Macquarie Weekly Convexity Alpha Single Commodity Indices

Index Manual
December 2022

IMPORTANT INFORMATION

BASIS OF PROVISION

This document (the **Index Manual**) sets out the rules for the Macquarie Weekly Convexity Alpha Single Commodity Indices (each, an **Index**) and reflects the methodology for determining the composition and calculation of each Index (the **Methodology**). The Methodology and each Index derived from this Methodology are the exclusive property of Macquarie Bank Limited (the **Index Administrator**). The Index Administrator owns the copyright and all other rights to the Indices. They have been provided to you solely for your internal use and you may not, without the prior written consent of the Index Administrator, distribute, reproduce, in whole or in part, summarize, quote from or otherwise publicly refer to the contents of the Methodology or use it as the basis of any financial instrument.

For the purposes of the remainder of this document, each reference to the Index in singular form shall be interpreted as being applicable to each Index covered by this Index Manual.

SUITABILITY OF INDEX

The Index and any financial instruments based on the Index may not be suitable for all investors and any investor must make an independent assessment of the appropriateness of any transaction in light of their own objectives and circumstances including the potential risks and benefits of entering into such a transaction. If you are in any doubt about any of the contents of this document, you should obtain independent professional advice.

This Index Manual assumes the reader is a sophisticated financial market participant, with the knowledge and expertise to understand the financial mathematics and derived pricing formulae, as well as the trading concepts, described herein. Any financial instrument based on the Index is unsuitable for a retail or unsophisticated investor.

RISK FACTORS

See the risk factors relating to Macquarie indices in the document headed "Macquarie Proprietary Indices – Risk Factors" provided to you with this Index Manual (the **Risk Factors**). Investors should note in particular the following sections of the Risk Factors: Part 1 (*General Risk Factors*), Part 2.2 (*Commodity Indices*), and Part 2.3 (*Single Futures Indices*).

HISTORICAL DATA

The Index has been calculated since the Index Live Date but historical levels have been produced by a back-test process from the Index Start Date. For more information, see Section 8.3 (*Historical Values of the Index*).

CONFLICTS AND USE OF DISCRETION

For operational reasons the Index may, in limited circumstances, permit the exercise of discretion by the Index Calculation Agent (acting in good faith and in a commercially reasonable manner). For further information see Section 5.4 (*Discretion*).

For information on potential conflicts, see Section 7.3 (*Conflicts*).

CESSATION OR MODIFICATION OF THE INDEX

If you have been granted written consent by the Index Administrator to reference the Index in any contract or financial instrument, you should include in such contract or financial instrument robust fallback provisions to deal with cessation or material modification of the Index.

For information on corrections, changes and cessation of the Index, see Section 5 (*Corrections, Changes, Cessation and Discretion*).

DISCLAIMER OF LIABILITY

The Methodology is published for information purposes only and does not create any legally binding obligation on the part of the Index Administrator, the Index Calculation Agent and/or their affiliates. This document is intended to provide a summary of the Index it purports to describe. The Index Administrator expressly disclaims (to the fullest extent permitted by applicable law) all warranties (express, statutory or implied) regarding this document and the Methodology or the Index, including but not limited to, all warranties of merchantability, fitness for a particular purpose (including investment by regulated funds) and all warranties arising from course of performance, course of dealing or usage of trade and their equivalents under applicable laws of any jurisdiction. In particular, the Index Administrator and Index Calculation Agent do not warrant or guarantee the completeness or accuracy of the Index or timeliness of calculations of any Index Level and do not warrant or guarantee the availability of any Index Level on any particular date or at any particular time. The Index Administrator and the Index Calculation Agent shall have no liability to any person for delays, omissions or interruptions in the delivery of any Index, including as a result of the failure of prices to be published in respect of any Component, an underlying Contract or, as applicable, any other reference value or as a result of a Contract failing to trade for any reason. Although the Index Calculation Agent will obtain information concerning Components and or reference values from publicly available sources it believes to be reliable, it will not independently verify this information. Accordingly, no representation, warranty or undertaking (express or implied) is made by the Index Administrator or the Index Calculation Agent as to the accuracy and completeness of information concerning any Index.

In particular, the Index Administrator and the Index Calculation Agent shall not be liable (whether in contract, tort or otherwise) for any losses (including direct, indirect, special, punitive or other damages (including loss of profits)) resulting from (i) any determination that a Market Disruption Event, an Adjustment Event or an Error has occurred or has not occurred, (ii) the timing relating to the determination that a Market Disruption Event, an Adjustment Event or an Error has occurred, or (iii) any actions taken or not taken by the Index Calculation Agent or the Index Administrator as a result of a determination that a Market Disruption Event, an Adjustment Event or an Error has occurred.

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SECTION 1:   OVERVIEW

1.1   INTRODUCTION AND INDEX OBJECTIVE

Each Index aims to provide a return based on a notional investment in futures contracts (each futures contract, a **Component**) on an individual physical commodity (referred to as a **Commodity**). Physical commodities are not easily investable on a direct and replicable basis. However, futures contracts on commodities represent a widely utilized synthetic proxy for direct investment in commodities. For this reason, each Index is constituted of, and reflects the price performance of, a Component comprised of a notional exchange traded futures contract (referred to as a **Contract**) relating to a physical commodity.

The shape of the commodities futures curve is mainly affected by the costs of storage and the supply and demand conditions of the underlying commodity. When the demand of a commodity outpaces the supply, its futures curve is generally downward sloping (called "backwardation") with the price of the nearby futures contract above the price of the deferred futures contract; and when the supply of a commodity outpaces the demand, its futures curve is generally upward sloping (called "contango") with the price of the deferred futures contract above the price of the nearby futures contract. The roll yield is the amount of return generated from the convergence of the price of a deferred futures contract towards the price of a nearby futures contract. In a backwardated market, the roll yield is positive, as the lower price of a deferred futures contract converges to the higher price of a nearby futures contract. Conversely, in a contango market, the roll yield is negative, as the higher price of a deferred futures contract converges to the lower price of a nearby futures contract.

Each Index has been paired into a "**Group**" (as specified in Annex A) and each Group has a corresponding Commodity. Each Group pairing is comprised of two Indices (referred to as a **Deferred Index** and a **Nearby Index**), aiming to maximise the roll yield by dynamically selecting two successive Contracts (referred to as a **Deferred Contract** and a **Nearby Contract**) along the futures curve with the highest roll yield differential (referred to as the **Convexity**) on a weekly basis. Taking a long exposure to the Deferred Index and simultaneously taking a short exposure to the Nearby Index will realise the highest return of the roll yield if the shape of the futures curve remains unchanged during the immediately following week.

The Indices are designed to be replicable and are calculated daily in an Excess Return format. To facilitate an understanding of the calculations, the Methodology contains certain worked examples which demonstrate the types of calculations needed to calculate the level of an Index on a particular date – See Section 2 (*Index Methodology*).

1.2   INDEX CALCULATION

The Indices are calculated and maintained by the Index Calculation Agent and supervised by the Index Administrator and the Index Oversight Committee, as described in Section 7 (*Oversight, Roles, Conflicts and Reviews*). All determinations with regard to the Indices are made following the rules set out in this document, without discretion by the Index Administrator or the Index Calculation Agent, other than in the limited circumstances set out in this document – see Section 5 (*Corrections, Changes, Cessation and Discretion*) for further information.

In respect of each Index, the Index Level as of the Index Start Date is equal to the Index Start Level specified in Section 4 (*Definitions*). Thereafter, each Index Level is calculated as set out in Section 2 (*Index Methodology*).

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

1.3   INDEX SPECIFICATIONS

Each Index is differentiated by the Index Specifications corresponding to that Index. The Index Specifications set out (i) the parameters specific to an Index (such as the Group and the Bloomberg Ticker), (ii) the parameters that determine the timing of rebalancing from one Contract into the next Contract (i.e. the Holdings Calculation Day) and (iii) the parameters that determine the Contract that the Index will be exposed to (such as the Eligible Futures Contracts). Accordingly, the Index Specifications determine for each Index, exposure to a particular part of the futures curve of a Commodity and the Index will reflect the performance of such point on the curve.

The Index Administrator may, at any time, commence calculation and publication of new Indices pursuant to the Methodology. In such circumstances the Index Administrator will publish a revised version of the Methodology, revised only to augment Annex A (*Index Specifications*) with the new Index Specifications relating to the new Indices.

1.4   METHODOLOGY

The Methodology for calculating the Index is described in the Section 2 (*Index Methodology*).

To facilitate an understanding of the calculations, the Methodology contains certain worked examples in Sections 2.1 to 2.3, which demonstrate the types of calculations needed to calculate the Index Level on a particular date.

SECTION 2:   INDEX METHODOLOGY

On a weekly basis, each Group will select two successive Contracts (referred to as a **Deferred Contract** and a **Nearby Contract**) with the highest roll yield differential (referred to as the **Convexity**) from the current shape of the futures curve according to the Methodology described in Section 2.1 (*Futures Contracts Selection*). The Deferred Index replicates the returns obtained by holding a Component that represents the selected Deferred Contract from one Index Business Day to the next; and the Nearby Index replicates the returns obtained by holding a Component that represents the selected Nearby Contract from one Index Business Day to the next. The following sections detail how the Index Calculation Agent will calculate the Holdings of the Component and the Index Level of each Index on each Index Business Day, based on the inputs set out in the relevant Index Specifications.

Section 2.1	(***Futures Contracts Selection***)	describes how a Deferred Contract and a Nearby Contract are determined on a weekly basis;
Section 2.2	(***Holdings Calculation***)	describes how the Holdings of the Component of the Index is calculated; and
Section 2.3	(***Daily Index Calculation***)	describes the daily calculation of the Index Level.

2.1   FUTURES CONTRACTS SELECTION

Each Group aims to maximise the return of roll yield by dynamically selecting two successive Contracts that realise the highest roll yield differential (referred to as the **Convexity**) from the current shape of the futures curve on a weekly basis. Such Contracts (referred to as the **Deferred Contract** and the **Nearby Contract**) must have sufficient liquidity in order to replicate direct investment and thus is selected from a set of eligible futures contracts. This Section 2.1 (*Futures Contracts Selection*) describes the procedure for determining the Deferred Contract and the Nearby Contract on one day of each calendar week (referred to as the **Contract Determination Day**).

The Index Specification table in Annex A specifies for each Group, the Eligible Futures Contracts in respect of each month. In order to determine the Deferred Contract and the Nearby Contract which are the Components of the Deferred Index and the Nearby Index, Section 2.1.1 (**Eligible Contracts Set**) narrows the pool of Eligible Futures Contracts to the Eligible Contracts Set. Section 2.1.2 (**Selectable Contracts Set**) further narrows the pool of futures contracts to the Selectable Contracts Set. Section 2.1.3 (**Deferred Contract and Nearby Contract**) is the final calculations required to determine the Deferred Contract and the Nearby Contract.

