

# CMC MARKETS TIER WEIGHTED PRECIOUS METALS INDEX METHODOLOGY

## INDEX DESCRIPTION

#### 1. Definitions:

"CMC Markets" means CMC Markets NZ Limited (company registration number 1705234); "Index" means the CMC Markets Precious Metals Index;

"Index Component" means one of the CMC Markets cash commodities used to construct the Index Price:

"Index Launch Date" means the day on which the Index first begins pricing and from when the base value begins. See "Further Information" for further base value information;

"Index Disruption Event" means any event such as but not limited to, an exchange holiday that results in the suspension of pricing or a change to the contract specification of any of the Index Components;

"Index Divisor" means the number used to calculate the Index;

"Initial Index Value" means \$10,000,000 calculated in accordance with section 3;

"Index Price" means the price of the Index;

"Index Rebalancing" means the adjustment made to an Index by the Index Review Panel post an Index Review Panel meeting.

"Index Review Panel" means the committee that reviews the Index Components at least on the Review Date or at any other time and which is composed of at least three members of CMC Markets to be nominated and replaced from time to time by the Group Head of Trading of CMC Markets in London, 133 Houndsditch, London, EC3A 7BX;

"Outgoing Component" means the affected Index Component which is substituted with another Index Component as a result of a Substitution Event;

"Qualifying Component" means a component chosen for inclusion within the Index by the Index Review Panel;

"Rebalancing Date" means the first Trading Day of the month following a Review Date;

"Review Date" means the third Friday in March and September each year, starting in 2019, or any other date as the Index Review Panel may determine in its sole discretion;

"Substitution Event" means the replacement of an Index Component as a result of an Index Disruption Event or decision by the Index Review Panel; and

"Trading Day" means any day that CMC Markets is open that is also a trading day on all the relevant exchanges for the Index Components other than a day on which trading on any such relevant exchange is scheduled to close prior to its regular weekday closing time.



# 2. Initial Index Composition and Minimum Number of Index Components

On the Index Launch Date the Index will initially comprise of four CMC cash commodities, listed in **Table 7.1** (section 7), deemed suitable for inclusion by the Index Review Panel with weightings at two tiers. Gold and Silver will be split equally to collectively make up 70% of the index weight. The remaining two Index Components, Platinum and Palladium will also be split equally and collectively make up 30% of the index weight.

With a target Initial Index Value of \$10m, the target weights will be used to assign a proportion of the Index value to each Index Component, which will then determine a number of units per Index Component using the closing prices on the day preceding the Index Launch Date. The number of units of each Index Component is rounded to the nearest integer, which may result in a minor difference to the target Index value. See the "Further Information" section for the Index Components, weightings and rounding error percentage.

The Index will initially and at each Index Rebalancing, comprise of the number of Index Components listed in **Table 7.1** (section 7), but may be subject to review if there are less than the number of Index Components listed in **Table 7.1** available, due to an Index Disruption Event.

Between an Index Rebalancing, an Index Component can be deleted from the Index due to Index Disruption Events.

# 3. Index Composition and Method of Calculation

On the Index Launch Date (t=0) the Index value will have an Initial Index Value of \$10,000,000 (as calculated below):

$$IV_{(0)} = \sum_{i=1}^{n} X_{(i,0)} * P_{(i,0)}$$

Where:

 $IV_{(0)}$  = Initial Index Value on Trading Day **t**=0  $X_{(i,0)}$  = Number of units of component **i** in the Index

P<sub>(i,0)</sub> = Price of component **i** in the Index on Trading Day **t**=0 n = Number of components in the Index on Trading Day **t**=0

Such that:

$$X_{(i,0)} = \frac{W_{(i,0)} * IV_{(0)}}{P_{(i,0)}}$$

Where:

W = Target component weight of component i on Trading Day t=0



The Index Price will then be calculated using the following formula:

$$IP_{(s)} = \frac{\sum_{i=1}^{n} X_{(i,t)} * P_{(i,s)}}{D_{(t)}}$$

Where:

IP(s) = Current Index Price at time **s** 

 $P_{(i,s)}$  = Last published CMC Markets bid or ask price of component i at time s

t = The launch or last rebalancing date

n = Number of components in the Index on Trading Day t

 $X_{(i,t)}$  = Number of units of component i in the Index on Trading Day t

D<sub>(t)</sub> = Index Divisor (as defined below) on Trading Day **t** 

The Index Divisor is a number used to initially set the Index Price at a starting base level. If a change in value of the Index is expected due to a non-market driven event in relation to any of the Index Components, then a new Index Divisor will be calculated based on the close price, of each Index Component, on the day before the expected event so as to maintain consistency of the Index Price.

## 4. Index Disruption Event

If, in the determination of the Index Review Panel, an Index Disruption Event has occurred, the Index Review Panel will decide on the best course of action as to whether to remove or continue to include the affected Index Component(s) within the Index. In either case, a new Index Divisor will be calculated using the last good CMC Markets close price of each Index Component before the Index Disruption Event of the affected Index Component(s).

#### 5. Periodic Review of the Index

The Index shall be reviewed by the Index Review Panel on each Review Date at least biannually. On the Review Date, all Index Components shall be reweighted as per the method on the Index Launch Date and a new number of units per Index Component calculated.

The basis for the Index Rebalancing shall be the respective prices of the Index Components on the relevant Rebalancing Date whereby the Index Price after the Rebalancing Date shall be equal to the Index Price before the Rebalancing Date.

If, in the determination of the Index Review Panel, an Index Disruption Event has occurred on a Rebalancing Date or Review Date, the Rebalancing Date or Review Date shall be postponed to the first succeeding Trading Day on which the Index Review Panel determines that there is no Index Disruption Event.

#### 6. Index Component Substitution

The Index Review Panel will determine if each of the Index Components still qualifies as a Qualifying Component at each Review Date. If a Substitution Event occurs, the Outgoing Component will be substituted with an alternative Index Component on the Rebalancing Date, subject to an Index Disruption Event.

The Index Review Panel shall substitute for such relevant Outgoing Component a new Index Component with effect from the Rebalancing Date.



If no Qualifying Component exists, the value of the Outgoing Component will be distributed proportionally across the remaining Index Components.

The basis for the substitution shall be the respective CMC Markets close prices of the Index Components on the relevant Rebalancing Date.

## 7. Further Information

# **CMC Markets Precious Metals Index**

## General description:

The CMC Markets Precious Metals Index tracks the performance of four CMC Markets cash commodity instruments. This Index will be reviewed by the Index Review Panel biannually.

The Index was created with a base level of 1,000 as of 29th March 2019.

## **Index Components on Index Launch Date:**

## **Table 7.1**

Component i	Initial target weighting w(i,0)
Gold	35.00%
Silver	35.00%
Platinum	15.00%
Palladium	15.00%

The percentage rounding error for the CMC Markets Precious Metals Index is 0.006%.