

Macquarie Trend Following Alpha F3 Index

**Index Manual
December 2021**

NOTICES AND DISCLAIMERS

BASIS OF PROVISION

This Index Manual sets out the rules for the Macquarie Trend Following Alpha F3 Index (the **Index**) and reflects the methodology for determining the composition and calculation of the Index (the **Methodology**). The Methodology and the Index derived from this Methodology are the exclusive property of Macquarie Bank Limited (the **Index Sponsor**). They have been provided to you solely for your internal use and you may not, without the prior written consent of the Index Sponsor, distribute, reproduce, in whole or in part, summarise, quote from or otherwise publicly refer to the contents of the Methodology or use it as the basis of any financial instrument.

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NOTICES

The Index is based on Underlying Contracts, as described in the Methodology. The Index Sponsor and/or its affiliates actively trade Underlying Contracts and options on Underlying Contracts. The Index Sponsor and/or its affiliates also actively enter into or trade and market securities, swaps, options, derivatives, and related instruments which are linked to the performance of these Underlying Contracts or are linked to the performance of an Index. The Index Sponsor and/or its affiliates may underwrite or issue other securities or financial instruments indexed to the Index, and the Index Sponsor or its affiliates may license the Index for publication or for use by unaffiliated third parties. These activities could present conflicts of interest and could affect the value of the Index. The Index Sponsor trades or may trade as principal in instruments (or related derivatives) linked to an index described in this document, and may have proprietary positions in the instruments (or related derivatives). The Index Sponsor may make a market in such instruments (or related derivatives), which may in extreme circumstances affect the levels of the Index described.

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THE MACQUARIE TREND FOLLOWING INDICES

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INTRODUCTION

The Macquarie Trend Following Alpha F3 Index is designed to provide investment exposure to a basket of two commodity indices, each of which is comprised of a basket of commodity futures according to a “trend-following” strategy, with a different observation period and rebalancing frequency. The aim of the Index is to combine the two Component, so as to benefit from both a longer-term, less frequently rebalancing and a shorter term, more frequent rebalancing trend-following signal. The Index is designed to be readily accessible to market participants and is calculated daily in both an Excess Return and Total Return format.

Each Component of the Macquarie Trend-Following Alpha F3 Index is an index comprised of a basket of commodity futures, comprised in such a way as to follow a trend-following strategy. Trend-following strategies are generally based on the assumption that the prices of assets which have been rising in the recent past will continue to rise, and prices of assets which have been falling in the recent past will continue to fall. Therefore, each Component will have long exposure to assets which have grown in value over the observation period of that Component, and short exposure to assets which have fallen in value over that same observation period. Further, each Component of the Index utilizes a methodology by which commodity futures which are more volatile will receive a smaller weight than commodity futures which are less volatile. This mechanism aims to enhance diversification of the Index by decreasing the allocation to those commodities which have shown recent volatility above a particular threshold. The two Components of the Index follow the same strategy, but they differ in terms of the frequency of their holdings calculations dates (that is, the frequency with which the components of each index are rebalanced) and also differ in the lookback period that is used in order to determine the trend of each individual commodity.

GENERAL NOTES ON THE INDICES AND THE METHODOLOGY

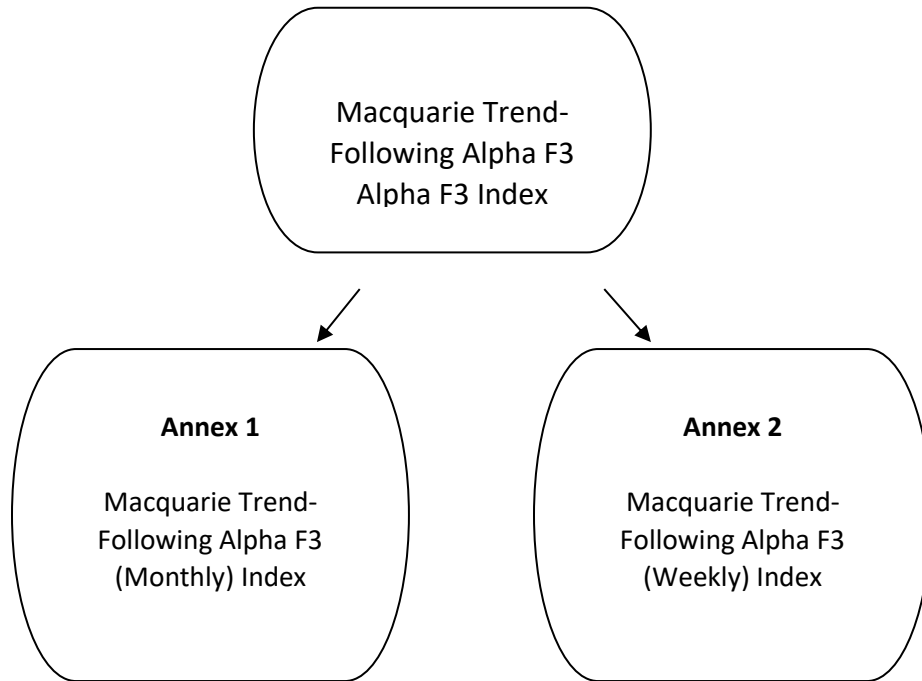
The Index is designed to be replicable and readily accessible to market participants and is calculated daily in both an Excess Return and a Total Return format. To facilitate an understanding of the calculations, this Index Manual contains various worked examples which demonstrate the types of calculations needed to calculate the level of the Index on a particular date.

The Index is calculated and maintained by the Index Calculation Agent and supervised by the Index Sponsor and Oversight Committee, as described below. Once the Index has been created, the Components and Weights (or if appropriate, formula for calculating Weights) will not be amended going forward. All determinations with regard to the Index are made following the rules set out in this document, without discretion by the Index Sponsor or Index Calculation Agent.

The Index is not based upon submissions provided by third parties (or an affiliate of the Index Sponsor or Index Calculation Agent) or expert judgment. The Index is based upon actual transaction data sourced from regulated markets and exchanges.

INDEX MANUAL DOCUMENTATION DIAGRAM

The Macquarie Trend-Following Alpha F3 Index is comprised of two Components, the Macquarie Trend-Following Alpha F3 (Monthly) and the Macquarie Trend-Following Alpha F3 (Weekly). The documentation for each of these Components can be found in Annex 1 and Annex 2 respectively.



INDEX GOVERNANCE

The Index Sponsor has established an independent oversight committee (the ***Oversight Committee***) to review and oversee management of the Indices and resolve any issues that arise. The Oversight Committee is comprised of the following designees, each an employee of Macquarie Bank Limited:

- A Senior Managing Director in the Metals, Mining and Agriculture division of the Commodities and Financial Markets group;
- A Director from the Legal and Governance group;
- A representative from the Technology division of the Corporate Operations Group;
- A representative from the Risk division of the Risk Management Group; and
- A representative from the Compliance division of the Risk Management Group.

Each member of the Oversight Committee is sufficiently knowledgeable about commodity futures contracts and the commodities markets in general, and is required to act in good faith and in a commercially reasonable manner.

The Index Sponsor will make available upon request the names of the individuals forming the Oversight Committee.

The Oversight Committee has considered the features of the Indices, the intended, expected or known usage of the Indices and the materiality of existing or potential conflicts of interest together with overseeing the daily management and operations of the Indices.

The Oversight Committee has approved the Methodology and this Index Manual and will be available on an ad hoc basis for the approval of any changes to the Methodology, any contemplated cancellation of the Indices and the resolution of any issues which arise in relation to the Indices.

INDEX SPONSOR AND INDEX CALCULATION AGENT

THE INDEX SPONSOR

Macquarie Bank Limited is the Index Sponsor. Notwithstanding anything to the contrary, the Index Sponsor will maintain all ownership rights, expressed or otherwise, with respect to the Index, including the ability to license, sell or transfer any or all of its ownership rights with respect to the Index, including but not limited to terminating and appointing any successor Index Calculation Agent. The Index Calculation Agent is appointed by the Index Sponsor to calculate and maintain each Index from and until such time that the Index Sponsor terminates its relationship with the current Index Calculation Agent and appoints a successor index calculation agent. Any such termination or appointment of a successor will be subject to the approval of the Oversight Committee.

The Index Sponsor may, from time to time, revise, amend and/or supplement this Manual. If such revisions or supplement materially affect the calculation of the Index, the Index Sponsor shall publish a new Manual no later than 30 days prior to implementation of the revised or supplemented rules. If it is not reasonably practicable to publish revised Manual 30 days prior to such changes, the revised Manual will be published as soon as reasonably practicable.

THE INDEX CALCULATION AGENT

The Technology division of the Corporate Operations Group (**COG**) of Macquarie Bank Limited acts as “Index Calculation Agent” in respect of the Index as of the date of this Manual. The methodology employed by the Index Calculation Agent in determining the composition and calculation of the Index is set out in the calculations and procedures described in this document.

RELATIONSHIP OF THE INDEX SPONSOR AND THE INDEX CALCULATION AGENT

The Index Calculation Agent is appointed by the Index Sponsor, subject to the approval of the Index Oversight Committee. While, as of the date of publication of these rules, both the Index Sponsor and the Index Calculation Agent form part of Macquarie Bank Limited, they are independent divisions within the bank and employees discharging the obligations of the Index Calculation Agent have separate lines of reporting and accountability from the employees performing the functions of the Index Sponsor.

DEFINITIONS

Component is each of the Components specified in Table 1, included in Section 1 below. The total number of Components is denoted by n .

Component Level in respect of an Index Business Day is the closing level of each Component as published by its index sponsor. If the Index Business Day is not a day on which the Component is scheduled to be published, the Component Level for that day will be the most recent available Component Level on the most recent publication day.

Contract is a futures contract traded in a Trading Facility and having a commodity as underlying.

Holdings Calculation Date is the last Index Business Day of a given calendar month.

Index Business Days are the days in the Index Calendar.

Index Calendar is the set of trading days of the NYSE Holiday schedule (<http://www.nyx.com/holidays-and-hours/nyse>).

Index Name is the Macquarie Trend-Following Alpha F3 Index.

Index Sponsor is Macquarie Bank Limited (Macquarie), the entity that publishes or announces (directly or through an agent) the daily level of the Index.

Index Start Date is the 28th February 2005.

Index Ticker is MQCP530E Index (Bloomberg) for the Excess Return Index and MQCP530T Index (Bloomberg) for the Total Return Index.

Initial Index Level is the level of the Index on the Index Start Date, specified as 100.

Settlement Prices, in respect of an Index Business Day, are the prices of the Underlying Contracts, expressed in US dollars, published by the relevant Trading Facility and referred by them as the settlement price for that particular Contract. If the Index Business Day is not a trading day of the relevant Trading Facility, then the Settlement Price of that particular Contract will be the most recent available price on the most recent trading day of the relevant Trading Facility.

Target Holdings are a set of multipliers used for the daily calculations of the Index derived from the Weights.