2.1.1   Eligible Contracts Set

In order to determine which Deferred Contract and Nearby Contract shall be selected on a Contract Determination Day, d (as defined in Section 4 (*Definitions*)), the Index Calculation Agent shall first determine a set of eligible futures contracts, $\mathbb{N}_d$ (referred to as the **Eligible Contracts Set**) from the pool of Eligible Futures Contracts specified in the Index Specification in Annex A.

For each Group, the relevant Index Specifications, specifies the eligible futures contract in respect of each month.

On a Contract Determination Day, d, the Eligible Contracts Set, $\mathbb{N}_d$, is a set of eligible futures contracts from (and including) the Contract Selection Start Month (defined in Section 4 (*Definitions*)) to (and including) the Contract Selection End Month (defined in Section 4 (*Definitions*)).

<u>Worked Example of the Eligible Contracts Set:</u>

For the Macquarie Weekly Convexity Alpha WTI Crude Oil (A) Group, the set of eligible futures contracts is explicitly listed under "Eligible Futures Contracts" in the relevant Index Specification:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
G	H	J	K	M	N	Q	U	V	X	Z	F+

* The letters, F, G, H, J, K, M, N, Q, U, V, X, and Z stand for the months of Jan, Feb, …, Dec respectively with the sign "+" signalling the futures contract in the year immediately following the year of the Contract Determination Day.

The Eligible Contracts Set in respect of 3 January 2020 is a set of the G (Feb), H (Mar), J (Apr), K (May), M (Jun), N (Jul), and Q (Aug) futures contracts, because 3 January 2020 is prior to the Contract Selection Day (defined in Section 4 (*Definitions*)), which is 15 January 2020.

2.1.2 Selectable Contracts Set

Following the determination of the Eligible Contracts Set, $\mathbb{N}_d$, to determine which Deferred Contract and Nearby Contract shall be selected on a Contract Determination Day, d, the Index Calculation Agent shall next determine a narrower set of eligible futures contracts, $\mathbb{R}_d$ (referred to as the **Selectable Contracts Set**).

The Selectable Contracts Set, $\mathbb{R}_d$, in respect of a Contract Determination Day, d, is determined according to the following formula:

$$\mathbb{R}_d = \left\{ n: \quad \min\{\text{FND}_{n,d}, \text{LTD}_{n,d}\} > \text{FED}_d \quad \forall n \in \mathbb{N}_d \right\}$$

Where:

$\mathbb{N}_d$	is the Eligible Contracts Set in respect of such Contract Determination Day, d, and is defined in Section 2.1.1 (*Eligible Contracts Set*);
n	is each futures contract in the Eligible Contracts Set, $\mathbb{N}_d$;
$\text{FND}_{n,d}$	is the First Notice Date in respect of a futures contract, n and such Contract Determination Day, d, and is defined in Section 4 (*Definitions*);
$\text{LTD}_{n,d}$	is the Last Trading Date in respect of a futures contract, n and such Contract Determination Day, d, and is defined in Section 4 (*Definitions*);
FED_d	is the First Eligible Day in respect of such Contract Determination Day, d, and is the Index Business Day which falls the number of Index Business Days equal to the First Contract Period following the Next Holdings Calculation Day, nR;
First Contract Period	is a number defined in Section 4 (*Definitions*);
nR	is the Next Holdings Calculation Day in respect of such Contract Determination Day, d, and is the Holdings Calculation Day immediately following the Holdings Calculation Day with which such Contract Determination Day, d, is associated; and

$\min\{x\}$ is the minimum element in respect of the set $\{x\}$. If $\text{FND}_{n,\text{d}}$ is not available, as determined by the Index Calculation Agent, then $\min\{x\}$ is $\text{LTD}_{n,\text{d}}$.

Worked Example of the Selectable Contracts Set:

For Macquarie Weekly Convexity Alpha WTI Crude Oil (A) Group, the Selectable Contracts Set in respect of 3 January 2020 is determined according to the following steps:

1. The First Notice Date and the Last Trading Date of each futures contract in the Eligible Contracts Set in respect of 3 January 2020 is shown in the following table.

Contract	First Notice Date	Last Trading Date
CLG20	23 Jan 2020	21 Jan 2020
CLH20	24 Feb 2020	20 Feb 2020
CLJ20	24 Mar 2020	20 Mar 2020
CLK20	23 Apr 2020	21 Apr 2020
CLM20	21 May 2020	19 May 2020
CLN20	24 Jun 2020	22 Jun 2020
CLQ20	23 Jul 2020	21 Jul 2020

2. The First Eligible Day in respect of 3 January 2020 is 21 January 2020.
3. The Last Trading Date of CLG20 contract does not satisfy the requirement in Section 2.1.2 (*Selectable Contracts Set*). Therefore, the Selectable Contracts Set in respect of 3 January 2020 is a set comprising the H (Mar), J (Apr), K (May), M (Jun), N (Jul), and Q (Aug) futures contracts.

2.1.3 Deferred Contract and Nearby Contract

Following the determination of the Selectable Contracts Set, $\mathbb{R}_\text{d}$, on a Contract Determination Day, d, the Index Calculation Agent shall determine the Deferred Contract and the Nearby Contract.

(i) if $|\mathbb{R}_\text{d}| = 2$:

The Deferred Contract, C_d^D, and the Nearby Contract, C_d^N, in respect of a Contract Determination Day, d, are determined according to the following formula:

$$\left(C_\text{d}^D, C_\text{d}^N\right) = \left(r_\text{d}^2, r_\text{d}^1\right) \quad \forall\, r_\text{d}^1, r_\text{d}^2 \in \text{Ordered}(\mathbb{R}_\text{d})$$

Where:

$\mathbb{R}_\text{d}$ is the Selectable Contracts Set in respect of such Contract Determination Day, d, and is defined in Section 2.1.2 (*Selectable Contracts Set*);

$|\mathbb{R}_\text{d}|$ is the number of futures contracts in the Selectable Contracts Set, $\mathbb{R}_\text{d}$;

$\text{Ordered}(\mathbb{R}_\text{d})$ is the Ordered Selectable Contracts Set in respect of such Contract Determination Day, d, and is a set of futures contracts in the Selectable Contracts Set, $\mathbb{R}_\text{d}$, which is ordered by the Last Trading Day of each futures contract in ascending order; and

r_d^i is the ith futures contract, r, of the Ordered Selectable Contracts Set, $\text{Ordered}(\mathbb{R}_\text{d})$, in respect of such Contract Determination Day, d.

(ii)   if $|\mathbb{R}_d| > 2$:

The Deferred Contract, C_d^D, and the Nearby Contract, C_d^N, in respect of a Contract Determination Day, d, are determined according to the following steps:

Step 1: Calculate the Implied Roll Yield

The Implied Roll Yield, in respect of a futures contract, r, in the Selectable Contract Set, $\mathbb{R}_d$, and such Contract Determination Day, d, is determined according to the following formula:

$$\text{RY}^r_{\text{implied,d}} = \left(\frac{S_d^{pr}}{S_d^r}\right)^{\frac{365}{\Delta t_r^{pr}}} - 1;$$

Where:

S_d^r	is the Settlement Price, in respect of such futures contract, r, and such Contract Determination Day, d. If such Settlement Price is zero, negative or not available, as determined by the Index Calculation Agent, then the Implied Roll Yield of the futures contract, r, and such Contract Determination Day, d, shall be determined as not available by the Index Calculation Agent;
S_d^{pr}	is the Settlement Price, in respect of the Previous Contract, and such Contract Determination Day, d. If such Settlement Price is zero, negative or not available, as determined by the Index Calculation Agent, then the Implied Roll Yield of the futures contract, r, and such Contract Determination Day, d, shall be determined as not available by the Index Calculation Agent;
Previous Contract	in respect of such futures contract, r, is a futures contract, the Last Trading Date of which immediately precedes the Last Trading Date of such futures contract, r, as determined by the Index Calculation Agent. For the avoidance of doubt, the Previous Contract may not belong to the Selectable Contracts Set, $\mathbb{R}_d$; and
Δt_r^{pr}	is the number of calendar days from (and including) the Last Trading Date of the Previous Contract, and to (but excluding) the Last Trading Date of such futures contract, r.

Step 2: Determine the Deferred Contract and the Nearby Contract

The Deferred Contract, C_d^D, and the Nearby Contract, C_d^N, in respect of a Contract Determination Day, d, are determined according to the following formula:

$$\left(C_d^D, C_d^N\right) = \left(r_d^{j+1}, r_d^j\right): \quad \text{Conv}^{r_d^{j+1}}_{r_d^j} = \max\left\{\text{Conv}^{r_d^{i+1}}_{r_d^i} \; \forall \, r_d^i, r_d^{i+1} \in \text{Ordered}(\overline{\mathbb{R}_d})\right\} \; 1 \le i, j < |\overline{\mathbb{R}_d}|$$

Where:

$\mathbb{R}_d$	is the Selectable Contracts Set in respect of such Contract Determination Day, d, and is defined in Section 2.1.2 (*Selectable Contracts Set*);

$\overline{\mathbb{R}_d}$	is the Filtered Selectable Contracts Set in respect of such Contract Determination Day, d, and is a set of futures contracts each of which belongs to the Selectable Contracts Set, $\mathbb{R}_d$, and has an available associated Implied Roll Yield, as determined in the previous step;
$\lvert \overline{\mathbb{R}_d} \rvert$	is the number of futures contracts in the Filtered Selectable Contracts Set, $\overline{\mathbb{R}_d}$;
$\mathrm{Ordered}(\overline{\mathbb{R}_d})$	is the Ordered Filtered Selectable Contracts Set in respect of such Contract Determination Day, d, and is a set of futures contracts in the Filtered Selectable Contracts Set, $\overline{\mathbb{R}_d}$, which is ordered by the Last Trading Day of each futures contract in ascending order;
r_d^i , r_d^j	is the i, j th futures contract, r, of the Ordered Filtered Selectable Contracts Set, $\mathrm{Ordered}(\overline{\mathbb{R}_d})$;
$\mathrm{Conv}_{r_d^i}^{r_d^{i+1}}$	is the Convexity, in respect of two successive futures contracts, r_d^{i+1} and r_d^i, and such Contract Determination Day, d, and is determined according to the following formula:

$$\mathrm{Conv}_{r_d^i}^{r_d^{i+1}} = \mathrm{RY}_{\mathrm{implied,d}}^{r_d^{i+1}} - \mathrm{RY}_{\mathrm{implied,d}}^{r_d^i};$$

Where:

$\mathrm{RY}_{\mathrm{implied,d}}^{r_d^{i+1}}, \mathrm{RY}_{\mathrm{implied,d}}^{r_d^i}$	is the Implied Roll Yield, in respect of a futures contract, r_d^{i+1} or r_d^i, and such Contract Determination Day, d, and is determined according to the previous step.
$\max\{x\}$	is the maximum element in respect of the set $\{x\}$. If there is more than one maximum element in the set $\{x\}$, the maximum element (C_d^D, C_d^N) with the most recent Last Trading Date of the futures contract, C_d^N, shall be determined as the Deferred Contract and Nearby Contract, respectively.

