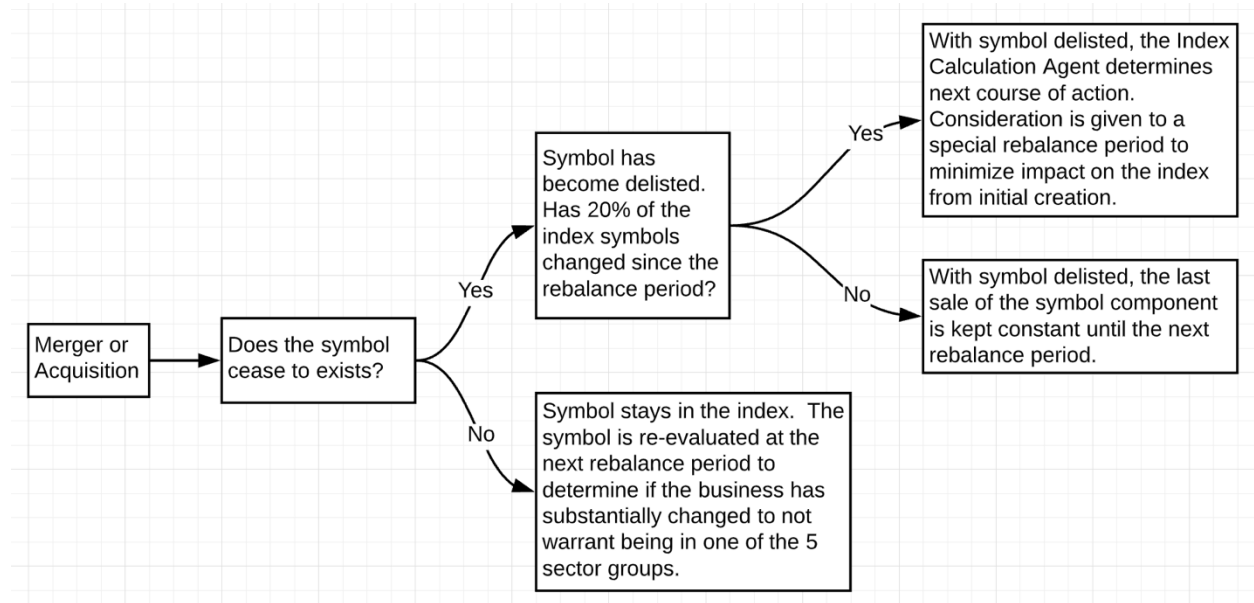

Figure 4 Merger and Acquisition Flowchart

A flowchart of the merger and acquisition process is shown in Figure 4, above.

An exception may exist where 20% of the underlying symbols differ from the original rebalance period. In other words, for the Small Stocks 75 Index, 15 symbols would have to become delisted from the June rebalance period – this would constitute 20% of the Index. In this scenario, the ICA determines the most appropriate course of action, which may include the implementation of a special rebalance period. The special rebalance would replace the missing symbols with the appropriate number from each sector using the methodology ranking process. Complex problems may require an additional course of action that is not covered under this document. In such circumstances, the ICA, under its obligations, will determine the most appropriate action.

Splits or Reverse Splits

A forward stock split is an increase in a company's total shares outstanding accompanied by a decrease in the price per share. A reverse stock split is a decrease in a company's total shares outstanding accompanied by an increase in the price per share. Forward and reverse stock splits have no net impact

on a company's market capitalization. What does change is the number of shares held in the Index to keep the weight constant when multiplied by the new price.

Table 4 shows several examples along with the impact on the shares held by the Index.