Trading Facility The exchange, facility or platform on or through which a particular Contract is traded. A Trading Facility may, but is not required to, be a contract market, exempt electronic trading facility, derivatives transaction execution facility, exempt board of trade or foreign board of trade, as such terms are defined in the U.S. Commodity Exchange Act and the rules and regulations promulgated thereunder.

Treasury Bill Rate in respect of any Index Business Day is the 91-day discount rate for U.S. Treasury Bills, as reported by the U.S. Department of the Treasury's Treasury Direct service (<http://www.treasurydirect.gov/RI/OFBills>) on the most recent of the weekly auction dates prior to said Index Business Day.

The **Underlying Contracts** in respect of an Index Business Day are all Contracts which are, indirectly, via its Components, an underlying of the Index or, if that Index Business Day is a Holdings Calculation Day, scheduled to be an underlying of the Index via its Components according to the methodology of the Components of the Index.

Weights are the weights periodically established according to Section 1 below.

CALCULATION OF THE MACQUARIE TREND FOLLOWING ALPHA F3 INDEX

The Macquarie Trend-Following Alpha F3 Index is meant to provide equal exposure to its two Components. To achieve that, a 50% weight is allocated to each of the two Components on each Holdings Calculation Date.

Section 1 describes the weights that are assigned to each of the Components of the Index.

Section 2 describes the day-to-day calculation of the Index

Section 3 describes Market Disruption Events and the modifications to the calculations that the Index Sponsor will perform to determine the Index Level during and following any market disruptions.

SECTION 1: WEIGHT AND HOLDINGS CALCULATION

On each Holdings Calculation Date, the Weights of the Macquarie Trend-Following Alpha F3 Index shall be set according to the table below:

Table 1 – Index components and weights

Component	Weight
Macquarie Trend-Following Alpha F3 (Monthly)	50%
Macquarie Trend-Following Alpha F3 (Weekly)	50%

On any Index Business Day, t , each Component i has a Holding, $H_{i,t}$, associated with it. This Holding represents the proportion in which the Index Level will change when the level of that Component changes. As outlined in the next section, the Holdings, $\{H_{1,t}, \dots, H_{n,t}\}$, of the n Components are used as inputs on the daily calculation of the Index. In this section, we outline the Holdings, $\{H_{1,t}, \dots, H_{n,t}\}$, calculations on any Index Business Day, t .

TARGET HOLDINGS CALCULATION ON A HOLDINGS CALCULATION DATE

The calculation of the Target Holdings on a Holdings Calculation Date, R , requires as input the set of Weights in respect of that Holdings Calculation Date R and the Component Levels of the Components on the Index Business Day immediately preceding that Holdings Calculations Date, R .

On any Holdings Calculation Date, R , let the Weight of each Component i be denoted by $W_{i,R}$ so that $\{W_{1,R}, \dots, W_{n,R}\}$ are the Weights of the n Components in the Index as determined by the Weighting Methodology of the Index in respect of the Holdings Calculation Date R . Analogously, let $\{C_{1,R-1}, \dots, C_{n,R-1}\}$ be the set of Component Levels of the Components on the Index Business Day immediately preceding the Holdings Calculation Date, R . The Index Target Holdings, $\{TH_{1,R}, \dots, TH_{n,R}\}$, for each of the n Components in the Index are calculated according to the formula below:

$$TH_{i,R} = I_{R-1} \times \frac{W_{i,R}}{C_{i,R-1}} \text{ for every Component } i = 1, \dots, n$$

where I_{R-1} is the Index Level on the Index Business Day immediately preceding the Holdings Calculation Date R.

DAILY HOLDINGS CALCULATION

On any Index Business Day, t , the set of Holdings $\{H_{1,t}, \dots, H_{n,t}\}$ is calculated according to the following rule:

- (i) If t is the Index Business Day immediately following the Holdings Calculation Date R, the Holdings $\{H_{1,t}, \dots, H_{n,t}\}$ are set equal to the Target Holdings $\{TH_{1,R}, \dots, TH_{n,R}\}$ calculated on that Holdings Calculations Date.
- (ii) On any other Index Business Day, t , the Holding of each Component i on that day, $H_{i,t}$, is set to be equal to the Holding of that particular Component on the previous Index Business Day, $H_{i,t-1}$.

SECTION 2: DAILY INDEX CALCULATION

The Index is available in both an Excess Return and a Total Return format. The calculation of the Index Level differs depending on which of these two performance benchmarks the Index tracks.

The Excess Return Index represents the performance of a synthetic, unfunded exposure to the Underlying Contracts in an Index, that is, the Index tracks what an investor would receive if it purchased or sold the futures contracts underlying the Components of the Index without taking into consideration the cost of investment capital.

On each Index Business Day, t , the Excess Return Index Level, I_t , is calculated (rounded to seven significant figures) based on the value of the Excess Return Index on the preceding Index Business Day, I_{t-1} , and the change in level of each of the Components, according to the formula:

$$I_t = I_{t-1} + \sum_i H_{i,t} (C_{i,t} - C_{i,t-1})$$

Where:

- I_t is the Index Level on the close of day t ;
- $H_{i,t}$ is the Holding of Component i on the Index Business Day t ;
- $C_{i,t}$ is the level of Component i on the Index Business Day t ;
- $t-1$ is the Index Business Day immediately preceding Index Business Day t

The Total Return Index represents a synthetic, funded exposure to the Underlying Contracts in an Index, that is, the Index tracks what an investor would receive if it purchased or sold the futures contracts underlying the Components of the Index, and simultaneously invested, at a risk-free rate, a USD sum of money equal to the aggregate notional associated with all bought futures contracts.

On an Index Business Day, t , the Total Return Index Level, TI_t , is calculated (rounded to seven significant figures) based on the value of the Total Return Index on the preceding Index Business Day, TI_{t-1} , the Index Daily Return, IDR_t , and the **Collateral Return**, CR_t , according to the formula:

$$TI_t = TI_{t-1} \times (1 + IDR_t + CR_t)$$

$$CR_t = \left[\frac{1}{1 - \frac{91}{360} \times TBAR_{t-1}} \right]^{days/91} - 1$$

Where:

$TBAR_{t-1}$ is the Treasury Bill Rate of the most recent weekly US Treasury Bill auction prior to the Index Business Day t ;

$days$ is the number of calendar days between the Index Business Day t and the previous Index Business Days $t-1$; and

IDR_t is equal to $\frac{I_t}{I_{t-1}} - 1$

SECTION 3: MARKET DISRUPTION EVENTS

The Index is comprised of two Components, each comprised of indices on one or more futures contracts, or may be comprised of one or more futures contracts on a particular commodity. On any given Index Business Day, disruptions can occur that prevent these contracts from being traded. When this happens, it is necessary for the calculations of the affected Index to be adjusted so that it remains replicable by market participants i.e. adjustments must be made to the Index calculations to ensure that the Index Levels reflect contract prices that were attainable in the market at the times they would need to be traded in order to replicate the performance of the Index.

With respect to the daily calculation of the Index, a “Market Disruption Event” means the occurrence, in respect of one or more Underlying Contracts, of one or more of the following events as determined by the Calculation Agent in its sole discretion:

- (i) a failure by the relevant Trading Facility to report or announce a settlement price for an Underlying Contract;
- (ii) all trading in an Underlying Contract of the Index is suspended and does not recommence at least ten minutes prior to the actual closing time of the regular trading session;
- (iii) the settlement price published by the relevant Trading Facility for one (or more) Underlying Contracts is a “limit price”, which typically means that the Trading Facility published settlement price for such Contract for a trading day has increased or decreased from the previous trading day’s settlement price by the maximum amount permitted under applicable rules of the Trading Facility;
- (iv) the index sponsor of a Component fails to publish a Component Level in respect of an Index Business Day;

- (v) any other event, if the Index Calculation Agent determines that the event materially interferes with the ability of market participants to hedge the Index;
- (vi) the occurrence of a Market Disruption Event in respect of an Underlying Contract that shares the same Commodity.

INDEX CALCULATION UNDER MARKET DISRUPTION EVENTS

When a Market Disruption Event occurs or is continuing on a particular Index Business Day, the Index Calculation Agent will determine the basket of futures contracts that is equivalent to the basket of Underlying Contracts that the Index represents, in respect of that Index Business Day and in accordance with the Index Rules. Once this basket is determined, the Index Calculation Agent will make such adjustments as are necessary to ensure the Index Levels reflect contract prices that were attainable in the market at the times they would need to be traded in order to replicate the performance of the Index, as described below:

If, on a Holdings Calculation Day R (hereinafter called the “Disrupted Holdings Calculation Day”), a Market Disruption Event with respect to one or more Underlying Contracts occurs (each such Contract a “Disrupted Contract” until the first Index Business Day on which no Market Disruption Event exists or is continuing in respect of that Contract), then the Index Calculation for subsequent Index Business Days until the second consecutive non-disrupted Index Business Day will be modified as follows:

- (i) As long as a Market Disruption Event that occurred or was continuing on the Holdings Calculation Day R is continuing, the Index Level will be calculated according to the following formula:

$$I_t = I_{t-1} + \sum_j H'_{j,t} (f_{j,t} - f_{j,t-1})$$

Where

$H'_{j,t}$ is the Equivalent Holding for Underlying Contract j as calculated according to points (ii)-(v) below

$f_{j,t}$ is the settlement price of Underlying Contract j as of the Index Business Day t

- (ii) The Index Calculation Agent shall determine the Equivalent Holdings and the Equivalent Target Holdings with respect to the Index. The Equivalent Holdings is a set of holdings $\{H'_{1,R}, \dots, H'_{m,R}\}$ which corresponds to the Underlying Contracts $\{F_1 \dots F_m\}$ of the Index and perfectly describes the returns of the Index in the time period from the immediately preceding Holdings Calculation Day to the Holdings Calculation Day R . The Equivalent Target Holdings is a set of target holdings $\{TH'_{1,t}, \dots, TH'_{m,t}\}$ for the Underlying Contracts, which perfectly describes the returns of the Index on the days following the Disrupted Holdings Calculation Day and until the first subsequent Holdings Calculation Day. The Equivalent Holdings and the Equivalent Target Holdings shall be determined for all Underlying Contracts, therefore some $H'_{j,t}$ and/or $TH'_{j,t}$ may have a value of 0.
- (iii) On the Index Business Day immediately following a Disrupted Holdings Calculation Day and until all Market Disruption Events that occurred on the Disrupted Holdings Calculation Day have ceased, the Equivalent Holdings $\{H'_{1,t}, \dots, H'_{m,t}\}$ are calculated based on the following formula:

$$H'_{j,t} = TH'_{j,R} + SCH_{j,t}$$

Where:

$TH'_{j,R}$ means the Equivalent Target Holding of Contract j on Holdings Calculation Day R

$SCH_{j,t}$ means $\begin{cases} H'_{j,t-1} - TH'_{j,R} & \text{if } j \text{ is a Disrupted Contract; or} \\ 0 & \text{otherwise} \end{cases}$

$H'_{j,t-1}$ means the Equivalent Holding of Contract j on Index Business Day t-1

- (iv) For each Disrupted Contract j , the Equivalent Holding $H'_{j,t}$ shall be equal to the Equivalent Target Holding $TH'_{j,t}$ on the first Index Business Day following a Disrupted Holdings Calculation Day, on which no Market Disruption Event in respect of that Contract j occurs or is continuing. If a Market Disruption Event continues for more than 5 Index Business Days following a Disrupted Holdings Calculation Day, the Index Calculation Agent shall, in good faith and in a commercially reasonable manner, determine the levels of each Disrupted Component j that will be used in the calculation of Holdings and Index Levels.
- (v) For each Underlying Contract that is not a Disrupted Contract, the Holding $H_{j,t}$ on the Index Business Day immediately following the Disrupted Holdings Calculation Day shall be the Equivalent Target Holding.
- (vi) On the second consecutive non-disrupted Index Business Day immediately following a Disrupted Holdings Calculation Day, the Index Sponsor will resume calculation of the Index in accordance with section 2.

