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 2020-004 – 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 Precious Metals Index Futures Contracts (the "Certification").

Pursuant to Commission Regulation 145.9, we hereby request confidential treatment of the attached Exhibits E, F, G and I of the Certification (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

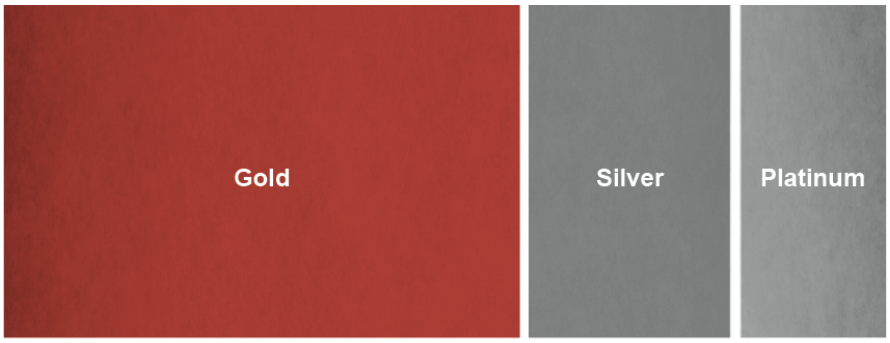
Exhibits

Appendix E: Small Precious Metals Index Methodology

Description

The Small Precious Metals Index ("Index") is comprised through a price-weighted combination of gold, silver, and platinum. Each metal's weight within the Index is calculated through a unique combination of global production, domestic consumption and dollar-denominated volume traded.

The Index creates a more diversified way of participating in the metals market. Rebalancing occurs annually.



The weights of each metal within the Index takes into consideration each metal's overall global production, domestic consumption, and volume as a share of the total.

Specifically, each metal is weighted according to a unique formula:

1. **Global Production.** 25% of a metal's weight is attributed to its share of global production. The greater the metal's share of production, the greater the weight in the Index.
2. **Domestic Consumption.** 70% of a metal's weight is from its share of domestic consumption.
3. **Volume.** The smallest percentage of a metal's impact, 5%, is from the dollar amount of volume traded. This creates a slight bias to favor metals that trade in larger amounts.

Current Components

The current components and weights of each metal can be found in Appendix F.

Data Used in the Calculation of Weights

Global Production

- Gold production numbers are retrieved from the "USGS Annual Gold Publication" using the previous year's estimates and converted to troy ounces.
- Silver production numbers are taken from the "USGS Annual Silver Publication" using the previous year's estimates and converted to troy ounces.

- Platinum production numbers are taken from the “USGS Annual Platinum-Group Metals Publication” using the previous year's estimates and converted to troy ounces.
- A proportion of each metal as a percentage of the total Global Production of the 3 metals is used in the final calculation of the Index. More on this calculation follows in “Calculating the Index.”

Domestic Consumption

- Gold consumption numbers are retrieved from the “USGS Annual Gold Publication” using the previous year's estimates and converted to troy ounces.
- Silver consumption numbers are retrieved from the “USGS Annual Silver Publication” using the previous year's estimates and converted to troy ounces.
- Platinum consumption numbers are retrieved from the “USGS Annual Platinum-Group Metals Publication” using the previous year’s estimates and converted to troy ounces. In the case that the platinum consumption numbers are missing from the documentation, platinum consumption numbers may be derived from the “USGS Annual Platinum-Group Metals Publication” using the following formula:

$$\text{Platinum Consumption} = \frac{\text{Imports for platinum consumption} - \text{Exports for platinum}}{\text{Net import reliance as a percentage of apparent consumption}}$$

  This derived consumption number is then converted to troy ounces (1 metric ton equals 32,150.7 troy ounces).
- A proportion of each metal as a percentage of the total Domestic Consumption of the 3 metals is used in the final calculation of the Index. More on this calculation follows in “Calculating the Index”.

Volumes

- Total monthly volumes for gold, silver and platinum are aggregated via a proprietary method.
- Final volume numbers are averaged, by component:

$$\frac{\text{Total Monthly Volume}_{\text{January}} + \text{Total Monthly Volume}_{\text{February}} + \text{Total Monthly Volume}_{\text{March}}}{3}$$

- A proportion of each metal as a percentage of the total notionally traded volume of the 3 metals is used in the final calculation of the Index. More on this calculation follows in “Calculating the Index.”

Calculating the Index

Calculating the Index follows a three-step approach with the weights of each product determined in steps (1) and (2) and then a final Index value determined in step (3):

1) Calculate the notional production, consumption and volumes for each of the components.
2) Determine the initial weights of each component within the Index prior to the rebalance.
3) Derive troy ounces of each component metal held constant in the Index until the next rebalance.