Split	Pre-Split		Post-Split	
	Shares Held	Share Price	Shares Held	Share Price
Forward Split 2-for-1	0.50	50	$0.50 \times 2 = 1$	$\dfrac{50}{2} = 25$
Forward Split 3-for-2	0.50	50	$0.50 \times \dfrac{3}{2} = 0.75$	$\dfrac{50}{\left(\frac{3}{2}\right)} = 33.\underline{33}$
Reverse Split 1-for-10	0.50	50	$0.50 \times \dfrac{1}{10} = 0.05$	$\dfrac{50}{\left(\frac{1}{10}\right)} = 500$
Reverse Split 2-for-13	0.50	50	$0.50 \times \dfrac{2}{13} = 0.0\widetilde{76}$	$\dfrac{50}{\left(\frac{2}{13}\right)} = 325$

Table 4 Example of Splits and Reverse Splits

For example, 0.50 shares (1/2 of 1 share) are held in the Index of stock XYZ. A 2-for-1 forward split is held and the price of the symbol declines from $50, pre-split, to $25, post-split. The net effect of the split is neutral since the shares in the Index are now doubled to 1.00 share held.

Dividends

Ordinary Dividends

Ordinary dividends are the proportionate distribution of corporate profits paid to shareholders, typically paid on a quarterly basis, but can follow a semi-annual or annual cycle. Before the dividend is distributed, the issuing company declares the dividend amount and the date of the dividend. The ex-dividend date is the last date by which shares can be purchased to receive the dividend. After that ex-dividend date, the price of the shares normally declines by the size of the dividend. The Index does not apply an adjustment to the distributing company shares under normal circumstances.

Special Dividends

Special dividends are dividends that occur outside of the normal payment of dividends and are considered to be an edge case. Companies will often consider a special dividend as "special", "extra", "irregular", "a distribution from reserves", or some other term in the dividend announcement. The ICA has the final say on how such dividends will be handled but, typically, it will adjust the number of shares to make up for the drop in the symbol price. A strong consideration will be given to adjusting the number of shares (similar to a stock split) when the dividend is larger than 10% of the current symbol price. A visual can be found in Figure 5, below:
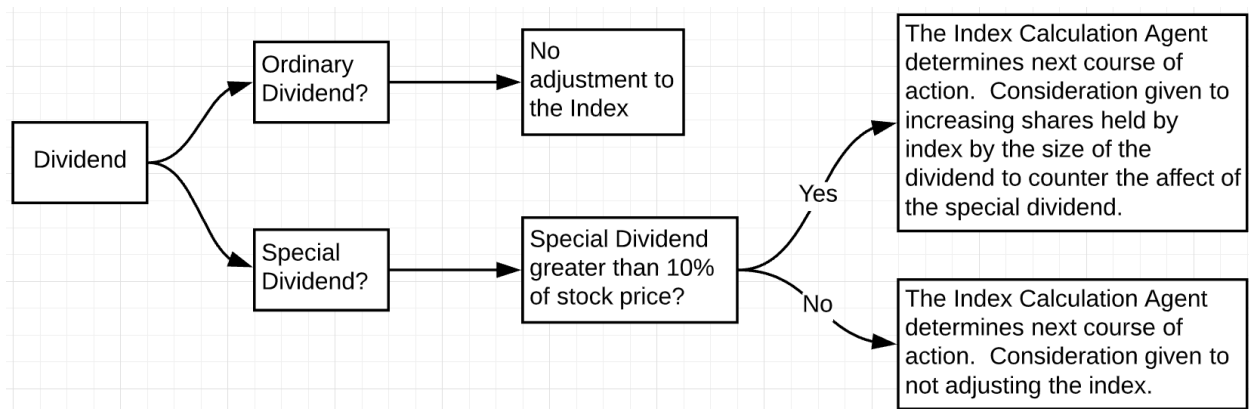
Figure 5 Dividend Flowchart

Bankruptcies and Stock Suspensions

Bankruptcies

Bankrupt stocks are ineligible for inclusion into the Index at the time of the rebalance. In the case of a bankruptcy, the symbol is kept in the Index until either the next rebalance time or the stock is delisted, whatever comes first.

In the case of a symbol being delisted or halted after the bankruptcy is filed, a price of 0 is used for the underlying symbol. There may be exceptions to this rule, such as if the symbol is delisted and moved to the OTC market. This may occur due to non-compliance issues on the primary exchange; if that is the case, the ICA has the final say on the appropriate course of action. A strong consideration will be given to using the closing price of the symbol on the symbol's first closing day on the OTC market.