CONTACTS

For more information on the Macquarie Trend Following Alpha F3 Index please contact:

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ANNEX 1

THE MACQUARIE TREND-FOLLOWING ALPHA F3 (MONTHLY) INDEX

INTRODUCTION

The Macquarie Trend-Following Alpha F3 (Monthly) Index (hereinafter, the *Index*) is designed to provide investment exposure to a basket of commodity futures contracts. As futures contracts expire at set intervals, the Index arranges the performance of different commodity futures into Components which represent the cumulative performance of an investment into commodity futures according to a particular schedule. The Index is designed to be readily accessible to market participants and is calculated daily in an Excess Return format.

The Index is designed to follow a “trend-following” strategy. Trend-following strategies are generally based on the assumption that the prices of assets which have been rising in the recent past will continue to rise, and prices of assets which have been falling in the recent past will continue to fall. Therefore, the Index will obtain long exposure to assets which have grown in value over the observation period determined by the Lookback of the Index, and short exposure to assets which have fallen in value over that same period.

Section 1 describes the way that the cumulative performance of commodity futures is calculated in respect of the Macquarie Trend-Following Alpha F3 (Monthly) Index, in a manner that reflects a continuous exposure to each of those commodities and which takes into account the fact that commodity futures have fixed expiration dates.

Section 2 describes the calculation of the weights that are assigned to each of these Components, taking into account the cumulative performance of each set of commodity futures and the volatility of that cumulative performance to determine whether, for the coming period, the Index will have a long (if recent cumulative performance was positive) or short (if recent cumulative performance was negative) exposure to that Component. If the volatility of that cumulative performance is above a certain threshold, then the exposure of the Index will be reduced proportionally in order to avoid a single commodity having an outsize effect on the Index returns as a result of its higher volatility compared to the rest of the commodities that make up the Index.

Section 3 describes the way that the weights calculated in Section 2 are translated into holdings, which are an intermediate calculation required for the calculation of the Index on a day to day basis. Holdings are a different way of expressing the weights of the Index that is unaffected by the day to day changes in the Index Level.

Section 4 describes the way that holdings and Component cumulative performances are used to calculate the level of the Index from one day to the next

Section 5 describes the way that disruptions to the Index are handled, such as missing or untradeable prices of Underlying Contracts.

DEFINITIONS

Commodity in respect of a Component, is the physical commodity that underlies the futures contracts referenced by that Component, as set out in the Index Component Table.

Components are the components of the Index which are set out in the Index Component Table. Each Index Component represents the performance of a sequence of Contracts which are included in and removed from the Index according to the Static Contract Roll Schedule corresponding to such Component as laid out in the Index Component Table. The process of inclusion in/removal from a Component of different Contracts happens over several Index Business Days, during which time that Component will represent the performance of both the Contract Rolling In and the Contract Rolling Out in different proportions as laid out in Section 1 below.

Contract is a futures contract traded on a Trading Facility and having a Commodity as underlying.

The **Contract Rolling In** of a Component on an Index Business Day is the Contract specified in the Index Component Table for the calendar month immediately following — with January following December — the calendar month to which that particular Index Business Day belongs. The Contract Rolling In represents the Contract to which the Index is exposed in respect of that Component during and subsequent to the Roll Period in which the relevant Component rolls its exposure from the Contract Rolling Out to the Contract Rolling In.

The **Contract Rolling Out** of a Component on an Index Business Day is the Contract specified in the Index Component Table for the calendar month to which that particular Index Business Day belongs. The Contract Rolling Out represents the Contract to which the Index is exposed in respect of that Component prior to and during the Roll Period in which the Index rolls its exposure from the Contract Rolling Out to the Contract Rolling In.

Index Business Days, are the days in the Index Calendar.

Index Calendar is the set of trading days of the NYSE Holiday schedule (<http://www.nyx.com/holidays-and-hours/nyse>).

Index Component Table is the Index Component Table as set out in the Appendix.

Index Level in respect of an Index Business Day, is the level of the Index as calculated and published by the Index Calculation Agent.

Index Name is the Macquarie Trend-Following Alpha F3 (Monthly) Index

Index Sponsor is Macquarie Bank Limited (Macquarie), the entity that publishes or announces (directly or through an agent) the Index Level of each Index.

Index Start Date is the 28 Feb 2005.

Index Ticker is the ticker by which the Index is identifiable on Bloomberg, MQCP532E.

Initial Index Level is 100.

Holdings Calculation Date is the last Index Business Day of each calendar month.

Lookback is 12.

Roll Start Date in respect of a Component, is the Index Business Day on which the Index exposure in respect of that Component periodically starts to move from the Contract Rolling Out into the Contract Rolling In. The Roll Start Date is the fifth Index Business Day of each month.

Roll Length is the number of the Index Business Days required to periodically move the exposure from the Contract Rolling Out into the Contract Rolling In for each Component of the index. The Roll Length of the Index is 5.

Roll Period in respect of a Component, is the set of Index Business Days consisting of the period starting from, and including, the Roll Start Date and lasting for the number of Index Business Days established by the Roll Length.

Roll Fraction in respect of a Component, means the fraction of exposure rolled out of the Contract Rolling Out and into the Contract Rolling In on each Index Business Day of the Roll Period. The Roll Fraction is equal to the inverse of the Roll Length.

The **Roll Weights** allocate exposure between the Contract Rolling Out and the Contract Rolling In through a calendar month for each of the Commodities.

Settlement Prices in respect of an Index Business Day, are the prices of the Contract Rolling In and the Contract Rolling Out, expressed in US dollars, published by the relevant Trading Facility and referred by them as the settlement price for that particular Contract. If the Index Business Day is not a trading day of the relevant Trading Facility, then the Settlement Price of that particular Contract will be the most recent available price on the most recent trading day of the relevant Trading Facility.

Static Contract Roll Schedule in respect of a Component, denotes the expiring futures contracts that will be removed from the Index in respect of that Component over the Roll Period of each month, starting with January and ending with December. The futures contract that is removed each month will be replaced with the futures contract that is scheduled to be removed the following month. If a “+” sign is included next to a letter, the futures contract indicated is the one associated with the corresponding month of the year following the month in respect of which this futures contract is selected. The letters translate to months according to the following table:

Month	Letter
January	F
February	G
March	H
April	J
May	K
June	M
July	N
August	Q
September	U
October	V
November	X

December	Z
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NB: On certain occasions the expiry of a contract may fall outside the month with which it is associated. In all situations the schedule will denote the month with which a futures contract is associated in its corresponding Trading Facility.

Trading Facility means each regulated futures exchange, facility or platform on or through which the Contracts underlying the Index are traded. The Trading Facility relevant to the commodity futures in respect to each Component of the Index is specified in the Index Component Table

The **Underlying Contracts** in respect of an Index Business Day are all Contracts which are an underlying of the Index or, if that Index Business Day is a Holdings Calculation Day, scheduled to be an underlying of the Index according to the methodology of that Index or that of its Components.

Vol Target is 10%

SECTION 1: CALCULATING THE CUMULATIVE PERFORMANCE OF A COMPONENT

In order to calculate the daily performance of the Macquarie Trend Following Alpha F3 (Monthly) Index, the cumulative performance of each Component of the index is required. On a daily basis each Component replicates the returns obtained by holding a specified Contract (or more than one Contract during a Roll Period) from one trading day to the next. The futures contract(s) associated with each Component will change through time, with futures contracts being added and removed according to a calendar month contract schedule that is specified in the Index Component Table, as described in more detail below.

The following sub-sections detail how the Index Calculation Agent will calculate the Cumulative Performance of each Component.

ROLL WEIGHTS CALCULATION

Futures contracts have fixed expiry dates, after which trading comes to an end. In order to accurately reflect a financial investment in a physical commodity, futures contracts are removed from the basket which is tracked by the Index prior to their expiry in a process called “rolling” the futures contracts.

Contracts are rolled on the close of each business day and over a series of business days. Rolling entails adjusting the Contracts the Index references in respect of each Component to reduce exposure to the Contract which is scheduled to expire and increase exposure to a further dated Contract. Thus, during the roll period each Component will reference more than one Contract, with the proportion of exposure to each Contract changing on the close of each business day. This is achieved by applying a “roll weight” to each Contract which, over the duration of the roll period, will change to reflect the changing composition of Contracts associated with each Component. These weights are then used to calculate that Component’s Cumulative Performance on the following business day.

The Roll Weights allocate exposure between the Contract Rolling Out and the Contract Rolling In throughout a calendar month. They are calculated daily for each Commodity t according to the following rule:

- (i) The Roll Weight of Component i on Index Business Day t , $RW_{i,t}$, is equal to one (1) if the Index Business Day, t , precedes the Roll Period for the calendar month to which the Index Business Day t belongs.
- (ii) The Roll Weight of Component i on Index Business Day t , $RW_{i,t}$, will decrease by the amount defined by the Roll Fraction on each day of the Roll Period. That is, $RW_{i,t} = RW_{i,t-1} - \text{Roll Fraction}$ for each Index Business Day t belonging to the Roll Period until $RW_{i,t}$ is equal to zero at the end of the Roll Period.
- (iii) The Roll Weight of Component i on Index Business Day t , $RW_{i,t}$, is set equal to zero (0) for all Index Business Days succeeding the Roll Period in the calendar month to which the Index Business Day t belongs.
- (iv) If a Market Disruption Event occurs, then each Contract will have its roll postponed as described in Section 3.

For example, In order to calculate the Cumulative Performance of the “Type A Crude (Brent) F3” Component of the Index, the Roll Weights calculations for January 2014 are calculated as follows:

- In respect of January 2 to January 7 (inclusive), i.e. from the first (1st) to the fourth (4th) Index Business Day in January, the Roll Weight is equal to 1.
- In respect of January 8, which is the first (1st) Index Business Day in the January Roll Period, the Roll Weight is equal to 0.8
- In respect of January 9, which is the second (2nd) Index Business Day in the January Roll Period, the roll weight is equal to 0.6
- In respect of January 10, which is the third (3rd) Index Business Day in the January Roll Period, the Roll Weight is equal to 0.4
- In respect of January 13, which is the fourth (4th) Index Business Day in the January Roll Period, the Roll Weight is equal to 0.2
- In respect of January 14, which is the fifth (5th) Index Business Day in the Roll Period, the Roll Weight is equal to zero.
- In respect of all other Index Business Days in January 2014, the roll weight is equal to zero.