Notional Production, Consumption, and Volumes

The notional production, consumption and volumes for each symbol, is calculated: x = {Gold, Silver, Platinum}:

$$\begin{aligned}
\text{Notional Production}_x &= \text{Production in troy ounces}_x \times \text{Average Price}_x \\
\text{Notional Consumption}_x &= \text{Consumption in troy ounces}_x \times \text{Average Price}_x \\
\text{Notional Traded Volume}_x &= \text{Monthly Average Traded Volume}_x \times \text{Average Price}_x \times \text{Contract Multiplier}_x
\end{aligned}$$

Where **Average Price$_x$** is represented as an average price of symbol *x* for the given evaluation period. For example, **notional traded volume** uses a linear average of the first three months of the year (e.g. the volume evaluation period), whereas **notional production** and **notional consumption** each use a linear average of the entire year's prices (e.g. the evaluation period for the production and consumption data).

Determining the Initial Component Weights

At the beginning of the April announcement period, calculate the weights of the components within the Index using 70% consumption, 25% production, and 5% volume. This process determines the initial weights of components for the Index.

The calculation for the weights is as follows, where x = {Gold,Silver,Platinum}.

$$\text{Notional Weighted}_x = 0.25\left(\frac{\text{Notional Production}_x}{\sum \text{Notional Production}_x}\right) + 0.70\left(\frac{\text{Notional Consumption}_x}{\sum \text{Notional Consumption}_x}\right) + 0.05\left(\frac{\text{Notional Volume}_x}{\sum \text{Notional Volume}_x}\right)$$

More explicitly, each symbol is weighted accordingly:

$$\begin{aligned}
\text{Notional Weighted Production}_x &= 0.25\left(\frac{\text{Notional Production}_x}{\text{Notional Production}_{\text{Gold}} + \text{Notional Production}_{\text{Silver}} + \text{Notional Production}_{\text{Platinum}}}\right) \\
\text{Notional Weighted Consumption}_x &= 0.70\left(\frac{\text{Notional Consumption}_x}{\text{Notional Consumption}_{\text{Gold}} + \text{Notional Consumption}_{\text{Silver}} + \text{Notional Consumption}_{\text{Platinum}}}\right) \\
\text{Notional Weighted Traded Volume}_x &= 0.05\left(\frac{\text{Notional Traded Volume}_x}{\text{Notional Traded Volume}_{\text{Gold}} + \text{Notional Traded Volume}_{\text{Silver}} + \text{Notional Traded Volume}_{\text{Platinum}}}\right)
\end{aligned}$$

The Index weight for each of the symbols is a combination of the notional weighted production, notional weighted consumption, and notional weighted trade volume. As shown below, the weighted production, consumption and volumes for gold, silver and platinum will sum to 100%.

$$\text{Index Weight}_{\text{Gold}} = \left(\begin{matrix}\text{Notional}\\ \text{Weighted}\\ \text{Production}_{\text{Gold}}\end{matrix} + \begin{matrix}\text{Notional}\\ \text{Weighted}\\ \text{Consumption}_{\text{Gold}}\end{matrix} + \begin{matrix}\text{Notional}\\ \text{Weighted}\\ \text{Trade Volume}_{\text{Gold}}\end{matrix}\right)$$

$$\text{Index Weight}_{\text{Silver}} = \left(\begin{matrix}\text{Notional}\\ \text{Weighted}\\ \text{Production}_{\text{Silver}}\end{matrix} + \begin{matrix}\text{Notional}\\ \text{Weighted}\\ \text{Consumption}_{\text{Silver}}\end{matrix} + \begin{matrix}\text{Notional}\\ \text{Weighted}\\ \text{Trade Volume}_{\text{Silver}}\end{matrix}\right)$$

$$\text{Index Weight}_{\text{Platinum}} = \left(\begin{matrix}\text{Notional}\\ \text{Weighted}\\ \text{Production}_{\text{Platinum}}\end{matrix} + \begin{matrix}\text{Notional}\\ \text{Weighted}\\ \text{Consumption}_{\text{Platinum}}\end{matrix} + \begin{matrix}\text{Notional}\\ \text{Weighted}\\ \text{Trade Volume}_{\text{Platinum}}\end{matrix}\right)$$

In mid-April, the proportions of each metal within the Index are published.

As an example, given the following notional derived numbers.