Stock Suspensions

For a suspended symbol, the last price of the symbol is carried forward for the duration of the suspension period. An exception occurs if the suspended symbol is held on the date prior to the rebalance; in that scenario, the symbol will be removed at a zero price, and the Index will be updated using a zero price for the suspended symbol.

In the case of the Index losing 20% of its symbols after the rebalance period for a continuous period of 60 days, the ICA, under its obligations, may hold a special rebalance to get the number back to the 75-symbol threshold. The special rebalance would replace the missing symbols with the appropriate number from each sector using the methodology ranking process. Complex problems may require an additional course of action that is not covered under this document. The ICA, under its obligations, will determine the most appropriate action in such circumstances.

Currently suspended symbols are not eligible for inclusion in the Index on the rebalance date.

Recalculation Policy

The decision to recalculate the Index is made by the ICA if one of the following events has occurred:

- Incorrect or revised closing price of component
- Missed corporate event such as a split
- Late announcement of a corporate event
- Incorrect calculation at the time of rebalancing
- Incorrect methodology application

Rules of thumb for Index revisions are held below. For errors discovered one week after the occurrence, the ICA determines the course of action and a notice is posted with the final conclusion.

Event	Action taken
Constitute closing price error	The price is corrected and reposted.
Missing corporate event	Missing corporate action events are corrected and reposted.
Late announcement	The announcement is posted late.
Incorrect calculation	Error is corrected and the Index is recalculated.

Appendix H: Settlement Day, Value, and Process

Overview

The Exchange, in conjunction with the DCO, will determine the settlement value for Contracts. For each Contract, the Exchange shall publish a daily settlement value and a final settlement value on the Contract's day of expiration. The daily settlement of each Contract occurs after the Contract closes, unless otherwise stated by the Exchange. Any settlement value shall be determined by the Exchange in accordance with the DCO's rules. Notwithstanding the foregoing, the DCO may modify settlement values in its discretion in accordance with its rules. All Contracts are cash settled at expiration.

Expiration for each Contract is the third Friday of the month at 15:00:00 CT, unless such day falls on a day on which the Exchange is not open; in which case the day of expiration is the business day preceding the third Friday of the month. Final settlement will occur on the same day as the expiration of the Contract and payments, if any, will be based on the final settlement value determined by the Exchange.

If the DCO determines that the primary market(s) for one or more constituents of the Index did not open or remain open for trading at or before the time when the settlement value for such futures would ordinarily be determined, or that a price, variance, or other value used as, or to determine, the final settlement value is otherwise unreported, inaccurate, unreliable, unavailable, or inappropriate for such use, then the DCO, using its best efforts to consult with the Exchange, shall determine the final settlement value in conformity with the By-Laws and Rules of the DCO and shall promptly notify the Exchange of its actions.

Definitions of front month and back month

The front month is the Contract nearest to expiration for a particular Exchange product. The front month is the anchor leg for settlements. When the front month expires, the nearest Contract to expiration becomes the new front month. All other monthly Contracts not the front month are the back month.

Daily settlement of front month

If a Trade occurs in the last sixty (60) seconds of the Contract's trading hours, the daily settlement value for the front month will be calculated using the volume weighted average price ("VWAP") of such Trades, rounded to the nearest tradable tick, or $0.01. If there are no Trades during this time, the Exchange will use the following methodology to determine the daily settlement value for such Contracts:

Cash Index Value + (Previous Day's Back-Front Spread / Days Between Front and Back Month Contracts) x Days to Expiration

Daily settlement of back month

If a Trade occurs in the last sixty (60) seconds of the Contract's trading hours, the daily settlement value will be calculated using the VWAP of such trades rounded to the nearest tradable tick, or $0.01. If there are no trades during this time, the settlement value of such back month Contract will be calculated using calendar spreads. In the absence of relevant calendar spread trades during the trading day, the settlement value for such back month Contract will be the front month settlement value for such product plus the previous day's front month minus back month spread value.