CALCULATING THE CUMULATIVE PERFORMANCE OF EACH COMPONENT

The Cumulative Performance of each Component represents the performance of a synthetic, unfunded exposure to the Contracts in that Component, that is, the Cumulative Performance tracks what an investor would receive if it purchased or sold the futures contracts underlying the Component without taking into consideration the cost of investment capital. On an Index Business Day, t , the Cumulative Performance of Component c , CP_t^c , is calculated (rounded to eight decimal points) based on the Cumulative Performance of that Component in the preceding Index Business Day, CP_{t-1}^c , and the prices of the Contract Rolling Out and Contract Rolling in on the relevant Index Business Day and the Index Business Day immediately preceding it, according to the following formula:

$$CP_t^c = CP_{t-1}^c \times \left(1 + \frac{RW_{c,t-1} \times CRO_{c,t} + (1 - RW_{c,t-1}) \times CRI_{c,t}}{RW_{c,t-1} \times CRO_{c,t-1} + (1 - RW_{c,t-1}) \times CRI_{c,t-1}} \right)$$

where:

$RW_{c,t-1}$ is the Roll Weight of Component c on the Index Business Day $t-1$ immediately preceding the Index Business Day t ;

$CRO_{c,t}$ and $CRI_{c,t}$ are the Settlement Prices of the Contract Rolling Out and the Contract Rolling In of Component c on the Index Business Day t , respectively; and

$CRO_{c,t-1}$ and $CRI_{c,t-1}$ are the Settlement Prices of the Contract Rolling Out and the Contract Rolling In of Component c on the Index Business Day $t-1$ immediately preceding the Index Business Day t , respectively.

The Cumulative Performance of each Component on the Index Start Date will be equal to 100.

For example, for the “Type A Crude (WTI) F3” Component, the Cumulative Performance in respect of January 10 2014 is calculated as follows:

- The immediately preceding Index Business Day is January 9 2014
- The Contract Rolling out is the May 2014 WTI Crude Oil contract
- The Contract Rolling in is the July 2014 WTI Crude Oil contract
- The Roll Weight in respect of January 9 is 0.6
- The Cumulative Performance of the “Type A Crude (WTI) F3” Component in respect of January 9 is 119.5683
- The prices for the Contract Rolling Out and the contract Rolling In are as follows:

	Contract Rolling Out	Contract Rolling In
9 th January 2014	91.69	90.69
10 th January 2014	92.68	91.59

- The calculation of the Cumulative Performance for January 10 is therefore:

$$\frac{92.68 \times 0.6 + 91.59 \times 0.4}{91.69 \times 0.6 + 90.69 \times 0.4} \times 119.5683 = 120.8178$$

MARKET DISRUPTION EVENTS AND MATERIAL CHANGES TO THE FUTURES INCLUDED IN A COMPONENT

Each Component of the Index is comprised of futures contracts on a particular physical commodity. On any given Index Business Day, disruptions can occur that prevent these Contracts from being traded. When this happens, it is necessary for the calculations of the affected Component to be adjusted so that it remains replicable by market participants, i.e. adjustments must be made to the Cumulative Performance calculations to ensure that they reflect Contract prices that were attainable in the market at the times they would need to be traded in order to replicate the Cumulative Performance.

During a Roll Period, this is generally achieved by modifying the Roll Weights of that Component. On any other Index Business Day, in the event that a price is not available for a Contract, a price will be appropriately substituted in order for the calculations in respect of a particular Index Business Day to take place.

With respect to the daily calculation of the Cumulative Performance of a Component, a “Market Disruption Event” means the occurrence of one or more of the following events, as determined by the Index Calculation Agent:

- (i) a material limitation, suspension, or disruption of trading in one (or more) of the Contracts underlying the Component which results in a failure by the relevant Trading Facility to report or announce a settlement price for such Contract(s) on the day on which such event occurs or any succeeding day on which it continues to occur;
- (ii) the Settlement Price published by the relevant Trading Facility for one (or more) Contracts underlying a Component of the Index is a “limit price”, which typically means that the Trading Facility published settlement price for such Contract for a trading day has increased or decreased from the previous trading day’s settlement price by the maximum amount permitted under applicable rules of the Trading Facility;

- (iii) any other event, if the Index Calculation Agent reasonably determines that the event materially interferes with the ability of market participants to hedge one or more Components of the Index.

ROLL WEIGHT CALCULATION UNDER MARKET DISRUPTION EVENTS

When a Market Disruption Event occurs during a Roll Period, the approach taken by the Index Calculation Agent is to delay changes to the Roll Weights of that Component until the Market Disruption Event affecting that Component has concluded, provided that in the event that a Market Disruption Event continues for multiple days, the Index Calculation Agent will make a good faith determination in respect of the market price to be attributed to the affected Contracts.

If, on an Index Business Day during the Roll Period of a Component, t , a Market Disruption Event occurs, then the Component with an underlying Contract affected by the Market Disruption Event will have its roll postponed according to the following methodology:

- (i) The Roll Weight, $RW_{i,t}$, will be set equal to its previous value, i.e., $RW_{i,t} = RW_{i,t-1}$.
- (ii) If the Roll Period falls in January, the Roll Weight on subsequent Index Business Days not affected by a Market Disruption Event will be determined without taking into account the Index Business Days on which a Market Disruption Event occurred or was continuing.
- (iii) If the Roll Period does not fall in January, the postponed portion of the roll in (ii) above will roll on the first Index Business Day not affected by Market Disruption Events.

In the event that the Roll Period ends without the Roll Weight being fully redistributed into the Contract Rolling In, then the Roll Period is extended until there is no Market Disruption Event. If the Roll Period is extended five (5) days, then the Index Calculation Agent will determine the Settlement Price in order to effect that portion of the roll. It is anticipated, however, that the Index Calculation Agent will only need to make such determination under extraordinary circumstances.

MATERIAL CHANGES TO THE FUTURES INCLUDED IN A COMPONENT

If, in respect of a Component of the Index:

- (i) The specifications of a Contract are altered by the relevant Trading Facility in such a way as to materially affect the ability of that Component to represent a financial investment in the underlying commodity of those futures; or
- (ii) Contracts with the appropriate underlying commodity are no longer traded in the Trading Facility corresponding to a Component of the Index,

then the Index Sponsor may, with the approval of the Oversight Committee:

- (i) Alter the specification of the Index in such a way as to ensure that the affected Component of the Index accurately represents a financial investment in the appropriate commodity; or
- (ii) Remove that Component from the Index.

SECTION 2: DETERMINING THE WEIGHTS OF THE MACQUARIE TREND-FOLLOWING ALPHA F3 (MONTHLY) INDEX

On each Holdings Calculation Date, the Weights of the Macquarie Trend Following Alpha F3 (Monthly) Index shall be set according to the below methodology:

The Weight W_R^c of each Component c on Holdings Calculation Date R will be calculated according to the following formula:

$$W_R^c = \frac{1}{N} \times \text{sign}(\text{Ret}_R^c) \times \min\left(\frac{\text{Vol Target}}{\text{Vol}_R^c}, 100\%\right)$$

Where:

N is the number of Components included in the index

$\text{sign}(x)$ is equal to one if x is positive, equal to minus one if x is negative and equal to zero if x is zero

Ret_R^c is calculated according to the following formula, rounded to 8 decimal places:

$$\text{Ret}_R^c = \ln\left(\frac{CP_{R-2}^c}{CP_{R-\text{Lookback}}^c}\right)$$

CP_{R-2}^c is the Cumulative Performance of Component c in respect of the second Index Business Day preceding Holdings Calculation day R

$CP_{R-\text{Lookback}}^c$ is the Cumulative Performance of Component c in respect of the Holdings Calculation Day that is preceding Holdings Calculation Day R by the amount of periods equal to the Lookback of the Index.

Vol Target is specified in the Definitions section of the Index

Vol_R^c is calculated according to the following formula, rounded to 8 decimal places:

$$\text{Vol}_R^c = \sqrt{\frac{252}{n-1} \sum_{i=2}^n \left(\ln\left(\frac{CP_{R-i}^c}{CP_{R-i-1}^c}\right) - \frac{1}{n-1} \sum_{i=2}^n \ln\left(\frac{CP_{R-i}^c}{CP_{R-i-1}^c}\right) \right)^2}$$

n is the number of Index Business Days from, and including, the second Index Business Day preceding Holdings Calculation Day R to and including the Holdings Calculation Day which precedes the Holdings Calculation Day R by a number of periods equal to the Lookback of the Index specified below.

CP_{R-i}^c is the Cumulative Performance of Component c in respect of the Index Business Day preceding the Holdings Calculation Day R by a number of Index Business Days equal to i.

CP_{R-i-1}^c is the Cumulative Performance of Component c in respect of the Index Business Day immediately preceding the Index Business Day that is preceding the Holdings Calculation Day R by a number of Index Business Days equal to i.

SECTION 3: HOLDINGS CALCULATION

On any Index Business Day, t , each Component i has a Holding, $H_{i,t}$, associated with it. As outlined in the next section, the Holdings, $\{H_{1,t}, \dots, H_{n,t}\}$, of the n Components are used as inputs on the daily calculation of the Index. In this section, we outline the Holdings, $\{H_{1,t}, \dots, H_{n,t}\}$, calculations on any Index Business Day, t .

TARGET HOLDINGS CALCULATION ON A HOLDINGS CALCULATION DATE

The calculation of the Target Holdings on a Holdings Calculation Date, R , requires as input the set of Weights in respect of that Holdings Calculation Date R and the Cumulative Performance of the Components on the Index Business Day immediately preceding that Holdings Calculations Date, R .

On any Holdings Calculation Date, R , let the Weight of each Component c be denoted by $W_{c,R}$ so that $\{W_{1,R}, \dots, W_{n,R}\}$ are the Weights of the n Components in the Index as determined in Section 2 and in respect of the Holdings Calculation Date R . Analogously, let $\{CP_{1,R-1}, \dots, CP_{n,R-1}\}$ be the set of Cumulative Performances of the Components on the Index Business Day immediately preceding the Holdings Calculation Date, R . The index Target Holdings, $\{TH_{1,R}, \dots, TH_{n,R}\}$, for each of the n Components in the Index are calculated according to the formula below:

$$TH_{c,R} = I_{R-1} \times \frac{W_{c,R}}{CP_{R-1}^c} \text{ for every Component } c = 1, \dots, n$$

where I_{R-1} is the Index Level on the Index Business Day immediately preceding the Holdings Calculation Date R .