	Gold	Silver	Platinum
Notional Consumption	$6,000,000,000	$3,000,000,000	$2,000,000,000
Notional Production	$133,000,000,000	$14,000,000,000	$5,000,000,000
Notional Traded Volume	$700,000,000,000	$120,000,000,000	$19,000,000,000

To calculate the starting Index weight of gold:

$$\text{Notional Weight}_{\text{Gold}} = 0.70\left(\frac{6{,}000{,}000{,}000}{11{,}000{,}000{,}000}\right) + 0.25\left(\frac{133{,}000{,}000{,}000}{152{,}000{,}000{,}000}\right) + 0.05\left(\frac{700{,}000{,}000{,}000}{839{,}000{,}000{,}000}\right) = 0.642 = 64.2\%$$

Continuing this process for the other metals, gold=64.2%, silver=22.1%, and platinum=13.7%. As stated previously, in mid-April the proportion of each metal within the Index are published.

Weights to Ounces

On the published rebalance date, the number of troy ounces is calculated:

$$\text{Troy Ounces}_{\text{Gold}} = \left(\frac{\text{Starting Value of Index} \times \text{Index Weight}_{\text{Gold}}}{\text{Price}_{\text{Gold}}}\right)$$

$$\text{Troy Ounces}_{\text{Silver}} = \left(\frac{\text{Starting Value of Index} \times \text{Index Weight}_{\text{Silver}}}{\text{Price}_{\text{Silver}}}\right)$$

$$\text{Troy Ounces}_{\text{Platinum}} = \left(\frac{\text{Starting Value of Index} \times \text{Index Weight}_{\text{Platinum}}}{\text{Price}_{\text{Platinum}}}\right)$$

The “Starting Value of the Index” is the closing price of the Index prior to the June 1st rebalance date.

Troy Ounces for each product are kept stable until the next rebalance.

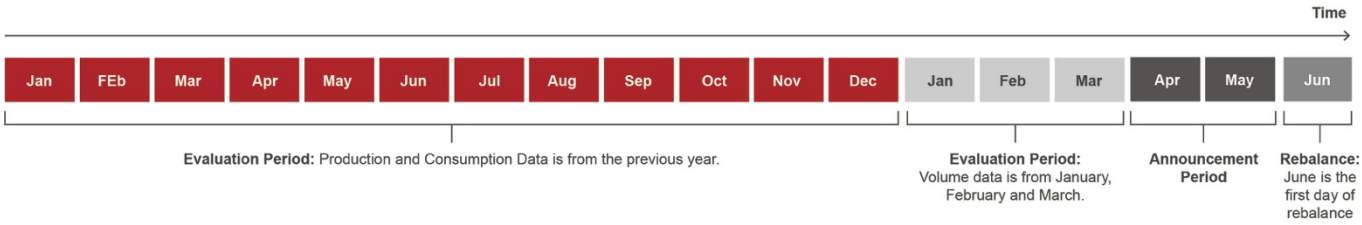
From the above example, gold comprises an initial 64.2% of the Index, silver 22.1% and platinum 13.7%. Assuming the closing price of the Index on May 31st is 116 and the closing price per troy ounce of gold is $1,200:

$$\textbf{Troy Ounces}_{\textbf{Gold}} = \frac{116 \times 0.642}{1200} = 0.06206$$

In this example scenario, the Index has 0.06206 troy ounces of gold. These ounces are kept constant until the next rebalance period. The same process is used for the additional silver and platinum components of the Index.

Rebalancing Timespans

The Index rebalances once annually. Timespans are broken into an evaluation period, an announcement period, and a rebalance period.



The **Evaluation Period** is the period of time where data is collected to determine the weights of the metals within the Index. Information from January through December is used for the production and consumption data. January, February and March are used for the volume data.

The **Announcement Period** is roughly a 60-day period to allow Participants to update any models and to prepare for the updated ratio for the weighting for each. 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 Precious Metals Index Components and Weights

The Small Precious Metals Index ("Index") is comprised of a price-weighted combination of gold, silver, and platinum.

Components

The Index is comprised of three precious metals. These values are derived using the methodology calculation and are kept constant until the next annual rebalance period.

Dates	Gold (oz)	Silver (oz)	Platinum (oz)
June 1, 2019 to May 31, 2020	0.0253979014	0.7435204084	0.0073197260
June 1, 2018 to May 31, 2019	0.0267550323	0.7150136557	0.0055568686
June 1, 2017 to May 31, 2018	0.0261946497	0.7943502867	0.0049233714
June 1, 2016 to May 31, 2017	0.0246688250	0.8988366202	0.0050535132
June 1, 2015 to May 31, 2016	0.0256580691	0.7880910613	0.0056348345

Economic Data

Below are the fractional production, consumption, and volume metrics used to calculate the yearly rebalance starting weights. See the methodology documentation for a complete description:

- **Global Production** data is obtained from the United States Geological Survey (USGS) Annual Publications.
- **Domestic Consumption** data is also obtained from the USGS Annual Publications.
- **Volume** numbers are aggregated via a proprietary method.