Monthly final settlement

On the day of expiration, the final settlement value of the Contract is determined using the modified average cash value of the respective cash index, starting at 14:58:30 CT to 14:59:59 CT, inclusive. The value of the cash index will be recorded for each second of this time frame. In the event the cash index value does not change during the one-second aggregation period, the value for the prior second is carried forward to ensure this is always comprised of 90 values; further, in the event the cash index value changes multiple times during such one-second aggregation period, the last value is used. The average of these 90 values is the final settlement value for the product. The calculation of the final settlement value of each Contract is performed by the Exchange's Index Calculation Agent, and validated by the Exchange.

An example of the calculation of the final settlement value can be seen below in Figure 6. In this hypothetical example, which was of the Small Stocks 75 Index ("Index"), the price of the cash Index can be seen changing in value due to changes in the individual components. Highlighted, however, are seconds where the Index value does not change due to an absence of change in the Index's underlying components. Prices such as these are carried forward to populate such seconds to ensure that the final settlement value is always comprised of 90 seconds, and therefore 90 values.

	Time	Index		Time	Index		Time	Index
1	5/17/19 14:58:30	49.066592	31	5/17/19 14:59:00	49.065766	61	5/17/19 14:59:30	49.065835
2	5/17/19 14:58:31	49.066592	32	5/17/19 14:59:01	49.065766	62	5/17/19 14:59:31	49.065387
3	5/17/19 14:58:32	49.066324	33	5/17/19 14:59:02	49.066481	63	5/17/19 14:59:32	49.065387
4	5/17/19 14:58:33	49.065877	34	5/17/19 14:59:03	49.066748	64	5/17/19 14:59:33	49.065387
5	5/17/19 14:58:34	49.068465	35	5/17/19 14:59:04	49.066213	65	5/17/19 14:59:34	49.065387
6	5/17/19 14:58:35	49.069000	36	5/17/19 14:59:05	49.066033	66	5/17/19 14:59:35	49.065387
7	5/17/19 14:58:36	49.068732	37	5/17/19 14:59:06	49.066693	67	5/17/19 14:59:36	49.061461
8	5/17/19 14:58:37	49.069000	38	5/17/19 14:59:07	49.066693	68	5/17/19 14:59:37	49.061461
9	5/17/19 14:58:38	49.069000	39	5/17/19 14:59:08	49.066693	69	5/17/19 14:59:38	49.061461
10	5/17/19 14:58:39	49.069000	40	5/17/19 14:59:09	49.068031	70	5/17/19 14:59:39	49.061461
11	5/17/19 14:58:40	49.069000	41	5/17/19 14:59:10	49.068833	71	5/17/19 14:59:40	49.061729
12	5/17/19 14:58:41	49.068465	42	5/17/19 14:59:11	49.068833	72	5/17/19 14:59:41	49.061729
13	5/17/19 14:58:42	49.068465	43	5/17/19 14:59:12	49.069101	73	5/17/19 14:59:42	49.061729
14	5/17/19 14:58:43	49.067750	44	5/17/19 14:59:13	49.069101	74	5/17/19 14:59:43	49.061461
15	5/17/19 14:58:44	49.067750	45	5/17/19 14:59:14	49.069368	75	5/17/19 14:59:44	49.061461
16	5/17/19 14:58:45	49.067750	46	5/17/19 14:59:15	49.066693	76	5/17/19 14:59:45	49.061194
17	5/17/19 14:58:46	49.067639	47	5/17/19 14:59:16	49.066693	77	5/17/19 14:59:46	49.061364
18	5/17/19 14:58:47	49.067639	48	5/17/19 14:59:17	49.066693	78	5/17/19 14:59:47	49.060916
19	5/17/19 14:58:48	49.068354	49	5/17/19 14:59:18	49.066526	79	5/17/19 14:59:48	49.060649
20	5/17/19 14:58:49	49.068621	50	5/17/19 14:59:19	49.066526	80	5/17/19 14:59:49	49.062434
21	5/17/19 14:58:50	49.065231	51	5/17/19 14:59:20	49.066259	81	5/17/19 14:59:50	49.061184
22	5/17/19 14:58:51	49.065231	52	5/17/19 14:59:21	49.066794	82	5/17/19 14:59:51	49.061184
23	5/17/19 14:58:52	49.065231	53	5/17/19 14:59:22	49.066526	83	5/17/19 14:59:52	49.061184
24	5/17/19 14:58:53	49.065231	54	5/17/19 14:59:23	49.066526	84	5/17/19 14:59:53	49.061184
25	5/17/19 14:58:54	49.065498	55	5/17/19 14:59:24	49.066526	85	5/17/19 14:59:54	49.061184
26	5/17/19 14:58:55	49.065498	56	5/17/19 14:59:25	49.066526	86	5/17/19 14:59:55	49.061184
27	5/17/19 14:58:56	49.065498	57	5/17/19 14:59:26	49.066637	87	5/17/19 14:59:56	49.060649
28	5/17/19 14:58:57	49.066033	58	5/17/19 14:59:27	49.066637	88	5/17/19 14:59:57	49.060649
29	5/17/19 14:58:58	49.066033	59	5/17/19 14:59:28	49.066102	89	5/17/19 14:59:58	49.060916
30	5/17/19 14:58:59	49.065498	60	5/17/19 14:59:29	49.066102	90	5/17/19 14:59:59	49.059043