DAILY HOLDINGS CALCULATION

On any Index Business Day, t , the set of Holdings $\{H_{1,t}, \dots, H_{n,t}\}$ is calculated according to the following rule:

- (i) If t is the Index Business Day immediately following the Holdings Calculation Date R , the Holdings $\{H_{1,t}, \dots, H_{n,t}\}$ are set equal to the Target Holdings $\{TH_{1,R}, \dots, TH_{n,R}\}$ calculated on that Holdings Calculations Date.
- (ii) On any other Index Business Day, t , the Holding of each Component i on that day, $H_{i,t}$, is set to be equal to the Holding of that particular Component on the previous Index Business Day, $H_{i,t-1}$.

SECTION 4: DAILY INDEX CALCULATION

On each Index Business Day, t , the Index Level, I_t , is calculated (rounded to 7 significant figures) based on the value of the Index on the preceding Index Business Day, I_{t-1} , and the change in Cumulative Performance of each of the Components, according to the formula:

$$I_t = I_{t-1} + \sum_i H_{i,t}(CP_t^c - CP_{t-1}^c)$$

Where:

- I_t is the Index Level on the close of day t ;
- $H_{i,t}$ is the Holding of Component i on the Index Business Day t ;
- CP_t^c is the Cumulative Performance of Component c on the Index Business Day t ;
- CP_{t-1}^c is the Cumulative Performance of Component c on the Index Business Day $t-1$;
- $t-1$ is the Index Business Day immediately preceding Index Business Day t

The Index Start Date as well as the Index Starting Level, which is the value of the Index on the Index Start Date, are specified in the Definitions section.

SECTION 5: MARKET DISRUPTION EVENTS

With respect to the daily calculation of the Index, a “Market Disruption Event” means the occurrence, in respect of one or more Underlying Contracts, of one or more of the following events as determined by the Index Sponsor in its sole discretion:

- (i) a failure by the relevant Trading Facility to report or announce a settlement price for an Underlying Contract;
- (ii) all trading in an Underlying Contract of the Index is suspended and does not recommence at least ten minutes prior to the actual closing time of the regular trading session;
- (iii) the settlement price published by the relevant Trading Facility for one (or more) Underlying Contracts is a “limit price”, which typically means that the Trading Facility published settlement price for such Contract for a trading day has increased or decreased from the previous trading day’s settlement price by the maximum amount permitted under applicable rules of the Trading Facility;
- (iv) the index sponsor of a Component fails to publish a Component Level in respect of an Index Business Day;
- (v) any other event, if the Index Sponsor determines in its sole discretion that the event materially interferes with the ability of the Index Sponsor or any of its affiliates to hedge the Index;
- (vi) the occurrence of a Market Disruption Event in respect of an Underlying Contract that shares the same Commodity.

INDEX CALCULATION UNDER MARKET DISRUPTION EVENTS

If, on a Holdings Calculation Day R (hereinafter called the “Disrupted Holdings Calculation Day”), a Market Disruption Event with respect to one or more Underlying Contracts occurs (each such Contract a “Disrupted Contract” until the first Index Business Day on which no Market Disruption Event exists or is continuing in respect of that Contract), then the Index Calculation for subsequent Index Business Days until the second consecutive non-disrupted Index Business Day will be modified as follows:

- (i) As long as a Market Disruption Event that occurred or was continuing on the Holdings Calculation Day R is continuing, the Index Level will be calculated according to the following formula:

$$I_t = I_{t-1} + \sum_j H'_{j,t} (f_{j,t} - f_{j,t-1})$$

Where

$H'_{j,t}$ is the Equivalent Holding for Underlying Contract j as calculated according to points (ii)-(v) below

$f_{j,t}$ is the settlement price of Underlying Contract j as of the Index Business Day t

- (ii) The Index Sponsor shall determine the Equivalent Holdings and the Equivalent Target Holdings with respect to the Index. The Equivalent Holdings is a set of holdings $\{H'_{1,R}, \dots, H'_{m,R}\}$ which corresponds to the Underlying Contracts $\{F_1 \dots F_m\}$ of the Index and perfectly describes the returns of the Index in the time period from the immediately preceding Holdings Calculation Day to the Holdings Calculation Day R. The Equivalent Target Holdings is a set of target holdings $\{TH'_{1,t}, \dots, TH'_{m,t}\}$ for the Underlying Contracts, which perfectly describes the returns of the Index on the days following the Disrupted Holdings Calculation Day and until the first subsequent Holdings Calculation Day. The Equivalent Holdings and the Equivalent Target Holdings shall be determined for all Underlying Contracts, therefore some $H'_{j,t}$ and/or $TH'_{j,t}$ may have a value of 0.
- (iii) On the Index Business Day immediately following a Disrupted Holdings Calculation Day and until all Market Disruption Events that occurred on the Disrupted Holdings Calculation Day have ceased, the Equivalent Holdings $\{H'_{1,t}, \dots, H'_{m,t}\}$ are calculated based on the following formula:

$$H'_{j,t} = TH'_{j,R} + SCH_{j,t}$$

Where:

$TH'_{j,R}$ means the Equivalent Target Holding of Contract j on Holdings Calculation Day R

$SCH_{j,t}$ means $\begin{cases} H'_{j,t-1} - TH'_{j,R} & \text{if } j \text{ is a Disrupted Contract; or} \\ 0 & \text{otherwise} \end{cases}$

$H'_{j,t-1}$ means the Equivalent Holding of Contract j on Index Business Day t-1

- (iv) For each Disrupted Contract j , the Equivalent Holding $H'_{j,t}$ shall be equal to the Equivalent Target Holding $TH'_{j,t}$ on the first Index Business Day following a Disrupted Holdings Calculation Day, on which no Market Disruption Event in respect of that Contract j occurs or is continuing. If a Market Disruption Event continues for more than 5 Index Business Days following a Disrupted Holdings Calculation Day, the Index Sponsor shall, in good faith and in a commercially reasonable manner, determine the levels of each Disrupted Component j that will be used in the calculation of Holdings and Index Levels.
- (v) For each Underlying Contract that is not a Disrupted Contract, the Holding $H_{j,t}$ on the Index Business Day immediately following the Disrupted Holdings Calculation Day shall be the Equivalent Target Holding.
- (vi) On the second consecutive non-disrupted Index Business Day immediately following a Disrupted Holdings Calculation Day, the Index Sponsor will resume calculation of the index in accordance with section 2.

APPENDIX: INDEX COMPONENT TABLE

Component	Commodity	Trading Facility	Static Contract Roll Schedule
Type A Copper (COMEX) F3	Copper (COMEX)	CMX	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type A Soybean Oil F3	Soybean Oil	CME	K,N,N,Z,Z,Z,Z,F+,F+,H+,H+,K+
Type A Corn F3	Corn	CBT	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type A Cocoa F3	Cocoa	ICE - US	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type A Crude (WTI) F3	Crude (WTI)	NYM/ICE	K,N,N,U,U,X,X,F+,F+,H+,H+,K+
Type A Cotton F3	Cotton	ICE - US	K,N,N,Z,Z,Z,Z,H+,H+,H+,K+
Type A Gold F3	Gold	CMX	M,M,Q,Q,Z,Z,Z,G+,G+,J+,J+
Type A Heating Oil F3	Heating Oil	NYM	K,N,N,U,U,X,X,F+,F+,H+,H+,K+
Type A Coffee F3	Coffee	ICE - US	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type A Kansas Wheat F3	Kansas Wheat	KBT	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type A Live Cattle F3	Live Cattle	CME	M,M,Q,Q,V,V,Z,Z,G+,G+,J+,J+
Type A Crude (Brent) F3	Crude (Brent)	ICE - UK	N,N,U,U,X,X,F+,F+,H+,H+,K+,K+
Type A Lean Hogs F3	Lean Hogs	CME	M,M,N,Q,V,V,Z,Z,G+,G+,J+,J+
Type A Aluminium F3	Aluminium	LME	K,N,N,U,U,X,X,F+,F+,H+,H+,K+
Type A Nickel F3	Nickel	LME	K,N,N,U,U,X,X,F+,F+,H+,H+,K+
Type A Zinc F3	Zinc	LME	K,N,N,U,U,X,X,F+,F+,H+,H+,K+
Type A Natural Gas F3	Natural Gas	NYM/ICE	K,N,N,U,U,X,X,F+,F+,H+,H+,K+
Type A Unleaded Gasoline F3	Gasoline	NYM	K,N,N,U,U,X,X,F+,F+,H+,H+,K+
Type A Soybeans F3	Soybeans	CBT	K,N,N,X,X,X,X,F+,F+,H+,H+,K+
Type A Sugar F3	Sugar	ICE - US	K,N,N,V,V,V,H+,H+,H+,H+,H+,K+
Type A Silver F3	Silver	CMX	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type A Soybean Meal F3	Soybean Meal	CME	K,N,N,Z,Z,Z,Z,F+,F+,H+,H+,K+
Type A Wheat F3	Wheat	CBT	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type B Corn F3	Corn	CBT	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type B Cocoa F3	Cocoa	ICE - US	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type B Crude (WTI) F3	Crude (WTI)	NYM/ICE	K,M,N,Q,U,V,X,Z,F+,G+,H+,J+
Type B Cotton F3	Cotton	ICE - US	K,N,N,Z,Z,Z,Z,H+,H+,H+,K+
Type B Feeder Cattle F3	Feeder Cattle	CME	K,Q,Q,Q,U,V,X,F+,F+,H+,H+,J+
Type B Gold F3	Gold	CMX	M,M,Q,Q,Z,Z,Z,G+,G+,J+,J+
Type B Heating Oil F3	Heating Oil	NYM	K,M,N,Q,U,V,X,Z,F+,G+,H+,J+
Type B Coffee F3	Coffee	ICE - US	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type B Kansas Wheat F3	Kansas Wheat	KBT	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type B Live Cattle F3	Live Cattle	CME	M,M,Q,Q,V,V,Z,Z,G+,G+,J+,J+
Type B Crude (Brent) F3	Crude (Brent)	ICE - UK	M,N,Q,U,V,X,Z,F+,G+,H+,J+,K+
Type B Gas Oil F3	Gas Oil	ICE - UK	K,M,N,Q,U,V,X,Z,F+,G+,H+,J+
Type B Lean Hogs F3	Lean Hogs	CME	M,M,N,Q,V,V,Z,Z,G+,G+,J+,J+
Type B Aluminium F3	Aluminium	LME	K,M,N,Q,U,V,X,Z,F+,G+,H+,J+
Type B Copper (LME) F3	Copper (LME)	LME	K,M,N,Q,U,V,X,Z,F+,G+,H+,J+
Type B Nickel F3	Nickel	LME	K,M,N,Q,U,V,X,Z,F+,G+,H+,J+
Type B Lead F3	Lead	LME	K,M,N,Q,U,V,X,Z,F+,G+,H+,J+
Type B Zinc F3	Zinc	LME	K,M,N,Q,U,V,X,Z,F+,G+,H+,J+
Type B Natural Gas F3	Natural Gas	NYM/ICE	K,M,N,Q,U,V,X,Z,F+,G+,H+,J+

Type B Unleaded Gasoline F3	Gasoline	NYM	K,M,N,Q,U,V,X,Z,F+,G+,H+,J+
Type B Soybeans F3	Soybeans	CBT	K,N,N,X,X,X,X,F+,F+,H+,H+,K+
Type B Sugar F3	Sugar	ICE - US	K,N,N,V,V,V,H+,H+,H+,H+,H+,K+
Type B Silver F3	Silver	CMX	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type B Wheat F3	Wheat	CBT	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+

ANNEX 2

THE MACQUARIE TREND-FOLLOWING ALPHA F3 (WEEKLY) INDEX

INTRODUCTION

The Macquarie Trend-Following Alpha F3 (Weekly) Index (hereinafter, the *Index*) is designed to provide investment exposure to a basket of commodity futures contracts. As futures contracts expire at set intervals, the Index arranges the performance of different commodity futures into Components which represent the cumulative performance of an investment into commodity futures according to a particular schedule. The Index is designed to be readily accessible to market participants and is calculated daily in an Excess Return format.