<u>Worked Example of the Deferred Contract and the Nearby Contract:</u>

For Macquarie Weekly Convexity Alpha WTI Crude Oil (A) Group, the Deferred Contract and the Nearby Contract in respect of 3 January 2020 is determined according to the following steps:

1. The Implied Roll Yield, in respect of each futures contract from the Selectable Contracts Set, is calculated and shown in the following Table.

Contract	Settlement Price on 3 Jan 2020	Previous Contract	Settlement Price on 3 Jan 2020	Implied Roll Yield
CLH20	62.82	CLG20	63.05	0.045467
CLJ20	62.48	CLH20	62.82	0.070692
CLK20	62.02	CLJ20	62.48	0.087942
CLM20	61.46	CLK20	62.02	0.125513
CLN20	60.83	CLM20	61.46	0.116960
CLQ20	60.18	CLN20	60.83	0.144782

2. The Convexity, in respect of two successive futures contracts from the Selectable Contracts Set, is calculated and shown in the following Table.

Deferred Contract	Implied Roll Yield of Deferred Contract	Nearby Contract	Implied Roll Yield of Nearby Contract	Convexity
CLJ20	0.070692	CLH20	0.045467	0.025225
CLK20	0.087942	CLJ20	0.070692	0.017250
CLM20	0.125513	CLK20	0.087942	0.037571
CLN20	0.116960	CLM20	0.125513	-0.008553
CLQ20	0.144782	CLN20	0.116960	0.027822

3. The Deferred Contract and the Nearby Contract, in respect of 3 January 2020, are CLM20 and CLK20, respectively, because they have the largest Convexity.

2.2   HOLDINGS CALCULATION

The holding of the Component (referred to as the **Target Holding**) will be determined on such Holdings Calculation Day, R. This Holding represents the proportion in which the Index Level will change when the level of that Component changes from (but excluding) such Holdings Calculation Day, R, to (and including) the Holdings Calculation Day immediately following such Holdings Calculation Day, R.

On Holdings Calculation Day, R, the exposure of the Deferred Index and the Nearby Index to their respective Contracts (each a **Component**) will be replaced by the Deferred Contract and the Nearby Contract determined on Contract Determination Day, d (as described in Section 2.1 (*Futures Contracts Selection*)).

In this Section 2.2 (*Holdings Calculation*), we outline the holding calculations on Index Business Day, t.

TARGET HOLDINGS CALCULATION ON A HOLDINGS CALCULATION DAY

The calculation of the Target Holding on a Holdings Calculation Day, R, requires as input the Index Level and the Settlement Price of the Component (determined on the associated Contract Determination Day) on the Index Business Day immediately preceding such Holdings Calculations Day, R.

The Target Holding, $TH_{i,R}$, in respect of the Component, i, and the Holdings Calculation Day, R, is calculated according to the formula below:

$$TH_{i,R} = \frac{I_{R-1}}{C_{i,R-1}}$$

Where:

I_{R-1} is the Index Level in respect of the Index Business Day immediately preceding the Holdings Calculation Day, R; and

$C_{i,R-1}$ is the Settlement Price of the Component, i, on the Index Business Day immediately preceding such Holdings Calculation Day, R.

Worked Example of the Target Holding:

For the Macquarie Weekly Convexity Alpha WTI Crude Oil (A) Deferred Index, the Target Holding, in respect of 6 January 2020, is calculated according to the following steps:

1. The Deferred Contract determined on the associated Contract Determination Day, 3 January 2020, is CLM20.
2. The Index Level, I_{R-1}, in respect of 3 January 2020, is 101.00306281, and the Settlement Price of CLM20, $C_{i,R-1}$, in respect of 3 January 2020, is 61.46, respectively.
3. The Target Holding of CLM20, $TH_{i,R}$, in respect of 6 January 2020, is $I_{R-1}/C_{i,R-1} = 101.00306281 / 61.46 = 1.643395099$.

DAILY HOLDINGS CALCULATION

On an Index Business Day, t, the Holding of the Component, i, is calculated according to the following rule:

(i)   If such Index Business Day, t, is the Index Business Day immediately following a Holdings Calculation Day, R, the Holding, $H_{i,t}$, of such Component, i, is calculated according to the formula below:

$$H_{i,t} = TH_{i,R}$$

Where:

$TH_{i,R}$ is the Target Holding, in respect of such Component, i, and such Holdings Calculation Day, R.

(ii)   On any other Index Business Day, t (that is not the Index Business Day immediately following a Holdings Calculation Day, R), the Holding, $H_{i,t}$, of such Component, i, is calculated according to the formula below:

$$H_{i,t} = H_{i,t-1}$$

Where:

$H_{i,t-1}$ is the Holding, in respect of such Component, i, and the Index Business Day immediately preceding such Index Business Day, t.

2.3   DAILY INDEX CALCULATION

On each Index Business Day, t, following the Index Start Date (defined in Section 4 (*Definitions*)), the Excess Return level of the Index (the **Index Level**, I_t) is calculated (rounded to eight decimal points) based on the Index Level on the immediately preceding Index Business Day, I_{t-1}, and the change in level of each of the Components, according to the formula below:

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

Where:

I_{t-1}	is the Index Level, in respect of the Index Business Day immediately preceding such Index Business Day, t;
i	is the Component of the Index, in respect of such Index Business Day, t, and is defined in Section 4 (*Definitions*);
$H_{i,t}$	is the Holding of the Component, i, in respect of such Index Business Day, t;
$C_{i,t}$	is the Settlement Price of the Component, i, in respect of such Index Business Day, t, on such Index Business Day, t; and
$C_{i,t-1}$	is the Settlement Price of the Component, i, in respect of such Index Business Day, t, on the Index Business Day immediately preceding such Index Business Day, t.

Worked Example of the Index Level

For the Macquarie Weekly Convexity Alpha WTI Crude Oil (A) Deferred Index, the Index Level, in respect of 7 January 2020, is determined according to the following steps:

1. The Holding of CLM20, $H_{i,t}$, in respect of 7 January 2020, is the same as the Target Holding of CLM20, $TH_{i,R}$, in respect of 6 January 2020 (see Section 2.2 (*Daily Holdings Calculation*)), and is 1.643395099.
2. The Settlement Prices of CLM20, $C_{i,t}$ and $C_{i,t-1}$, in respect of 6 January and 7 January 2020, are 61.68 and 61.32, respectively.
3. The Index Level, I_{t-1}, in respect of 6 January 2020, is 101.36461017.
4. Therefore, the Index Level, I_t, in respect of 7 January 2020, is $I_{t-1} + H_{i,t} \times (C_{i,t} - C_{i,t-1}) =$ 101.36461017 + 1.643395099 x (61.32-61.68) = 100.77298793.

SECTION 3:   MARKET DISRUPTION

3.1   UNDERLYING CONTRACTS

The Index is calculated on a daily basis based on the settlement prices of the contracts that underlie the Index (the **Underlying Contracts**). The Underlying Contracts may directly or ultimately underlie the Index, depending on how the Index is constructed. If the Components of the Index are futures or other contracts, then the Underlying Contracts will refer to the Components of the Index. If the Components of the Index are indices, then the Underlying Contracts of the Index will refer to the contracts that underlie those Component indices either directly (where the Component indices are comprised of constituents that are contracts) or ultimately (where the Components indices are comprised of constituents that are indices, in which case the underlying contracts of those constituent indices will be the Underlying Contracts).

The determination of a Market Disruption Event (as defined below) is made in respect of the Underlying Contracts of the Index.

3.2   MARKET DISRUPTION EVENTS

With respect to the 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 Calculation Agent:

(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)   any other event, if the Index Administrator reasonably determines that the event materially interferes with the ability of market participants to hedge the Index; or

(v)   in respect of an Underlying Contract that is a Commodity futures contract, the occurrence of a Market Disruption Event (as defined in sub-paragraphs (i) to (iv) (inclusive), above) in respect of an Underlying Contract that shares the same Commodity (such Underlying Contract, a **Linked Contract**).

For the avoidance of doubt, the occurrence of a Market Disruption Event in accordance with sub-paragraph (v) above shall be deemed to occur in respect of an Underlying Contract regardless of whether or not any other Market Disruption Event (in accordance with sub-paragraphs (i) to (iv) (inclusive), above) has occurred in respect of such Underlying Contract.

3.3 CONSEQUENCES OF A MARKET DISRUPTION EVENT

If a Market Disruption Event occurs or is continuing in respect of an Underlying Contract (the **Disrupted Contract**) on an Index Business Day (the **Disrupted Day**), the impact of such Market Disruption Event on the calculation of the Index Level on such Disrupted Day will depend on certain factors, including whether the Index is synthetically trading in the Disrupted Contract (in accordance with the Methodology) and the availability of the settlement price of the Disrupted Contract, as described below.

3.3.1 Consequences of a Market Disruption Event on a Disrupted Day (no rebalancing)

If a Market Disruption Event occurs (or is continuing) on a Disrupted Day that is not a Disrupted Rebalancing Day (as defined below), then the Index Level will be calculated on such Disrupted Day using the Disruption Price (as defined below) of such Disrupted Contract; provided that, if the Market Disruption Event is continuing on the Market Disruption Longstop Date, then a Market Disruption Adjustment Event shall occur and the Index Calculation Agent may take action in accordance with Section 6.1 (*Adjustment Events*).

The determination of the Disruption Price of the Disrupted Contract on a Disrupted Day (that is not a Disrupted Rebalancing Day) prior to the Market Disruption Longstop Date, depends on whether or not the settlement price of the Disrupted Contract is available on the Publication Source on such Disrupted Day. The availability of the settlement price of a Disrupted Contract will generally depend on the type of Market Disruption Event; for example, a Market Disruption Event caused by the settlement price of the Disrupted Contract being a "limit price" or by a disruption of a Linked Contract (available) or a Market Disruption Event caused by the failure of the Trading Facility to publish the settlement price of the Disrupted Contract (unavailable).

The **Disruption Price** is determined as follows: (i) if the settlement price of the Disrupted Contract for such Disrupted Day (the **Disrupted Day Price**) is available from the Publication Source, then (notwithstanding the occurrence of the Market Disruption Event) the Disruption Price will be the Disrupted Day Price; or (ii) if the settlement price of the Disrupted Contract for such Disrupted Day is not available from the Publication Source, then the Disruption Price will be the settlement price of the Disrupted Contract on the Index Business Day prior to such Disrupted Day on which no Market Disruption Event (causing the settlement price to be unavailable) occurred or was continuing (the **Previous Price**).

On the Disrupted Day (that is not a Disrupted Rebalancing Day), the Index Calculation Agent will use the relevant Disruption Price to calculate the Index in place of the price of the Disrupted Contract that would otherwise be used in accordance with the Methodology. By way of further explanation, the Disruption Price will be substituted for the Settlement Price ($C_{i,t}$) in the Index Level calculation (see Section 2.3 (*Daily Index Calculation*)) on the Disrupted Day.