Final Settlement Value   49.07

Figure 6 Final Monthly Settlement Example

In the scenario of multiple price changes during the one-second aggregation period, the last price is used for that second (i.e., the price nearest 59 milliseconds).

The final settlement value is published shortly after 15:00:00 CT.

Six-Month Settlement Performance Testing

This section outlines the robustness of the methodology by exploring the depth of the market and richness of the prints that make up the price of the Index around expiration.

Small Stocks 75 Index

The Small Stocks 75 Index takes last trade data from the following sources:

Source	Description
Consolidated Tape Association ("The CTA")	Trade and quote data for securities with a primary listing on the New York Stock Exchange are distributed through The CTA's Network A (also known as Tape A), and trade and quote data for securities with primary listing on another non-Nasdaq exchange (e.g., NYSE American, CBOE's exchanges, etc.) are distributed through The CTA's Network B (Tape B).
UTP Plan	The UTP Plan was developed to oversee the dissemination and sales of market data for stocks listed on Nasdaq, through a data channel known as Network C (Tape C). Trade and quote data for securities with a primary listing on the Nasdaq exchange are distributed through Network C.

During the 90 seconds before final settlement, the robustness of the market can be seen by the number of prints in each component. Statistics around the number of prints of the Small Stocks 75 Index component stocks during the final settlement window are displayed in Figure 7. While the Index is disseminated on a one-second frequency, on average, the average number of records during the 90 second period before expiration is nearly 1,600 *per symbol*. The average sum of total Transactions during the 90 second period is over 200,000.

	Jan. 18, 2019	Feb. 15, 2019	Mar. 15, 2019	Apr. 18, 2019	May 17, 2019	Jun. 21, 2019
Average # of prints per component	1,465	1,337	2,107	1,343	1,330	1,843
Largest # of prints	7,045	5,473	19,587	6,498	6,324	10,455
Smallest # of prints	21	20	27	63	112	61
Sum of prints	189,028	172,473	271,852	171,905	170,191	234,071

Figure 7 Statistics around counts of unique prints of the Small Stocks 75 Index components during the 90 seconds of settlement

Displayed in Figure 8 are the number of unique prints *per symbol*, during the 90-second period used during the calculation of the settlement value. The final settlement value is a modified average of the 90 Index prints between 14:58:30 CT to 14:59:59 CT, inclusive. The depth of the market makes it difficult for a market Participant to manipulate the Stocks 75 Index's settlement value.

	Jan. 18, 2019	Feb. 15, 2019	Mar. 15, 2019	Apr. 18, 2019	May 17, 2019	Jun. 21, 2019
Average # of records per component	73	75	76	72	72	76
Largest # of records	90	90	90	90	90	90
Smallest # of records	5	12	7	8	30	25

Figure 8 Number of unique seconds, per symbol, used in the Stocks 75 Index settlement methodology