The Index is designed to follow a “trend-following” strategy. Trend-following strategies are generally based on the assumption that the prices of assets which have been rising in the recent past will continue to rise, and prices of assets which have been falling in the recent past will continue to fall. Therefore, the Index will obtain long exposure to assets which have grown in value over the observation period determined by the Lookback of the Index, and short exposure to assets which have fallen in value over that same period.

Section 1 describes the way that the cumulative performance of commodity futures is calculated in respect of the Macquarie Trend-Following Alpha F3 (Monthly) Index, in a manner that reflects a continuous exposure to each of those commodities and which takes into account the fact that commodity futures have fixed expiration dates.

Section 2 describes the calculation of the weights that are assigned to each of these Components, taking into account the cumulative performance of each set of commodity futures and the volatility of that cumulative performance to determine whether, for the coming period, the Index will have a long (if recent cumulative performance was positive) or short (if recent cumulative performance was negative) exposure to that Component. If the volatility of that cumulative performance is above a certain threshold, then the exposure of the Index will be reduced proportionally in order to avoid a single commodity having an outsize effect on the Index returns as a result of its higher volatility compared to the rest of the commodities that make up the Index.

Section 3 describes the way that the weights calculated in Section 2 are translated into holdings, which are an intermediate calculation required for the calculation of the Index on a day to day basis. Holdings are a different way of expressing the weights of the Index that is unaffected by the day to day changes in the Index Level.

Section 4 describes the way that holdings and Component cumulative performances are used to calculate the level of the Index from one day to the next

Section 5 describes the way that disruptions to the Index are handled, such as missing or untradeable prices of Underlying Contracts.

DEFINITIONS

Commodity in respect of a Component, is the physical commodity that underlies the futures contracts referenced by that Component, as laid out in the Index Component Table.

Components are the components of the Index which are set out in the Index Component Table. Each Index Component represents the performance of a sequence of Contracts which are included in and removed from the Index according to the Static Contract Roll Schedule corresponding to such Component as laid out in the Index Component Table. The process of inclusion in/removal from a Component of different Contracts happens over several Index Business Days, during which time that Component will represent the performance of both the Contract Rolling In and the Contract Rolling Out in different proportions as laid out in Section 1 below.

Contract is a futures contract traded on a Trading Facility and having a Commodity as underlying.

The **Contract Rolling In** of a Component on an Index Business Day is the Contract specified in the Index Component Table for the calendar month immediately following — with January following December — the calendar month to which that particular Index Business Day belongs. The Contract Rolling In represents the Contract to which the Index is exposed in respect of that Component during and subsequent to the Roll Period in which the relevant Component rolls its exposure from the Contract Rolling Out to the Contract Rolling In.

The **Contract Rolling Out** of a Component on an Index Business Day is the Contract specified in the Index Component Table for the calendar month to which that particular Index Business Day belongs. The Contract Rolling Out represents the Contract to which the Index is exposed in respect of that Component prior to and during the Roll Period in which the Index rolls its exposure from the Contract Rolling Out to the Contract Rolling In.

Index Business Days are the days in the Index Calendar.

Index Calendar is the set of trading days of the NYSE Holiday schedule (<http://www.nyx.com/holidays-and-hours/nyse>).

Index Component Table is the Index Component Table as set out in the Appendix.

Index Level, in respect of an Index Business Day, is the level of the Index as calculated and published by the Index Calculation Agent.

Index Name is the Macquarie Trend-Following Alpha F3 (Weekly) Index.

Index Sponsor is Macquarie Bank Limited (Macquarie), the entity that publishes or announces (directly or through an agent) the Index Level of each Index.

Index Start Date is the 28 Feb 2005.

Index Ticker is the ticker by which the Index is identifiable on Bloomberg, MQCP531E

Initial Index Level is 100.

Holdings Calculation Date in respect of a Component, each Monday that is an Index Business Day or if that day is not an Index Business Day, the immediately preceding Index Business Day.

Lookback is 12.

Roll Start Date in respect of a Component, is the Index Business Day on which the Index exposure in respect of that Component periodically starts to move from the Contract Rolling Out into the Contract Rolling In. The Roll Start Date is the fifth Index Business Day of each month.

Roll Length is the number of the Index Business Days required to periodically move the exposure from the Contract Rolling Out into the Contract Rolling In for each Component of the Index. The Roll Length of the Index is 5.

Roll Period, in respect of a Component, is the set of Index Business Days consisting of the period starting from, and including, the Roll Start Date and lasting for the number of Index Business Days established by the Roll Length.

Roll Fraction in respect of a Component, means the fraction of exposure rolled out of the Contract Rolling Out and into the Contract Rolling In on each Index Business Day of the Roll Period. The Roll Fraction is equal to the inverse of the Roll Length.

The **Roll Weights** allocate exposure between the Contract Rolling Out and the Contract Rolling In through a calendar month for each of the Commodities.

Settlement Prices, in respect of an Index Business Day, are the prices of the Contract Rolling In and the Contract Rolling Out, expressed in US dollars, published by the relevant Trading Facility and referred by them as the settlement price for that particular Contract. If the Index Business Day is not a trading day of the relevant Trading Facility, then the Settlement Price of that particular Contract will be the most recent available price on the most recent trading day of the relevant Trading Facility.

Static Contract Roll Schedule in respect of a Component, denotes the expiring futures contracts that will be removed from the Index in respect of that Component over the Roll Period of each month, starting with January and ending with December. The futures contract that is removed each month will be replaced with the futures contract that is scheduled to be removed the following month. If a “+” sign is included next to a letter, the futures contract indicated is the one associated with the corresponding month of the year following the month in respect of which this futures contract is selected. The letters translate to months according to the following table:

Month	Letter
January	F
February	G
March	H
April	J
May	K
June	M
July	N
August	Q
September	U
October	V

November	X
December	Z

NB: On certain occasions the expiry of a contract may fall outside the month with which it is associated. In all situations the schedule will denote the month with which a futures contract is associated in its corresponding Trading Facility.

Trading Facility means each regulated futures exchange, facility or platform on or through which the Contracts underlying the Index are traded. The Trading Facility relevant to the commodity futures in respect to each Component of the Index is specified in the Index Component Table

The **Underlying Contracts** in respect of an Index Business Day are all Contracts which are an underlying of the Index or, if that Index Business Day is a Holdings Calculation Day, scheduled to be an underlying of the Index according to the methodology of that Index or that of its Components.

Vol Target is 10%

SECTION 1: CALCULATING THE CUMULATIVE PERFORMANCE OF A COMPONENT

In order to calculate the daily performance of the Macquarie Trend Following Alpha F3 (Weekly) Index, the cumulative performance of each Component of the index is required. On a daily basis each Component replicates the returns obtained by holding a specified Contract (or more than one Contract during a Roll Period) from one trading day to the next. The futures contract(s) associated with each Component will change through time, with futures contracts being added and removed according to a calendar month contract schedule that is specified in the Index Component, as described in more detail below.

The following sub-sections detail how the Index Calculation Agent will calculate the Cumulative Performance of each Component.

ROLL WEIGHTS CALCULATION

Futures contracts have fixed expiry dates, after which trading comes to an end. In order to accurately reflect a financial investment in a physical commodity, futures contracts are removed from the basket which is tracked by the Index prior to their expiry in a process called “rolling” the futures contracts.

Contracts are rolled on the close of each business day and over a series of business days. Rolling entails adjusting the Contracts the Index references in respect of each Component to reduce exposure to the Contract which is scheduled to expire and increase exposure to a further dated Contract. Thus, during the roll period each Component will reference more than one Contract, with the proportion of exposure to each Contract changing on the close of each business day. This is achieved by applying a “roll weight” to each Contract which, over the duration of the roll period, will change to reflect the changing composition of Contracts associated with each Component. These weights are then used to calculate that Component’s Cumulative Performance on the following business day.

The Roll Weights allocate exposure between the Contract Rolling Out and the Contract Rolling In throughout a calendar month. They are calculated daily for each Commodity t according to the following rule:

- (i) The Roll Weight of Component i on Index Business Day t , $RW_{i,t}$, is equal to one (1) if the Index Business Day, t , precedes the Roll Period for the calendar month to which the Index Business Day t belongs.
- (ii) The Roll Weight of Component i on Index Business Day t , $RW_{i,t}$, will decrease by the amount defined by the Roll Fraction on each day of the Roll Period. That is, $RW_{i,t} = RW_{i,t-1} - \text{Roll Fraction}$ for each Index Business Day t belonging to the Roll Period until $RW_{i,t}$ is equal to zero at the end of the Roll Period.
- (iii) The Roll Weight of Component i on Index Business Day t , $RW_{i,t}$, is set equal to zero (0) for all Index Business Days succeeding the Roll Period in the calendar month to which the Index Business Day t belongs.
- (iv) If a Market Disruption Event occurs, then each Contract will have its roll postponed as described in Section 3.