3.3.2 Consequences of a Market Disruption Event on a Disrupted Rebalancing Day

If a Market Disruption Event occurs (or is continuing) on an Index Business Day on which the Index is synthetically trading in (i.e. rebalancing) the Disrupted Contract (a **Disrupted Rebalancing Day**), then the Index will defer the rebalancing of the Index relating to the Disrupted Contract (the **Disrupted Action**) until the earlier of (i) the next Rebalancing Day or (ii) the Market Disruption End Date. On the Disrupted Rebalancing Day and on each Disrupted Day on which the relevant Market Disruption Event is continuing until (but excluding) the Market Disruption End Date or the next Rebalancing Day (as applicable) (the **Rebalancing Deferral Period**), the calculation of the Index Level will be modified to reflect such deferral of the Disrupted Action. For the avoidance of doubt, the Index actions relating to the other Underlying Contracts (in respect of which no Market Disruption Event has occurred on such Disrupted Rebalancing Day and which are not Linked Contracts) will continue to be calculated in accordance with the Methodology during the Rebalancing Deferral Period.

If the Rebalancing Deferral Period ends due to a subsequent Rebalancing Day (a **New Rebalancing Day**), then the Disrupted Action in respect of the original Disrupted Rebalancing Day shall not be completed and the rebalancing on the New Rebalancing Day shall be determined in accordance with Section 2.2 (*Holdings Calculation*) (and this Section 3 (*Market Disruption*), where applicable). For the avoidance of doubt, determinations on the New Rebalancing Day shall be made without reference to any Disrupted Action (whether or not completed) that has occurred in respect of any previous Rebalancing Day, and the determination of a Market Disruption Event in respect of an Underlying Contract and any consequences thereof shall be determined in accordance with this Section 3 (*Market Disruption*) without reference to any Market Disruption Event determined in respect of any prior Rebalancing Day.

If the Rebalancing Deferral Period ends on the Market Disruption End Date, then the Disrupted Action will be completed and the calculation of the Index Level will be modified accordingly to reflect the completion of such Disrupted Action; provided that, if the Market Disruption End Date falls on the Market Disruption Longstop Date, then a Market Disruption Adjustment Event shall occur and the Index Calculation Agent may take action in accordance with Section 6.1 (*Adjustment Events*).

3.3.3 Market Disruption Date Definitions

Market Disruption Adjustment Event means the existence of a Market Disruption Event on the Market Disruption Longstop Date.

Market Disruption End Date means the earlier of (i) the Index Business Day on which the Market Disruption Event ceases to occur; (ii) the Index Business Day immediately preceding the expiry date of the Disrupted Contract; (iii) Index Business Day immediately preceding the first notice date of the Disrupted Contract (if applicable) and (iv) the Market Disruption Longstop Date.

Market Disruption Longstop Date means the date determined by the Index Calculation Agent (subject to approval by the Index Oversight Committee) on which the Market Disruption Event shall be deemed to end for the purpose of determining the Index Level. In determining the Market Disruption Longstop Date, the Index Calculation Agent (and the Index Oversight Committee) may take into account factors including (but not limited to) the objective of the Index, the expiry date of the Disrupted Contract and market practice.

Rebalancing Day is an Index Business Day on which the Index is synthetically trading.

SECTION 4:   DEFINITIONS

Adjustment Event is defined in Section 6.1 (*Adjustment Events*).

Affected Index Level is defined in Section 5.1.1 (*Errors*).

Bloomberg Ticker, in respect of an Index, is the ticker under which the relevant Index Level will be published, as specified in Annex A (*Index Specifications*).

Calculation Error is defined in Section 5.1.1 (*Errors*).

Commodity, in respect of an Index, is the physical commodity that underlies the Contract referenced by the Index, as specified in Annex A (*Index Specifications*).

Component, is the futures contract comprising the Index. Therefore in respect of an Index and an Index Business Day, is either (i) the Deferred Contract, if such Index is a Deferred Index; or (ii) the Nearby Contract, if such Index is a Nearby Index. Such Deferred Contract or Nearby Contract is the Component in respect of the Index and an Index Business Day from (but excluding) the Holdings Calculation Day associated with such Contract Determination Day to (and including) the immediately following Holdings Calculation Day.

Component Change Event is defined in Section 6.1 (*Adjustment Events*).

Contract, in respect of an Index, is a futures contract traded on the Trading Facility of such Index and having a Commodity as underlying. A Contract is either (i) a Deferred Contract, if such Index is a Deferred Index; or (ii) a Nearby Contract, if such Index is a Nearby Index.

Contract Determination Day, in respect of an Index and a Holdings Calculation Day, is the Index Business Day immediately preceding such Holdings Calculation Day.

Contract Selection Day, in respect of an Index and a Contract Determination Day, is the **tenth (10th)** Index Business Day of the calendar month such Contract Determination Day falls.

Contract Selection End Month, in respect of an Index and a Contract Determination Day, is (i) the **seventh (7th)** calendar month following — with January following December — the month that such Contract Determination Day falls, if such Contract Determination Day is prior to (and including) the Contract Selection Day; or (ii) the **eighth (8th)** calendar month following — with January following December — the month that such Contract Determination Day falls, if such Contract Determination Day is after (but excluding) the Contract Selection Day.

Contract Selection Start Month, in respect of an Index and a Contract Determination Day, is (i) the calendar month that such Contract Determination Day falls, if such Contract Determination Day is prior to (and including) the Contract Selection Day; or (ii) the calendar month immediately following — with January following December — the month that such Contract Determination Day falls, if such Contract Determination Day is after (but excluding) the Contract Selection Day.

Convexity is defined in Section 2.1.3 (*Deferred Contract and Nearby Contract*).

Deferred Contract is defined in Section 2.1.3 (*Deferred Contract and Nearby Contract*).

Deferred Index is specified in Annex A (*Index Specifications*), and is constituted of, and reflects the price performance of, a Component comprised of the Deferred Contract.

Disrupted Contract is defined in Section 3.3 (*Consequences of a Market Disruption Event*).

Disrupted Day is defined in Section 3.3 (*Consequences of a Market Disruption Event*).

Disrupted Day Price is defined in Section 3.3.1 (*Consequences of a Market Disruption Event on a Disrupted Day (no rebalancing)*).

Disrupted Rebalancing Day is defined in Section 3.3.2 (*Consequences of a Market Disruption Event on a Disrupted Rebalancing Day*).

Disruption Price is defined in Section 3.3.1 (*Consequences of a Market Disruption Event on a Disrupted Day (no rebalancing)*).

Eligible Contracts Set, in respect of an Index and a Contract Determination Day, is defined in Section 2.1.1 (*Eligible Contracts Set*).

Error is defined in Section 5.1.1 (*Errors*).

Excess Return to format tracks what an investor would receive if it purchased or sold the futures contracts underlying the Index without taking into consideration the cost of investment capital. It represents the performance of an index to synthetic, unfunded exposure of futures contract which underly an index.

First Contract Period is a number used to determine the Selectable Contracts Set in Section 2.1.2 (*Selectable Contracts Set*), and is set to **five (5)**.

First Notice Date, in respect of a futures contract and a Contract Determination Day, is the value that is published by the relevant Trading Facility and referred by such Trading Facility as the first notice date for that particular futures contract on such Contract Determination Day.

Group is specified in Annex A (*Index Specifications*). Each Group specifies the following: (i) the Commodity of each Index in such Group (e.g. "Zinc"), and (ii) the code of the Holdings Calculation Day of each Index in such Group (e.g. "A" represents Monday, "B" represents Tuesday, …, and "E" represents Friday). Each Group includes two Indices: (i) the Deferred Index, and (ii) the Nearby Index.

Holdings Calculation Day, in respect of an Index, is specified in Annex A (*Index Specifications*). If such calendar day is not an Index Business Day, then the Holdings Calculation Day is the Index Business Day immediately following such calendar day.

Implied Roll Yield is defined in Section 2.1.3 (*Deferred Contract and Nearby Contract*).

Index is defined in the section entitled "Important Information". Each Index is either (i) a Deferred Index, or (ii) a Nearby Index.

Index Administrator is defined in the section entitled "Important Information".

Index Business Days, in respect of an Index, are the days in the Index Calendar.

Index Calculation Agent is defined in Section 7.2.2 (*Index Calculation Agent*).

Index Calendar, in respect of an Index, is the calendar of days in respect of which an Index Level will be published, and is the set of trading days of the New York Mercantile Exchange (NYMEX) schedule.

Input Error is defined in Section 5.1.1 (*Errors*)*.

Index Level, in respect of an Index and an Index Business Day, is defined in Section 2.3 (*Daily Index Calculation*) and is the level of such Index as calculated and published by the Index Calculation Agent.

Index Live Date, in respect of an Index, is the Index Business Day from which the Index is calculated on a live basis, and is 1 December 2020.

Index Manual is defined in the section entitled "Important Information".

Index Oversight Committee is defined in Section 7.1 (*Index Governance*).

Index Publication Days are defined in Section 8.2 (*Publication of Index Level*).

Index Specifications is a set of variables peculiar to a particular Index, as set out in the Index Specifications table for that Index in Annex A (*Index Specifications*).

Index Start Date, in respect of an Index, is the first Index Business Day on which the Index Calculation Agent will calculate and publish an Index Level for such Index, and is specified in Annex A (*Index Specifications*). The Index Calculation Agent may calculate, but not publish, the Index Level in respect of Index Business Days preceding the Index Start Date if that is required for calculating the Index Level of the Index on the Index Start Date or on following days.

Index Start Level, in respect of an Index, is the Index Level of such Index on the Index Start Date, and is 100.

Last Trading Date, in respect of a futures contract and a Contract Determination Day, is the value that is published by the relevant Trading Facility and referred by such Trading Facility as the last trading date for that particular futures contract on such Contract Determination Day.

Linked Contract is defined in Section 3.2 (*Market Disruption Events*).

Market Disruption Adjustment Event is defined in Section 3.3.3 (*Market Disruption Date Definitions*).

Market Disruption End Date is defined in Section 3.3.3 (*Market Disruption Date Definitions*).

Market Disruption Event is defined in Section 3.2 (*Market Disruption Events*).

Market Disruption Longstop Date is defined in Section 3.3.3 (*Market Disruption Date Definitions*).

Material Error is defined in Section 5.1.1 (*Errors*).

Methodology is as defined in the section entitled "Important Information".

Nearby Contract is defined in Section 2.1.3 (*Deferred Contract and Nearby Contract*).

Nearby Index is specified in Annex A (*Index Specifications*), and is constituted of, and reflects the price performance of, a Component comprised of the Nearby Contract.

New Rebalancing Day is defined in Section 3.3.2 (*Consequences of a Market Disruption Event on a Disrupted Rebalancing Day*).

Previous Price is defined in Section 3.3.1 (*Consequences of a Market Disruption Event on a Disrupted Day (no rebalancing)*).

Publication Time is defined in Section 8.2 (*Publication of Index Level*).

Rebalancing Deferral Period is defined in Section 3.3.2 (*Consequences of a Market Disruption Event on a Disrupted Rebalancing Day*).

Replicability Event is defined in Section 6.1 (*Adjustment Events*).

Selectable Contracts Set, in respect of an Index and a Contract Determination Day, is defined in Section 2.1.2 (*Selectable Contracts Set*).