	Gold	Silver	Platinum
June 1, 2019 to May 31, 2020			
Fractional Notional Weighted Production (Jan – Dec 2018)	87.99%	9.02%	2.99%
Fractional Notional Weighted Consumption (Jan – Dec 2018)	57.55%	27.00%	15.45%
Fractional Notional Weighted Volume (Jan, Feb, March 2019)	83.89%	13.95%	2.16%
Average Prices (Jan, Feb, March 2019)	1304.06	15.57	824.18
Calculated Weights using May 31, 2019 prices	**66.47%**	**21.86%**	**11.67%**
June 1, 2018 to May 31, 2019			
Fractional Notional Weighted Production (Jan – Dec 2017)	86.38%	9.57%	4.05%
Fractional Notional Weighted Consumption (Jan – Dec 2017)	59.44%	28.14%	12.42%
Fractional Notional Weighted Volume (Jan, Feb, March 2018)	84.12%	14.08%	1.80%
Average Prices (Jan, Feb, March 2018)	1329.78	16.76	977.45
Calculated Weights using May 31, 2018 prices	**67.41%**	**22.79%**	**9.80%**
June 1, 2017 to May 31, 2018			
Fractional Notional Weighted Production (Jan – Dec 2016)	86.03%	10.19%	3.78%
Fractional Notional Weighted Consumption (Jan – Dec 2016)	55.34%	33.27%	11.39%
Fractional Notional Weighted Volume (Jan, Feb, March 2017)	81.12%	16.61%	2.27%
Average Prices (Jan, Feb, March 2017)	1219.22	17.45	979.84
Calculated Weights using May 31, 2017 prices	**64.30%**	**26.66%**	**9.03%**
June 1, 2016 to May 31, 2017			
Fractional Notional Weighted Production (Jan – Dec 2015)	85.12%	10.35%	4.53%
Fractional Notional Weighted Consumption (Jan – Dec 2015)	50.52%	36.93%	12.55%
Fractional Notional Weighted Volume (Jan, Feb, March 2016)	83.50%	14.31%	2.19%
Average Prices (Jan, Feb, March 2016)	1184.12	14.89	917.65
Calculated Weights using May 31, 2016 prices	**60.82%**	**29.16%**	**10.03%**
June 1, 2015 to May 31, 2016			
Fractional Notional Weighted Production (Jan – Dec 2014)	83.40%	11.48%	5.12%
Fractional Notional Weighted Consumption (Jan – Dec 2014)	51.63%	32.53%	15.84%
Fractional Notional Weighted Volume (Jan, Feb, March 2015)	82.03%	14.99%	2.98
Average Prices (Jan, Feb, March 2015)	1220.49	16.76	1194.87
Calculated Weights using May 29, 2015 prices	**61.09%**	**26.39%**	**12.51%**

Appendix G: 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 1. In this hypothetical example, which was of the Small Precious Metals 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						
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 1 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 Precious Metals Index

During the 90 seconds before final settlement, the robustness of the market can be seen by the number of prints in Silver (XAG/USD), Gold (XAU/USD), and Platinum (XPT/USD). These prints are defined as the midpoint between the reported bid and offers. This can be seen in Figure 2.

	Jan. 18, 2019	Feb. 15, 2019	Mar. 15, 2019	Apr. 18, 2019	May 17, 2019	Jun. 21, 2019
XAG/USD	50	61	39	26	29	30
XAU/USD	315	444	278	257	187	327
XPT/USD	7	3	3	2	7	17

Figure 2 Counts of unique prints of the Small Precious Metals Index components during the 90 seconds of settlement

The largest number of prints are coming from Gold (XAU/USD). This is also the largest weight of the Index, accounting for approximately two-thirds of the Small Precious Metals Index.

Displayed in Figure 3 are the number of unique prints during the 90 second period used within 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 Small Precious Metal Index's settlement value.

	Jan. 18, 2019	Feb. 15, 2019	Mar. 15, 2019	Apr. 18, 2019	May 17, 2019	Jun. 21, 2019
XAG/USD	33	39	26	23	23	21
XAU/USD	74	89	76	79	65	85
XPT/USD	4	2	2	1	6	15

Figure 3 Number of unique seconds used in the Small Precious Metals Index settlement methodology