For example, In order to calculate the Cumulative Performance of the “Type A Crude (Brent) F3” Component of the Index, the Roll Weights calculations for January 2014 are calculated as follows:

- In respect of January 2 to January 7 (inclusive), i.e. from the first (1st) to the fourth (4th) Index Business Day in January, the Roll Weight is equal to 1.
- In respect of January 8, which is the first (1st) Index Business Day in the January Roll Period, the Roll Weight is equal to 0.8
- In respect of January 9, which is the second (2nd) Index Business Day in the January Roll Period, the roll weight is equal to 0.6
- In respect of January 10, which is the third (3rd) Index Business Day in the January Roll Period, the Roll Weight is equal to 0.4
- In respect of January 13, which is the fourth (4th) Index Business Day in the January Roll Period, the Roll Weight is equal to 0.2
- In respect of January 14, which is the fifth (5th) Index Business Day in the Roll Period, the Roll Weight is equal to zero
- In respect of all other Index Business Days in January 2014, the roll weight is equal to zero

CALCULATING THE CUMULATIVE PERFORMANCE OF EACH COMPONENT

The Cumulative Performance of each Component represents the performance of a synthetic, unfunded exposure to the Contracts in that Component, that is, the Cumulative Performance tracks what an investor would receive if it purchased or sold the futures contracts underlying the Component without taking into consideration the cost of investment capital. On an Index Business Day, t , the Cumulative Performance of Component c , CP_t^c , is calculated (rounded to eight decimal points) based on the Cumulative Performance of that Component in the preceding Index Business Day, CP_{t-1}^c , and the prices of the Contract Rolling Out and Contract Rolling in on the relevant Index Business Day and the Index Business Day immediately preceding it, according to the following formula:

$$CP_t^c = CP_{t-1}^c \times \left(1 + \frac{RW_{c,t-1} \times CRO_{c,t} + (1 - RW_{c,t-1}) \times CRI_{c,t}}{RW_{c,t-1} \times CRO_{c,t-1} + (1 - RW_{c,t-1}) \times CRI_{c,t-1}} \right)$$

where:

$RW_{c,t-1}$ is the Roll Weight of Component c on the Index Business Day $t-1$ immediately preceding the Index Business Day t ;

$CRO_{c,t}$ and $CRI_{c,t}$ are the Settlement Prices of the Contract Rolling Out and the Contract Rolling In of Component c on the Index Business Day t , respectively; and

$CRO_{c,t-1}$ and $CRI_{c,t-1}$ are the Settlement Prices of the Contract Rolling Out and the Contract Rolling In of Component c on the Index Business Day $t-1$ immediately preceding the Index Business Day t , respectively.

The Cumulative Performance of each Component on the Index Start Date will be equal to 100.

For example, for the “Type A Crude (WTI) F3” Component, the Cumulative Performance in respect of January 10 2014 is calculated as follows:

- The immediately preceding Index Business Day is January 9 2014
- The Contract Rolling out is the May 2014 WTI Crude Oil contract
- The Contract Rolling in is the July 2014 WTI Crude Oil contract
- The Roll Weight in respect of January 9 is 0.6
- The Cumulative Performance of the “Type A Crude (WTI) F3” Component in respect of January 9 is 119.5683
- The prices for the Contract Rolling Out and the contract Rolling In are as follows:

	Contract Rolling Out	Contract Rolling In
9 th January 2014	91.69	90.69
10 th January 2014	92.68	91.59

- The calculation of the Cumulative Performance for January 10 is therefore:

$$\frac{92.68 \times 0.6 + 91.59 \times 0.4}{91.69 \times 0.6 + 90.69 \times 0.4} \times 119.5683 = 120.8178$$

MARKET DISRUPTION EVENTS AND MATERIAL CHANGES TO THE FUTURES INCLUDED IN A COMPONENT

Each Component of the Index is comprised of futures contracts on a particular physical commodity. On any given Index Business Day, disruptions can occur that prevent these Contracts from being traded. When this happens, it is necessary for the calculations of the affected Component to be adjusted so that it remains replicable by market participants, i.e. adjustments must be made to the Cumulative Performance calculations to ensure that they reflect Contract prices that were attainable in the market at the times they would need to be traded in order to replicate the Cumulative Performance.

During a Roll Period, this is generally achieved by modifying the Roll Weights of that Component. On any other Index Business Day, in the event that a price is not available for a Contract, a price will be appropriately substituted in order for the calculations in respect of a particular Index Business Day to take place.

With respect to the daily calculation of the Cumulative Performance of a Component, a “Market Disruption Event” means the occurrence of one or more of the following events, as determined by the Index Calculation Agent:

- (i) a material limitation, suspension, or disruption of trading in one (or more) of the Contracts underlying the Component which results in a failure by the relevant Trading Facility to report or announce a settlement price for such Contract(s) on the day on which such event occurs or any succeeding day on which it continues to occur;
- (ii) the Settlement Price published by the relevant Trading Facility for one (or more) Contracts underlying a Component of the Index is a “limit price”, which typically means that the Trading Facility published settlement price for such Contract for a trading day has increased or decreased from the previous trading day’s settlement price by the maximum amount permitted under applicable rules of the Trading Facility;

- (iii) any other event, if the Index Calculation Agent reasonably determines that the event materially interferes with the ability of market participants to hedge one or more Components of the Index.

ROLL WEIGHT CALCULATION UNDER MARKET DISRUPTION EVENTS

When a Market Disruption Event occurs during a Roll Period, the approach taken by the Index Calculation Agent is to delay changes to the Roll Weights of that Component until the Market Disruption Event affecting that Component has concluded, provided that in the event that a Market Disruption Event continues for multiple days, the Index Calculation Agent will make a good faith determination in respect of the market price to be attributed to the affected Contracts.

If, on an Index Business Day during the Roll Period of a Component, t , a Market Disruption Event occurs, then the Component with an underlying Contract affected by the Market Disruption Event will have its roll postponed according to the following methodology:

- (i) The Roll Weight, $RW_{i,t}$, will be set equal to its previous value, i.e., $RW_{i,t} = RW_{i,t-1}$.
- (ii) If the Roll Period falls in January, the Roll Weight on subsequent Index Business Days not affected by a Market Disruption Event will be determined without taking into account the Index Business Days on which a Market Disruption Event occurred or was continuing.
- (iii) If the Roll Period does not fall in January, the postponed portion of the roll in (ii) above will roll on the first Index Business Day not affected by Market Disruption Events.

In the event that the Roll Period ends without the Roll Weight being fully redistributed into the Contract Rolling In, then the Roll Period is extended until there is no Market Disruption Event. If the Roll Period is extended five (5) days, then the Index Calculation Agent will determine the Settlement Price in order to effect that portion of the roll. It is anticipated, however, that the Index Calculation Agent will only need to make such determination under extraordinary circumstances.

MATERIAL CHANGES TO THE FUTURES INCLUDED IN A COMPONENT

If, in respect of a Component of the Index:

- (i) The specifications of a Contract are altered by the relevant Trading Facility in such a way as to materially affect the ability of that Component to represent a financial investment in the underlying commodity of those futures; or
- (ii) Contracts with the appropriate underlying commodity are no longer traded in the Trading Facility corresponding to a Component of the Index,

then the Index Sponsor may, with the approval of the Oversight Committee:

- (i) Alter the specification of the Index in such a way as to ensure that the affected Component of the Index accurately represents a financial investment in the appropriate commodity; or
- (ii) Remove that Component from the Index.

SECTION 2: DETERMINING THE WEIGHTS OF THE MACQUARIE TREND-FOLLOWING ALPHA F3 (WEEKLY INDEX)

On each Holdings Calculation Date, the Weights of the Macquarie Trend Following Alpha F3 (Weekly) Index shall be set according to the below methodology:

The Weight W_R^c of each Component c on Holdings Calculation Date R will be calculated according to the following formula:

$$W_R^c = \frac{1}{N} \times \text{sign}(\text{Ret}_R^c) \times \min\left(\frac{\text{Vol Target}}{\text{Vol}_R^c}, 100\%\right)$$

Where:

N is the number of Components included in the index

$\text{sign}(x)$ is equal to one if x is positive, equal to minus one if x is negative and equal to zero if x is zero

Ret_R^c is calculated according to the following formula, rounded to 8 decimal places:

$$\text{Ret}_R^c = \ln\left(\frac{CP_{R-2}^c}{CP_{R-\text{Lookback}}^c}\right)$$

CP_{R-2}^c is the Cumulative Performance of Component c in respect of the second Index Business Day preceding Holdings Calculation day R

$CP_{R-\text{Lookback}}^c$ is the Cumulative Performance of Component c in respect of the Holdings Calculation Day that is preceding Holdings Calculation Day R by the amount of periods equal to the Lookback of the Index.

Vol Target is specified in the Definitions section of the Index

Vol_R^c is calculated according to the following formula, rounded to 8 decimal places:

$$\text{Vol}_R^c = \sqrt{\frac{252}{n-1} \sum_{i=2}^n \left(\ln\left(\frac{CP_{R-i}^c}{CP_{R-i-1}^c}\right) - \frac{1}{n-1} \sum_{i=2}^n \ln\left(\frac{CP_{R-i}^c}{CP_{R-i-1}^c}\right) \right)^2}$$

n is the number of Index Business Days from, and including, the second Index Business Day preceding Holdings Calculation Day R to and including the Holdings Calculation Day which precedes the Holdings Calculation Day R by a number of periods equal to the Lookback of the Index specified below.

CP_{R-i}^c is the Cumulative Performance of Component c in respect of the Index Business Day preceding the Holdings Calculation Day R by a number of Index Business Days equal to i.

CP_{R-i-1}^c is the Cumulative Performance of Component c in respect of the Index Business Day immediately preceding the Index Business Day that is preceding the Holdings Calculation Day R by a number of Index Business Days equal to i.

SECTION 3: HOLDINGS CALCULATION

On any Index Business Day, t , each Component i has a Holding, $H_{i,t}$, associated with it. As outlined in the next section, the Holdings, $\{H_{1,t}, \dots, H_{n,t}\}$, of the n Components are used as inputs on the daily calculation of the Index. In this section, we outline the Holdings, $\{H_{1,t}, \dots, H_{n,t}\}$, calculations on any Index Business Day, t .

TARGET HOLDINGS CALCULATION ON A HOLDINGS CALCULATION DATE

The calculation of the Target Holdings on a Holdings Calculation Date, R , requires as input the set of Weights in respect of that Holdings Calculation Date R and the Cumulative Performance of the Components on the Index Business Day immediately preceding that Holdings Calculations Date, R .

On any Holdings Calculation Date, R , let the Weight of each Component c be denoted by $W_{c,R}$ so that $\{W_{1,R}, \dots, W_{n,R}\}$ are the Weights of the n Components in the Index as determined in Section 2 and in respect of the Holdings Calculation Date R . Analogously, let $\{CP_{1,R-1}, \dots, CP_{n,R-1}\}$ be the set of Cumulative Performances of the Components on the Index Business Day immediately preceding the Holdings Calculation Date, R . The index Target Holdings, $\{TH_{1,R}, \dots, TH_{n,R}\}$, for each of the n Components in the Index are calculated according to the formula below:

$$TH_{c,R} = I_{R-1} \times \frac{W_{c,R}}{CP_{R-1}^c} \text{ for every Component } c = 1, \dots, n$$

where I_{R-1} is the Index Level on the Index Business Day immediately preceding the Holdings Calculation Date R .

DAILY HOLDINGS CALCULATION

On any Index Business Day, t , the set of Holdings $\{H_{1,t}, \dots, H_{n,t}\}$ is calculated according to the following rule:

- (i) If t is the Index Business Day immediately following the Holdings Calculation Date R , the Holdings $\{H_{1,t}, \dots, H_{n,t}\}$ are set equal to the Target Holdings $\{TH_{1,R}, \dots, TH_{n,R}\}$ calculated on that Holdings Calculations Date.
- (ii) On any other Index Business Day, t , the Holding of each Component i on that day, $H_{i,t}$, is set to be equal to the Holding of that particular Component on the previous Index Business Day, $H_{i,t-1}$.