Settlement Price, in respect of a futures contract and an Index Business Day, is the price that is published by the relevant Trading Facility and referred by such Trading Facility as the settlement price for that particular futures contract. If the settlement price is not available, as determined by the Index Calculation Agent, then the Settlement Price of that particular futures contract will be the most recent available price on the intersection of the most recent trading days of the relevant Trading Facility and the set of Index Business Days.

Target Holding, in respect of a Component and a Holdings Calculation Day, is defined in Section 2.2 (*Holdings Calculation*).

Trading Facility, in respect of an Index, is the regulated futures exchange, facility or platform on or through which the Contracts underlying such Index are traded, as specified in Annex A (*Index Specifications*).

Underlying Contracts is defined in Section 3.1 (*Underlying Contracts*).

SECTION 5: CORRECTIONS, CHANGES, CESSATION AND DISCRETION

5.1   CORRECTIONS AND ERROR HANDLING

5.1.1   Errors

Where the Index Administrator or the Index Calculation Agent becomes aware of an Input Error or a Calculation Error (an **Error**), the cause of such error will be investigated and steps taken, to the extent practicable and within the control of the Index Calculation Agent, to prevent such errors from recurring.

If an Error is not corrected by 11.59pm, New York time, on the Index Publication Day following the occurrence of the Error, the Index Calculation Agent shall determine whether such Error affects any published Index Level (such Error, a **Material Error** and each affected Index Level, an **Affected Index Level**).

Input Error means any error in input data that is detected by, or notified to, the Index Calculation Agent.

Calculation Error means any error in the implementation of the Methodology or arising in the Index calculation and dissemination process that is detected by or notified to the Index Calculation Agent.

5.1.2   Notification of Errors

The Index Calculation Agent shall publish an announcement regarding the occurrence of any Material Error and any change to the Methodology (see Section 5.2 (*Changes in Methodology*)).

5.1.3   Restatement of Index Levels

The Index Calculation Agent will restate any Affected Index Level resulting from a Material Error in the following circumstances:

(1)   in respect of a Material Error that is an Input Error:

    (i)   if the Index Calculation Agent becomes aware of such Input Error within 2 Index Publication Days of publication of the relevant Affected Index Level; or

    (ii)   otherwise, as determined by the Index Oversight Committee.

(2)   In respect of a Material Error that is a Calculation Error:

    (i)   if the Index Calculation Agent becomes aware of such Calculation Error prior within 30 calendar days following the Index Publication Day on which the first Affected Index Level was published; or

    (ii)   otherwise, as determined by the Index Oversight Committee.

5.2 CHANGES IN METHODOLOGY

Various factors, including external factors beyond the control of the Index Administrator, might necessitate material changes to an Index. The Index Manual contains information as of the date appearing on its cover, and such information may change from time to time. No assurance can be given that the Methodology reflects information subsequent to this date.

The Index Administrator may amend the Methodology at any time if the change is (i) of a formal, minor or technical nature, (ii) to correct any manifest or proven error or (iii) where the Index Calculation Agent determines that such change is not materially prejudicial to investors in financial products (in respect of which the Index Administrator has given consent to refer to the Index).

In any other case, a change to the Methodology will be considered to be a material change and may only be made subject to the approval of the Index Oversight Committee. The Index Oversight Committee shall determine the implementation timeline for such change and the timing for notification of such change to investors (which shall generally be at least 30 calendar days prior to implementation, but may be shorter if the Index Oversight Committee so determines), which the Index Administrator will communicate to investors by email).

5.3 CESSATION OF INDEX

The Index Administrator may withdraw the Index, at any time and without notice, if no financial instruments (in respect of which Macquarie Bank Limited has given consent to refer to the Index) are outstanding. The Index Administrator may, in any case (subject to the approval of the Index Oversight Committee), withdraw an Index, without reason, provided that either (i) it notifies all investors in financial instruments (in respect of which Macquarie Bank Limited has given consent to refer to the Index) of its intention to do so by email at least 30 calendar days prior to cessation of calculation and publication of the Index or (ii) all investors in financial instruments (in respect of which Macquarie Bank Limited has given consent to refer to the Index) have agreed to the cessation of the Index and the date of such cessation.

5.4 DISCRETION

In order to ensure continuity, the methodology of this Index permits the exercise of discretion or expert judgement in certain limited circumstances as set out in this Index Manual - see the following sections:

- Section 2.1.2 (*Selectable Contracts Set*) (see the definition of "$\min\{x\}$");
- Section 2.1.3 (*Deferred Contract and Nearby Contract*) (see the definitions of "S_d^r", "S_d^{pr}" and "Previous Contract");
- Section 3 (*Market Disruption*);
- The definition of "Settlement Price" in Section 4 (*Definitions*);
- Section 5 (*Corrections, Changes, Cessation and Discretion*); and
- Section 6 (*Adjustment Events and Regulatory Event*).

The Index Calculation Agent or the Index Oversight Committee may also exercise discretion in the administration of the Index if an event or circumstance arises in respect of which there is no fallback provided for in the methodology of this Index and which the Index Calculation Agent or Index Oversight Committee determines prevents the Index Calculation Agent from determining the Index in the normal manner, constitutes a market disruption under the relevant Index Manual or the exercise of expert judgement or discretion is otherwise appropriate in the circumstances.

The Index Calculation Agent or the Index Oversight Committee may exercise any such discretion or expert judgement acting in good faith and in a commercially reasonable manner. Any exercise of discretion or expert judgement that the Index Calculation Agent determines will have a material effect on the Index shall be subject to the approval of the Index Oversight Committee.

SECTION 6: ADJUSTMENT EVENTS AND REGULATORY EVENT

6.1 ADJUSTMENT EVENTS

If an Adjustment Event occurs, the Index Calculation Agent may, but shall not be obliged to, take one or more of the following steps:

(i) suspend the publication of the Index Level until such time as the Adjustment Event ceases to occur; or

(ii) with the approval of the Index Oversight Committee:

(a) substitute the Component, if applicable, affected by the Adjustment Event with an asset which has similar characteristics and make such adjustments to the Index as are necessary, if any, in order to account for the substitution;

(b) make such adjustments to the Index (including to any of the weights or values of the Components or to the Index Level) and/or alter the methodology of the Index, in order to account for the effect of the Adjustment Event; or

(c) if no such adjustment or alteration could be made to preserve the objective of the Index, discontinue the Index.

Adjustment Event means, in respect of a Component, each General Adjustment Event and each Asset Class Specific Adjustment Event (as defined in Section 6.2 (*Asset Class Specific Definitions – Adjustment Events*) as applicable for such Component.

Change in Economic Assumptions means, in respect of a Component, a material change of any economic assumptions (including, but not limited to, assumptions as to liquidity, estimated trading and/or rolling costs of the Components, bid/offer spreads in the market in respect of the Components and the funding cost associated with trading the Components) incorporated into the Methodology for such Component.

Component Change Event means, in respect of a Component, that since the Index Live Date, liquidity for the Component on the relevant trading venue has materially decreased in the context of the known or expected financial exposure to the Index.

Component Licensing Event means, in respect of a Component or any instrument or security on which the value of a Component depends, and for which a license has been granted to the Index Administrator (or an affiliate of the Index Administrator) in relation to the calculation, hedging or use of the Index, that either (a) such license is revoked, impaired or otherwise disputed for any reason, or (b) there is a material increase in the fee schedule applicable to such license.

Dealer means a hypothetical broker dealer subject to the same securities laws and rules and regulations of any securities regulators, exchanges and self-regulating organisations as apply to the Index Administrator.

General Adjustment Event means any of the following: a Change in Economic Assumptions, a Component Change Event, a Component Licensing Event and a Replicability Event.

Replicability Event means that on or after the Index Live Date one or more Dealers would be unable, after using commercially reasonable efforts, to hold, acquire, maintain, short sell or dispose of:

(i)   one or more Components;

(ii)   any instrument or security on which the value of a Component depends; or

(iii)   any instrument or security which is required to replicate the calculation methodology of the Index (including, but not limited to, interest rates and FX rates, if applicable).

6.2   ASSET CLASS SPECIFIC DEFINITIONS – ADJUSTMENT EVENTS

6.2.1   Exchange Traded Components

The following terms are applicable in respect of each Component.

Asset Class Specific Adjustment Event means Contract Change Event.

Contract Change Event means any of the following:

(i)   the specifications of a Component are materially altered by the relevant Trading Venue; or

(ii)   a Component is permanently no longer traded on the relevant Trading Venue.

6.3   REGULATORY EVENT

If a Regulatory Event occurs, the Index Administrator may, but shall not be obliged:

(i)   to suspend the publication of the Index Level until such time as the Regulatory Event ceases to occur; or

(ii)   with the approval of the Index Oversight Committee, to discontinue the Index.

Regulatory Event means that on or after the Index Live Date (a) due to the adoption of or any change in any applicable regulation, or (b) due to the promulgation of or any change in the interpretation by any court, tribunal or regulatory authority with competent jurisdiction of any applicable regulation, the Index Administrator determines that it is not permitted (or there is a reasonable likelihood that, within the next 30 Index Publication Days, it will not be permitted) to continue to sponsor, administer, maintain or calculate, as applicable, the Index.

SECTION 7:   OVERSIGHT, ROLES, CONFLICTS AND REVIEWS

7.1   INDEX GOVERNANCE

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

- A Managing Director in the Quantitative Investment Strategies team of the Commodities and Global Markets Group;

- A Director from the Legal and Governance Group;

- A representative from the Index Calculation Agent;

- A representative from the Risk division of the Risk Management Group;

- A representative from the Compliance division of the Risk Management Group; and

- A representative from the Business Operational Risk Management department within the Central division of the Commodities and Global Markets Group.

Each member of the Index Oversight Committee is sufficiently knowledgeable about algorithmic indices and is required to act in good faith and in a commercially reasonable manner, provided that the Managing Director from the Commodities and Global Markets division will not be a voting member of the Committee, but shall act in an advisory capacity only. In giving approval to any adjustments made to the Index in accordance with this Index Manual, the Index Oversight Committee shall give due consideration to any equivalent decisions and actions taken by relevant trading venues or trade bodies.

The Index Oversight Committee has considered the features of the Index, the intended, expected or known usage of the Index and the materiality of existing or potential conflicts of interest and, taking these into account, has approved the Methodology and this Index Manual. The Index Oversight Committee is also charged with overseeing the daily management and operations of the Index. It will be available on an ad hoc basis for the consideration or approval of any relevant Adjustment Events, Regulatory Events, Errors, exercises of discretion, changes to the Methodology, any contemplated cancellation of the Index and the resolution of any other issues which arise in relation to the Index.

7.2   INDEX ADMINISTRATOR AND INDEX CALCULATION AGENT

7.2.1   Index Administrator

Macquarie Bank Limited is the Index Administrator. Notwithstanding anything to the contrary, the Index Administrator 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.

7.2.2   Index Calculation Agent

The Index Calculation Agent is appointed by the Index Administrator to calculate and maintain each Index from and until such time that the Index Administrator 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 Index Oversight Committee.

The Index Calculation Team within the Commodities and Global Markets division of Macquarie Bank Limited acts as index calculation agent (the **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.

7.2.3   Relationship of the Index Administrator and the Index Calculation Agent

The Index Calculation Agent is appointed by the Index Administrator, subject to the approval of the Index Oversight Committee. While, as of the date of publication of these rules, both the Index Administrator and the Index Calculation Agent form part of Macquarie Bank Limited, they are independent teams within the bank and the 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 Administrator.

7.2.4   Not acting as a fiduciary

Neither the Index Administrator nor the Index Calculation Agent owes any duty of care or acts as agent of another person in respect of its respective obligations in relation to the Index as set out in this Index Manual.

7.3   CONFLICTS

The Index is based on underlying assets, as described in the Methodology. The Index Administrator and/or its affiliates actively trade these underlying assets and options on these underlying assets. The Index Administrator 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 assets or are linked to the performance of an Index. The Index Administrator and/or its affiliates may underwrite or issue other securities or financial instruments indexed to an Index, and the Index Administrator or its affiliates may license an Index for publication or for use by unaffiliated third parties. These activities could present conflicts of interest and could affect the value of an Index. The Index Administrator 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 Administrator may make a market in such instruments (or related derivatives), which may in extreme circumstances affect the levels of the Index described.

The Index Administrator, the Index Calculation Agent and the business unit which creates instruments linked to the Index are all businesses or entities of Macquarie. Steps have been taken to manage and mitigate the inherent conflicts of interest which result, including the establishment of separate reporting lines for the respective roles, establishment of an independent Index Oversight Committee and the implementation and enforcement of policies and procedures to ensure that appropriate controls are in place.

Certain activities conducted by the Index Administrator may conflict with interests of investors in the Index. Such activities could include (but are not limited to) providing or participating in competing products (such as financial instruments linked to the Index, a Component or a similar index or component) and hedging its exposure to the Index. The Index Administrator could receive substantial returns in respect of such activities, which will not be passed on to any investors in products linked to the Index; whereas the value of investments linked to the Index may decline. Any such activities conducted by the Index Administrator around the time of a rebalancing could adversely impact the performance of the Index and therefore the level of a concurrent rebalancing.

The Index Administrator may have access to information relating to the Index, a Component or investments linked to a Component. The Index Administrator is not obliged to use that information for the benefit of any person entering into products linked to the Index.

7.4   REVIEWS

The Index Administrator has procedures in place to review a sample of its Indices (which may not include these Indices) on an annual basis (or more frequently, if it determines appropriate). Such sample shall include the indices requested by the Index Oversight Committee to be reviewed. The Index Administrator shall submit a report on its reviews to the Index Oversight Committee. If the Index Administrator determines that changes are required to a methodology, the Index Oversight Committee shall review the changes the reasons therefor. Any such changes approved by the Index Oversight Committee shall be implemented in accordance with Section 5.2 (*Changes in Methodology*).

SECTION 8: GENERAL INFORMATION

8.1   VALUATION AND CALCULATIONS

The Index Calculation Agent shall, unless stated otherwise, perform all calculations in this Index Manual. It shall perform such calculations in its sole and absolute discretion, acting in good faith and in a commercially reasonable manner. All such calculations shall be subject to the Index Calculation Agent's policies and procedures and will (in the absence of manifest error) be final, conclusive and binding. Neither the Index Calculation Agent nor the Index Administrator shall have any liability for errors or omissions made in good faith.

8.2   PUBLICATION OF INDEX LEVEL

The publication of the Index Level by the Index Calculation Agent for an Index Publication Day follows a publication cycle which ends at the Publication Time for such day. Any Index Level published before the Publication Time in respect of a day is indicative and may be restated up to and including the Publication Time.

In respect of an Index Publication Day, the Index Level as published by the Index Calculation Agent on the Bloomberg Ticker at the Publication Time for such day shall be the official Index Level and shall be final and binding (save for changes made pursuant to Section 5 (*Corrections, Changes, Cessation and Discretion*)). See Section 5.1.2 regarding the publication of Material Errors.

Publication Time means, in respect of and Index Publication Day, 23:59:59 (New York Time) on the Index Publication Day immediately following such Publication Business Day.

Index Publication Day means in respect of an Index, are the days in the Index Calendar.

8.3   HISTORICAL VALUES OF THE INDEX

Hypothetical back-tested historical values of the Index are not indicative of future performance. The Index Administrator makes no representation as to the accuracy or appropriateness of, and shall have no liability to you or any other entity for any loss or damage, direct or indirect, arising from the use of the historical values.

SECTION 9: NOTICES AND DISCLAIMERS

9.1 REGULATORY STATUS

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This document is not a personal recommendation as defined by the Financial Conduct Authority and you should consider whether you can rely upon any opinion or statement contained in this document without seeking further advice tailored for your own circumstances. It is also not investment research, and has not been prepared in accordance with legal requirements designed to promote the independence of such. Any opinions expressed herein may differ from the opinions expressed in other departments including the research department. Nor have the contents of this document been reviewed by any regulatory authority, and the distribution of this document and availability of related financial instruments in certain jurisdictions may be restricted by law.

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9.3 THIRD-PARTY DISCLAIMER

The Index is not endorsed, sponsored or promoted by the issuer or sponsor of any Component of underlying asset of any Component.

ANNEX A   INDEX SPECIFICATIONS

Annex A may be supplemented from time to time by the addition of new Index Specifications tables.

i	Group	Index	Bloomberg Ticker	Commodity	Trading Facility	Eligible Futures Contracts	Holdings Calculation Day	Index Start Date
1	Macquarie Weekly Convexity Alpha WTI Crude Oil (A)	Deferred	MQSRCLAA	WTI Crude Oil	NYMEX		Monday	7 Jan 2004
		Nearby	MQSRCLBA					
2	Macquarie Weekly Convexity Alpha WTI Crude Oil (B)	Deferred	MQSRCLAB				Tuesday	7 Jan 2004
		Nearby	MQSRCLBB					
3	Macquarie Weekly Convexity Alpha WTI Crude Oil (C)	Deferred	MQSRCLAC				Wednesday	7 Jan 2004
		Nearby	MQSRCLBC					
4	Macquarie Weekly Convexity Alpha WTI Crude Oil (D)	Deferred	MQSRCLAD				Thursday	7 Jan 2004
		Nearby	MQSRCLBD					
5	Macquarie Weekly Convexity Alpha WTI Crude Oil (E)	Deferred	MQSRCLAE				Friday	7 Jan 2004
		Nearby	MQSRCLBE					
6	Macquarie Weekly Convexity Alpha Brent Crude Oil (A)	Deferred	MQSRCOAA	Brent Crude Oil	ICE		Monday	7 Jan 2004
		Nearby	MQSRCOBA					
7	Macquarie Weekly Convexity Alpha Brent Crude Oil (B)	Deferred	MQSRCOAB				Tuesday	7 Jan 2004
		Nearby	MQSRCOBB					
8	Macquarie Weekly Convexity Alpha Brent Crude Oil (C)	Deferred	MQSRCOAC				Wednesday	7 Jan 2004
		Nearby	MQSRCOBC					
9	Macquarie Weekly Convexity Alpha Brent Crude Oil (D)	Deferred	MQSRCOAD				Thursday	7 Jan 2004
		Nearby	MQSRCOBD					
10	Macquarie Weekly Convexity Alpha Brent Crude Oil (E)	Deferred	MQSRCOAE				Friday	7 Jan 2004
		Nearby	MQSRCOBE					
11	Macquarie Weekly Convexity Alpha Gasoline (A)	Deferred	MQSRXBAA	Gasoline	NYMEX		Monday	7 Jan 2004
		Nearby	MQSRXBBA					
12		Deferred	MQSRXBAB				Tuesday	7 Jan 2004

Eligible Futures Contracts — WTI Crude Oil (NYMEX):

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
G	H	J	K	M	N	Q	U	V	X	Z	F+

Eligible Futures Contracts — Brent Crude Oil (ICE):

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
H	J	K	M	N	Q	U	V	X	Z	F+	G+

Eligible Futures Contracts — Gasoline (NYMEX):

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
G	H	J	K	M	N	Q	U	V	X	Z	F+

i	Group	Index	Bloomberg Ticker	Commodity	Trading Facility	Eligible Futures Contracts	Holdings Calculation Day	Index Start Date
	Macquarie Weekly Convexity Alpha Gasoline (B)	Nearby	MQSRXBBB					
13	Macquarie Weekly Convexity Alpha Gasoline (C)	Deferred	MQSRXBAC				Wednesday	7 Jan 2004
		Nearby	MQSRXBBC					
14	Macquarie Weekly Convexity Alpha Gasoline (D)	Deferred	MQSRXBAD				Thursday	7 Jan 2004
		Nearby	MQSRXBBD					
15	Macquarie Weekly Convexity Alpha Gasoline (E)	Deferred	MQSRXBAE				Friday	7 Jan 2004
		Nearby	MQSRXBBE					
16	Macquarie Weekly Convexity Alpha Gasoil (A)	Deferred	MQSRQSAA				Monday	7 Jan 2004
		Nearby	MQSRQSBA					
17	Macquarie Weekly Convexity Alpha Gasoil (B)	Deferred	MQSRQSAB				Tuesday	7 Jan 2004
		Nearby	MQSRQSBB	Gasoil	ICE	Jan G, Feb H, Mar J, Apr K, May M, Jun N, Jul Q, Aug U, Sep V, Oct X, Nov Z, Dec F+		
18	Macquarie Weekly Convexity Alpha Gasoil (C)	Deferred	MQSRQSAC				Wednesday	7 Jan 2004
		Nearby	MQSRQSBC					
19	Macquarie Weekly Convexity Alpha Gasoil (D)	Deferred	MQSRQSAD				Thursday	7 Jan 2004
		Nearby	MQSRQSBD					
20	Macquarie Weekly Convexity Alpha Gasoil (E)	Deferred	MQSRQSAE				Friday	7 Jan 2004
		Nearby	MQSRQSBE					
21	Macquarie Weekly Convexity Alpha Heating Oil (A)	Deferred	MQSRHOAA				Monday	7 Jan 2004
		Nearby	MQSRHOBA					
22	Macquarie Weekly Convexity Alpha Heating Oil (B)	Deferred	MQSRHOAB				Tuesday	7 Jan 2004
		Nearby	MQSRHOBB	Heating Oil	NYMEX	Jan G, Feb H, Mar J, Apr K, May M, Jun N, Jul Q, Aug U, Sep V, Oct X, Nov Z, Dec F+		
23	Macquarie Weekly Convexity Alpha Heating Oil (C)	Deferred	MQSRHOAC				Wednesday	7 Jan 2004
		Nearby	MQSRHOBC					
24	Macquarie Weekly Convexity Alpha Heating Oil (D)	Deferred	MQSRHOAD				Thursday	7 Jan 2004
		Nearby	MQSRHOBD					
25	Macquarie Weekly Convexity Alpha Heating Oil (E)	Deferred	MQSRHOAE				Friday	7 Jan 2004
		Nearby	MQSRHOBE					
26		Deferred	MQSRNGAA	Natural Gas	NYMEX		Monday	7 Jan 2004