SECTION 4: DAILY INDEX CALCULATION

On each Index Business Day, t , the Index Level, I_t , is calculated (rounded to 7 significant figures) based on the value of the Index on the preceding Index Business Day, I_{t-1} , and the change in Cumulative Performance of each of the Components, according to the formula:

$$I_t = I_{t-1} + \sum_i H_{i,t}(CP_t^c - CP_{t-1}^c)$$

Where:

- I_t is the Index Level on the close of day t ;
- $H_{i,t}$ is the Holding of Component i on the Index Business Day t ;
- CP_t^c is the Cumulative Performance of Component c on the Index Business Day t ;
- CP_{t-1}^c is the Cumulative Performance of Component c on the Index Business Day $t-1$;
- $t-1$ is the Index Business Day immediately preceding Index Business Day t

The Index Start Date as well as the Index Starting Level, which is the value of the Index on the Index Start Date, are specified in the Definitions section.

SECTION 5: MARKET DISRUPTION EVENTS

With respect to the daily calculation of the Index, a “Market Disruption Event” means the occurrence, in respect of one or more Underlying Contracts, of one or more of the following events as determined by the Index Sponsor in its sole discretion:

- (i) a failure by the relevant Trading Facility to report or announce a settlement price for an Underlying Contract;
- (ii) all trading in an Underlying Contract of the Index is suspended and does not recommence at least ten minutes prior to the actual closing time of the regular trading session;
- (iii) the settlement price published by the relevant Trading Facility for one (or more) Underlying Contracts is a “limit price”, which typically means that the Trading Facility published settlement price for such Contract for a trading day has increased or decreased from the previous trading day’s settlement price by the maximum amount permitted under applicable rules of the Trading Facility;
- (iv) the index sponsor of a Component fails to publish a Component Level in respect of an Index Business Day;
- (v) any other event, if the Index Sponsor determines in its sole discretion that the event materially interferes with the ability of the Index Sponsor or any of its affiliates to hedge the Index;
- (vi) the occurrence of a Market Disruption Event in respect of an Underlying Contract that shares the same Commodity.

INDEX CALCULATION UNDER MARKET DISRUPTION EVENTS

If, on a Holdings Calculation Day R (hereinafter called the “Disrupted Holdings Calculation Day”), a Market Disruption Event with respect to one or more Underlying Contracts occurs (each such Contract a “Disrupted Contract” until the first Index Business Day on which no Market Disruption Event exists or is continuing in respect of that Contract), then the Index Calculation for subsequent Index Business Days until the second consecutive non-disrupted Index Business Day will be modified as follows:

- (i) As long as a Market Disruption Event that occurred or was continuing on the Holdings Calculation Day R is continuing, the Index Level will be calculated according to the following formula:

$$I_t = I_{t-1} + \sum_j H'_{j,t} (f_{j,t} - f_{j,t-1})$$

Where

$H'_{j,t}$ is the Equivalent Holding for Underlying Contract j as calculated according to points (ii)-(v) below

- $f_{j,t}$ is the settlement price of Underlying Contract j as of the Index Business Day t
- (ii) The Index Sponsor shall determine the Equivalent Holdings and the Equivalent Target Holdings with respect to the Index. The Equivalent Holdings is a set of holdings $\{H'_{1,R}, \dots, H'_{m,R}\}$ which corresponds to the Underlying Contracts $\{F_1 \dots F_m\}$ of the Index and perfectly describes the returns of the Index in the time period from the immediately preceding Holdings Calculation Day to the Holdings Calculation Day R . The Equivalent Target Holdings is a set of target holdings $\{TH'_{1,t}, \dots, TH'_{m,t}\}$ for the Underlying Contracts, which perfectly describes the returns of the Index on the days following the Disrupted Holdings Calculation Day and until the first subsequent Holdings Calculation Day. The Equivalent Holdings and the Equivalent Target Holdings shall be determined for all Underlying Contracts, therefore some $H'_{j,t}$ and/or $TH'_{j,t}$ may have a value of 0.
- (iii) On the Index Business Day immediately following a Disrupted Holdings Calculation Day and until all Market Disruption Events that occurred on the Disrupted Holdings Calculation Day have ceased, the Equivalent Holdings $\{H'_{1,t}, \dots, H'_{m,t}\}$ are calculated based on the following formula:

$$H'_{j,t} = TH'_{j,R} + SCH_{j,t}$$

Where:

$TH'_{j,R}$ means the Equivalent Target Holding of Contract j on Holdings Calculation Day R

$SCH_{j,t}$ means $\begin{cases} H'_{j,t-1} - TH'_{j,R} & \text{if } j \text{ is a Disrupted Contract; or} \\ 0 & \text{otherwise} \end{cases}$

$H'_{j,t-1}$ means the Equivalent Holding of Contract j on Index Business Day $t-1$

- (iv) For each Disrupted Contract j , the Equivalent Holding $H'_{j,t}$ shall be equal to the Equivalent Target Holding $TH'_{j,t}$ on the first Index Business Day following a Disrupted Holdings Calculation Day, on which no Market Disruption Event in respect of that Contract j occurs or is continuing. If a Market Disruption Event continues for more than 5 Index Business Days following a Disrupted Holdings Calculation Day, the Index Sponsor shall, in good faith and in a commercially reasonable manner, determine the levels of each Disrupted Component j that will be used in the calculation of Holdings and Index Levels.
- (v) For each Underlying Contract that is not a Disrupted Contract, the Holding $H_{j,t}$ on the Index Business Day immediately following the Disrupted Holdings Calculation Day shall be the Equivalent Target Holding.
- (vi) On the second consecutive non-disrupted Index Business Day immediately following a Disrupted Holdings Calculation Day, the Index Sponsor will resume calculation of the index in accordance with section 2.

APPENDIX: INDEX COMPONENT TABLE

Component	Commodity	Trading Facility	Static Contract Roll Schedule
Type A Copper (COMEX) F3	Copper (COMEX)	CMX	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type A Soybean Oil F3	Soybean Oil	CME	K,N,N,Z,Z,Z,Z,F+,F+,H+,H+,K+
Type A Corn F3	Corn	CBT	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type A Cocoa F3	Cocoa	ICE - US	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type A Crude (WTI) F3	Crude (WTI)	NYM/ICE	K,N,N,U,U,X,X,F+,F+,H+,H+,K+
Type A Cotton F3	Cotton	ICE - US	K,N,N,Z,Z,Z,Z,H+,H+,H+,K+
Type A Gold F3	Gold	CMX	M,M,Q,Q,Z,Z,Z,G+,G+,J+,J+
Type A Heating Oil F3	Heating Oil	NYM	K,N,N,U,U,X,X,F+,F+,H+,H+,K+
Type A Coffee F3	Coffee	ICE - US	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type A Kansas Wheat F3	Kansas Wheat	KBT	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type A Live Cattle F3	Live Cattle	CME	M,M,Q,Q,V,V,Z,Z,G+,G+,J+,J+
Type A Crude (Brent) F3	Crude (Brent)	ICE - UK	N,N,U,U,X,X,F+,F+,H+,H+,K+,K+
Type A Lean Hogs F3	Lean Hogs	CME	M,M,N,Q,V,V,Z,Z,G+,G+,J+,J+
Type A Aluminium F3	Aluminium	LME	K,N,N,U,U,X,X,F+,F+,H+,H+,K+
Type A Nickel F3	Nickel	LME	K,N,N,U,U,X,X,F+,F+,H+,H+,K+
Type A Zinc F3	Zinc	LME	K,N,N,U,U,X,X,F+,F+,H+,H+,K+
Type A Natural Gas F3	Natural Gas	NYM/ICE	K,N,N,U,U,X,X,F+,F+,H+,H+,K+
Type A Unleaded Gasoline F3	Gasoline	NYM	K,N,N,U,U,X,X,F+,F+,H+,H+,K+
Type A Soybeans F3	Soybeans	CBT	K,N,N,X,X,X,X,F+,F+,H+,H+,K+
Type A Sugar F3	Sugar	ICE - US	K,N,N,V,V,V,H+,H+,H+,H+,H+,K+
Type A Silver F3	Silver	CMX	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type A Soybean Meal F3	Soybean Meal	CME	K,N,N,Z,Z,Z,Z,F+,F+,H+,H+,K+
Type A Wheat F3	Wheat	CBT	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type B Corn F3	Corn	CBT	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type B Cocoa F3	Cocoa	ICE - US	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type B Crude (WTI) F3	Crude (WTI)	NYM/ICE	K,M,N,Q,U,V,X,Z,F+,G+,H+,J+
Type B Cotton F3	Cotton	ICE - US	K,N,N,Z,Z,Z,Z,H+,H+,H+,K+
Type B Feeder Cattle F3	Feeder Cattle	CME	K,Q,Q,Q,U,V,X,F+,F+,H+,H+,J+
Type B Gold F3	Gold	CMX	M,M,Q,Q,Z,Z,Z,G+,G+,J+,J+
Type B Heating Oil F3	Heating Oil	NYM	K,M,N,Q,U,V,X,Z,F+,G+,H+,J+
Type B Coffee F3	Coffee	ICE - US	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type B Kansas Wheat F3	Kansas Wheat	KBT	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type B Live Cattle F3	Live Cattle	CME	M,M,Q,Q,V,V,Z,Z,G+,G+,J+,J+
Type B Crude (Brent) F3	Crude (Brent)	ICE - UK	M,N,Q,U,V,X,Z,F+,G+,H+,J+,K+
Type B Gas Oil F3	Gas Oil	ICE - UK	K,M,N,Q,U,V,X,Z,F+,G+,H+,J+
Type B Lean Hogs F3	Lean Hogs	CME	M,M,N,Q,V,V,Z,Z,G+,G+,J+,J+
Type B Aluminium F3	Aluminium	LME	K,M,N,Q,U,V,X,Z,F+,G+,H+,J+
Type B Copper (LME) F3	Copper (LME)	LME	K,M,N,Q,U,V,X,Z,F+,G+,H+,J+
Type B Nickel F3	Nickel	LME	K,M,N,Q,U,V,X,Z,F+,G+,H+,J+
Type B Lead F3	Lead	LME	K,M,N,Q,U,V,X,Z,F+,G+,H+,J+
Type B Zinc F3	Zinc	LME	K,M,N,Q,U,V,X,Z,F+,G+,H+,J+
Type B Natural Gas F3	Natural Gas	NYM/ICE	K,M,N,Q,U,V,X,Z,F+,G+,H+,J+

Type B Unleaded Gasoline F3	Gasoline	NYM	K,M,N,Q,U,V,X,Z,F+,G+,H+,J+
Type B Soybeans F3	Soybeans	CBT	K,N,N,X,X,X,X,F+,F+,H+,H+,K+
Type B Sugar F3	Sugar	ICE - US	K,N,N,V,V,V,H+,H+,H+,H+,H+,K+
Type B Silver F3	Silver	CMX	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+
Type B Wheat F3	Wheat	CBT	K,N,N,U,U,Z,Z,Z,H+,H+,H+,K+