i	Group	Index	Bloomberg Ticker	Commodity	Trading Facility	Eligible Futures Contracts	Holdings Calculation Day	Index Start Date
	Macquarie Weekly Convexity Alpha Natural Gas (A)	Nearby	MQSRNGBA			(see Natural Gas grid below)		
27	Macquarie Weekly Convexity Alpha Natural Gas (B)	Deferred	MQSRNGAB				Tuesday	7 Jan 2004
		Nearby	MQSRNGBB					
28	Macquarie Weekly Convexity Alpha Natural Gas (C)	Deferred	MQSRNGAC				Wednesday	7 Jan 2004
		Nearby	MQSRNGBC					
29	Macquarie Weekly Convexity Alpha Natural Gas (D)	Deferred	MQSRNGAD				Thursday	7 Jan 2004
		Nearby	MQSRNGBD					
30	Macquarie Weekly Convexity Alpha Natural Gas (E)	Deferred	MQSRNGAE				Friday	7 Jan 2004
		Nearby	MQSRNGBE					
31	Macquarie Weekly Convexity Alpha Gold (A)	Deferred	MQSRGCAA	Gold	COMEX		Monday	7 Jan 2004
		Nearby	MQSRGCBA					
32	Macquarie Weekly Convexity Alpha Gold (B)	Deferred	MQSRGCAB				Tuesday	7 Jan 2004
		Nearby	MQSRGCBB					
33	Macquarie Weekly Convexity Alpha Gold (C)	Deferred	MQSRGCAC			(see Gold grid below)	Wednesday	7 Jan 2004
		Nearby	MQSRGCBC					
34	Macquarie Weekly Convexity Alpha Gold (D)	Deferred	MQSRGCAD				Thursday	7 Jan 2004
		Nearby	MQSRGCBD					
35	Macquarie Weekly Convexity Alpha Gold (E)	Deferred	MQSRGCAE				Friday	7 Jan 2004
		Nearby	MQSRGCBE					
36	Macquarie Weekly Convexity Alpha Silver (A)	Deferred	MQSRSIAA	Silver	COMEX		Monday	7 Jan 2004
		Nearby	MQSRSIBA					
37	Macquarie Weekly Convexity Alpha Silver (B)	Deferred	MQSRSIAB				Tuesday	7 Jan 2004
		Nearby	MQSRSIBB			(see Silver grid below)		
38	Macquarie Weekly Convexity Alpha Silver (C)	Deferred	MQSRSIAC				Wednesday	7 Jan 2004
		Nearby	MQSRSIBC					
39	Macquarie Weekly Convexity Alpha Silver (D)	Deferred	MQSRSIAD				Thursday	7 Jan 2004
		Nearby	MQSRSIBD					

Eligible Futures Contracts — Natural Gas:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
G	H	J	K	M	N	Q	U	V	X	Z	F+

Eligible Futures Contracts — Gold:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
G	J	J	M	M	Q	Q	Z	Z	Z	Z	G+

Eligible Futures Contracts — Silver:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
H	H	K	K	N	N	U	U	Z	Z	Z	H+

i	Group	Index	Bloomberg Ticker	Commodity	Trading Facility	Eligible Futures Contracts	Holdings Calculation Day	Index Start Date
40	Macquarie Weekly Convexity Alpha Silver (E)	Deferred	MQSRSIAE				Friday	7 Jan 2004
		Nearby	MQSRSIBE					
41	Macquarie Weekly Convexity Alpha Zinc (A)	Deferred	MQSRLXAA	Zinc	LME	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec / G H J K M N Q U V X Z F+	Monday	7 Jan 2004
		Nearby	MQSRLXBA					
42	Macquarie Weekly Convexity Alpha Zinc (B)	Deferred	MQSRLXAB				Tuesday	7 Jan 2004
		Nearby	MQSRLXBB					
43	Macquarie Weekly Convexity Alpha Zinc (C)	Deferred	MQSRLXAC				Wednesday	7 Jan 2004
		Nearby	MQSRLXBC					
44	Macquarie Weekly Convexity Alpha Zinc (D)	Deferred	MQSRLXAD				Thursday	7 Jan 2004
		Nearby	MQSRLXBD					
45	Macquarie Weekly Convexity Alpha Zinc (E)	Deferred	MQSRLXAE				Friday	7 Jan 2004
		Nearby	MQSRLXBE					
46	Macquarie Weekly Convexity Alpha Nickel (A)	Deferred	MQSRLNAA	Nickel	LME	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec / G H J K M N Q U V X Z F+	Monday	7 Jan 2004
		Nearby	MQSRLNBA					
47	Macquarie Weekly Convexity Alpha Nickel (B)	Deferred	MQSRLNAB				Tuesday	7 Jan 2004
		Nearby	MQSRLNBB					
48	Macquarie Weekly Convexity Alpha Nickel (C)	Deferred	MQSRLNAC				Wednesday	7 Jan 2004
		Nearby	MQSRLNBC					
49	Macquarie Weekly Convexity Alpha Nickel (D)	Deferred	MQSRLNAD				Thursday	7 Jan 2004
		Nearby	MQSRLNBD					
50	Macquarie Weekly Convexity Alpha Nickel (E)	Deferred	MQSRLNAE				Friday	7 Jan 2004
		Nearby	MQSRLNBE					
51	Macquarie Weekly Convexity Alpha Aluminium (A)	Deferred	MQSRLAAA	Aluminium	LME	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec / G H J K M N Q U V X Z F+	Monday	7 Jan 2004
		Nearby	MQSRLABA					
52	Macquarie Weekly Convexity Alpha Aluminium (B)	Deferred	MQSRLAAB				Tuesday	7 Jan 2004
		Nearby	MQSRLABB					
53	Macquarie Weekly Convexity Alpha Aluminium (C)	Deferred	MQSRLAAC				Wednesday	7 Jan 2004
		Nearby	MQSRLABC					

i	Group	Index	Bloomberg Ticker	Commodity	Trading Facility	Eligible Futures Contracts	Holdings Calculation Day	Index Start Date
54	Macquarie Weekly Convexity Alpha Aluminium (D)	Deferred	MQSRLAAD				Thursday	7 Jan 2004
		Nearby	MQSRLABD					
55	Macquarie Weekly Convexity Alpha Aluminium (E)	Deferred	MQSRLAAE				Friday	7 Jan 2004
		Nearby	MQSRLABE					
56	Macquarie Weekly Convexity Alpha Copper (COMEX) (A)	Deferred	MQSRHGAA	Copper (COMEX)	COMEX		Monday	7 Jan 2004
		Nearby	MQSRHGBA					
57	Macquarie Weekly Convexity Alpha Copper (COMEX) (B)	Deferred	MQSRHGAB				Tuesday	7 Jan 2004
		Nearby	MQSRHGBB					
58	Macquarie Weekly Convexity Alpha Copper (COMEX) (C)	Deferred	MQSRHGAC			Jan: H, Feb: H, Mar: K, Apr: K, May: N, Jun: N, Jul: U, Aug: U, Sep: Z, Oct: Z, Nov: Z, Dec: H+	Wednesday	7 Jan 2004
		Nearby	MQSRHGBC					
59	Macquarie Weekly Convexity Alpha Copper (COMEX) (D)	Deferred	MQSRHGAD				Thursday	7 Jan 2004
		Nearby	MQSRHGBD					
60	Macquarie Weekly Convexity Alpha Copper (COMEX) (E)	Deferred	MQSRHGAE				Friday	7 Jan 2004
		Nearby	MQSRHGBE					
61	Macquarie Weekly Convexity Alpha Corn (A)	Deferred	MQSRCAA	Corn	CBOT		Monday	7 Jan 2004
		Nearby	MQSRCBA					
62	Macquarie Weekly Convexity Alpha Corn (B)	Deferred	MQSRCAB				Tuesday	7 Jan 2004
		Nearby	MQSRCBB					
63	Macquarie Weekly Convexity Alpha Corn (C)	Deferred	MQSRCAC			Jan: H, Feb: H, Mar: K, Apr: K, May: N, Jun: N, Jul: U, Aug: U, Sep: Z, Oct: Z, Nov: Z, Dec: H+	Wednesday	7 Jan 2004
		Nearby	MQSRCBC					
64	Macquarie Weekly Convexity Alpha Corn (D)	Deferred	MQSRCAD				Thursday	7 Jan 2004
		Nearby	MQSRCBD					
65	Macquarie Weekly Convexity Alpha Corn (E)	Deferred	MQSRCAE				Friday	7 Jan 2004
		Nearby	MQSRCBE					
66	Macquarie Weekly Convexity Alpha Soybeans (A)	Deferred	MQSRSAA	Soybeans	CBOT	Jan: H, Feb: H, Mar: K, Apr: K, May: N, Jun: N, Jul: X, Aug: X, Sep: X, Oct: X, Nov: F+, Dec: F+	Monday	7 Jan 2004
		Nearby	MQSRSBA					
67	Macquarie Weekly Convexity Alpha Soybeans (B)	Deferred	MQSRSAB				Tuesday	7 Jan 2004
		Nearby	MQSRSBB					

i	Group	Index	Bloomberg Ticker	Commodity	Trading Facility	Eligible Futures Contracts	Holdings Calculation Day	Index Start Date
68	Macquarie Weekly Convexity Alpha Soybeans (C)	Deferred	MQSRSAC				Wednesday	7 Jan 2004
		Nearby	MQSRSBC					
69	Macquarie Weekly Convexity Alpha Soybeans (D)	Deferred	MQSRSAD				Thursday	7 Jan 2004
		Nearby	MQSRSBD					
70	Macquarie Weekly Convexity Alpha Soybeans (E)	Deferred	MQSRSAE				Friday	7 Jan 2004
		Nearby	MQSRSBE					
71	Macquarie Weekly Convexity Alpha Soybean Oil (A)	Deferred	MQSRBOAA	Soybean Oil	CBOT		Monday	7 Jan 2004
		Nearby	MQSRBOBA					
72	Macquarie Weekly Convexity Alpha Soybean Oil (B)	Deferred	MQSRBOAB				Tuesday	7 Jan 2004
		Nearby	MQSRBOBB					
73	Macquarie Weekly Convexity Alpha Soybean Oil (C)	Deferred	MQSRBOAC			Jan H, Feb H, Mar K, Apr K, May N, Jun N, Jul Z, Aug Z, Sep Z, Oct Z, Nov Z, Dec F+	Wednesday	7 Jan 2004
		Nearby	MQSRBOBC					
74	Macquarie Weekly Convexity Alpha Soybean Oil (D)	Deferred	MQSRBOAD				Thursday	7 Jan 2004
		Nearby	MQSRBOBD					
75	Macquarie Weekly Convexity Alpha Soybean Oil (E)	Deferred	MQSRBOAE				Friday	7 Jan 2004
		Nearby	MQSRBOBE					
76	Macquarie Weekly Convexity Alpha Soybean Meal (A)	Deferred	MQSRSMAA	Soybean Meal	CBOT		Monday	7 Jan 2004
		Nearby	MQSRSMBA					
77	Macquarie Weekly Convexity Alpha Soybean Meal (B)	Deferred	MQSRSMAB				Tuesday	7 Jan 2004
		Nearby	MQSRSMBB					
78	Macquarie Weekly Convexity Alpha Soybean Meal (C)	Deferred	MQSRSMAC			Jan H, Feb H, Mar K, Apr K, May N, Jun N, Jul Z, Aug Z, Sep Z, Oct Z, Nov Z, Dec F+	Wednesday	7 Jan 2004
		Nearby	MQSRSMBC					
79	Macquarie Weekly Convexity Alpha Soybean Meal (D)	Deferred	MQSRSMAD				Thursday	7 Jan 2004
		Nearby	MQSRSMBD					
80	Macquarie Weekly Convexity Alpha Soybean Meal (E)	Deferred	MQSRSMAE				Friday	7 Jan 2004
		Nearby	MQSRSMBE					
81	Macquarie Weekly Convexity Alpha Wheat (CBOT) (A)	Deferred	MQSRWAA	Wheat (CBOT)	CBOT	Jan H, Feb H, Mar K, Apr K, May N, Jun N, Jul U, Aug U, Sep Z, Oct Z, Nov Z, Dec H+	Monday	7 Jan 2004
		Nearby	MQSRWBA					
82		Deferred	MQSRWAB				Tuesday	7 Jan 2004

i	Group	Index	Bloomberg Ticker	Commodity	Trading Facility	Eligible Futures Contracts	Holdings Calculation Day	Index Start Date
	Macquarie Weekly Convexity Alpha Wheat (CBOT) (B)	Nearby	MQSRWBB					
83	Macquarie Weekly Convexity Alpha Wheat (CBOT) (C)	Deferred	MQSRWAC				Wednesday	7 Jan 2004
		Nearby	MQSRWBC					
84	Macquarie Weekly Convexity Alpha Wheat (CBOT) (D)	Deferred	MQSRWAD				Thursday	7 Jan 2004
		Nearby	MQSRWBD					
85	Macquarie Weekly Convexity Alpha Wheat (CBOT) (E)	Deferred	MQSRWAE				Friday	7 Jan 2004
		Nearby	MQSRWBE					
86	Macquarie Weekly Convexity Alpha Wheat (KCBOT) (A)	Deferred	MQSRKWAA	Wheat (KCBOT)	KCBOT		Monday	7 Jan 2004
		Nearby	MQSRKWBA					
87	Macquarie Weekly Convexity Alpha Wheat (KCBOT) (B)	Deferred	MQSRKWAB				Tuesday	7 Jan 2004
		Nearby	MQSRKWBB					
88	Macquarie Weekly Convexity Alpha Wheat (KCBOT) (C)	Deferred	MQSRKWAC			Jan H, Feb H, Mar K, Apr K, May N, Jun N, Jul U, Aug U, Sep Z, Oct Z, Nov Z, Dec H+	Wednesday	7 Jan 2004
		Nearby	MQSRKWBC					
89	Macquarie Weekly Convexity Alpha Wheat (KCBOT) (D)	Deferred	MQSRKWAD				Thursday	7 Jan 2004
		Nearby	MQSRKWBD					
90	Macquarie Weekly Convexity Alpha Wheat (KCBOT) (E)	Deferred	MQSRKWAE				Friday	7 Jan 2004
		Nearby	MQSRKWBE					
91	Macquarie Weekly Convexity Alpha Sugar (A)	Deferred	MQSRSBAA	Sugar	NYBOT		Monday	7 Jan 2004
		Nearby	MQSRSBBA					
92	Macquarie Weekly Convexity Alpha Sugar (B)	Deferred	MQSRSBAB				Tuesday	7 Jan 2004
		Nearby	MQSRSBBB					
93	Macquarie Weekly Convexity Alpha Sugar (C)	Deferred	MQSRSBAC			Jan H, Feb H, Mar K, Apr K, May N, Jun N, Jul V, Aug V, Sep V, Oct H+, Nov H+, Dec H+	Wednesday	7 Jan 2004
		Nearby	MQSRSBBC					
94	Macquarie Weekly Convexity Alpha Sugar (D)	Deferred	MQSRSBAD				Thursday	7 Jan 2004
		Nearby	MQSRSBBD					
95	Macquarie Weekly Convexity Alpha Sugar (E)	Deferred	MQSRSBAE				Friday	7 Jan 2004
		Nearby	MQSRSBBE					
96		Deferred	MQSRKCAA	Coffee	NYBOT		Monday	7 Jan 2004

i	Group	Index	Bloomberg Ticker	Commodity	Trading Facility	Eligible Futures Contracts	Holdings Calculation Day	Index Start Date
	Macquarie Weekly Convexity Alpha Coffee (A)	Nearby	MQSRKCBA			Jan H, Feb H, Mar K, Apr K, May N, Jun N, Jul U, Aug U, Sep Z, Oct Z, Nov Z, Dec H+		
97	Macquarie Weekly Convexity Alpha Coffee (B)	Deferred / Nearby	MQSRKCAB / MQSRKCBB				Tuesday	7 Jan 2004
98	Macquarie Weekly Convexity Alpha Coffee (C)	Deferred / Nearby	MQSRKCAC / MQSRKCBC				Wednesday	7 Jan 2004
99	Macquarie Weekly Convexity Alpha Coffee (D)	Deferred / Nearby	MQSRKCAD / MQSRKCBD				Thursday	7 Jan 2004
100	Macquarie Weekly Convexity Alpha Coffee (E)	Deferred / Nearby	MQSRKCAE / MQSRKCBE				Friday	7 Jan 2004
101	Macquarie Weekly Convexity Alpha Cotton (A)	Deferred / Nearby	MQSRCTAA / MQSRCTBA	Cotton	NYBOT		Monday	7 Jan 2004
102	Macquarie Weekly Convexity Alpha Cotton (B)	Deferred / Nearby	MQSRCTAB / MQSRCTBB				Tuesday	7 Jan 2004
103	Macquarie Weekly Convexity Alpha Cotton (C)	Deferred / Nearby	MQSRCTAC / MQSRCTBC			Jan H, Feb H, Mar K, Apr K, May N, Jun N, Jul Z, Aug Z, Sep Z, Oct Z, Nov Z, Dec H+	Wednesday	7 Jan 2004
104	Macquarie Weekly Convexity Alpha Cotton (D)	Deferred / Nearby	MQSRCTAD / MQSRCTBD				Thursday	7 Jan 2004
105	Macquarie Weekly Convexity Alpha Cotton (E)	Deferred / Nearby	MQSRCTAE / MQSRCTBE				Friday	7 Jan 2004
106	Macquarie Weekly Convexity Alpha Lean Hogs (A)	Deferred / Nearby	MQSRLHAA / MQSRLHBA	Lean Hogs	CME		Monday	7 Jan 2004
107	Macquarie Weekly Convexity Alpha Lean Hogs (B)	Deferred / Nearby	MQSRLHAB / MQSRLHBB				Tuesday	7 Jan 2004
108	Macquarie Weekly Convexity Alpha Lean Hogs (C)	Deferred / Nearby	MQSRLHAC / MQSRLHBC			Jan G, Feb J, Mar J, Apr M, May M, Jun N, Jul Q, Aug V, Sep V, Oct Z, Nov Z, Dc G+	Wednesday	7 Jan 2004
109	Macquarie Weekly Convexity Alpha Lean Hogs (D)	Deferred / Nearby	MQSRLHAD / MQSRLHBD				Thursday	7 Jan 2004
110		Deferred	MQSRLHAE				Friday	7 Jan 2004

i	Group	Index	Bloomberg Ticker	Commodity	Trading Facility	Eligible Futures Contracts	Holdings Calculation Day	Index Start Date
	Macquarie Weekly Convexity Alpha Lean Hogs (E)	Nearby	MQSRLHBE					
111	Macquarie Weekly Convexity Alpha Live Cattle (A)	Deferred	MQSRLCAA	Live Cattle	CME		Monday	7 Jan 2004
		Nearby	MQSRLCBA					
112	Macquarie Weekly Convexity Alpha Live Cattle (B)	Deferred	MQSRLCAB				Tuesday	7 Jan 2004
		Nearby	MQSRLCBB					
113	Macquarie Weekly Convexity Alpha Live Cattle (C)	Deferred	MQSRLCAC			Jan G, Feb J, Mar J, Apr M, May M, Jun Q, Jul Q, Aug V, Sep V, Oct Z, Nov Z, Dec G+	Wednesday	7 Jan 2004
		Nearby	MQSRLCBC					
114	Macquarie Weekly Convexity Alpha Live Cattle (D)	Deferred	MQSRLCAD				Thursday	7 Jan 2004
		Nearby	MQSRLCBD					
115	Macquarie Weekly Convexity Alpha Live Cattle (E)	Deferred	MQSRLCAE				Friday	7 Jan 2004
		Nearby	MQSRLCBE					
116	Macquarie Weekly Convexity Alpha Cocoa (A)	Deferred	MQSRCCAA	Cocoa	NYBOT		Monday	7 Jan 2004
		Nearby	MQSRCCBA					
117	Macquarie Weekly Convexity Alpha Cocoa (B)	Deferred	MQSRCCAB				Tuesday	7 Jan 2004
		Nearby	MQSRCCBB					
118	Macquarie Weekly Convexity Alpha Cocoa (C)	Deferred	MQSRCCAC			Jan H, Feb H, Mar K, Apr K, May N, Jun N, Jul U, Aug U, Sep Z, Oct Z, Nov Z, Dec H+	Wednesday	7 Jan 2004
		Nearby	MQSRCCBC					
119	Macquarie Weekly Convexity Alpha Cocoa (D)	Deferred	MQSRCCAD				Thursday	7 Jan 2004
		Nearby	MQSRCCBD					
120	Macquarie Weekly Convexity Alpha Cocoa (E)	Deferred	MQSRCCAE				Friday	7 Jan 2004
		Nearby	MQSRCCBE					
121	Macquarie Weekly Convexity Alpha Lead (A)	Deferred	MQSRLLAA	Lead	LME		Monday	7 Jan 2004
		Nearby	MQSRLLBA					
122	Macquarie Weekly Convexity Alpha Lead (B)	Deferred	MQSRLLAB			Jan G, Feb H, Mar J, Apr K, May M, Jun N, Jul Q, Aug U, Sep V, Oct X, Nov Z, Dec F+	Tuesday	7 Jan 2004
		Nearby	MQSRLLBB					
123	Macquarie Weekly Convexity Alpha Lead (C)	Deferred	MQSRLLAC				Wednesday	7 Jan 2004
		Nearby	MQSRLLBC					
124		Deferred	MQSRLLAD				Thursday	7 Jan 2004

i	Group	Index	Bloomberg Ticker	Commodity	Trading Facility	Eligible Futures Contracts	Holdings Calculation Day	Index Start Date
125	Macquarie Weekly Convexity Alpha Lead (D)	Nearby	MQSRLLBD					
	Macquarie Weekly Convexity Alpha Lead (E)	Deferred	MQSRLLAE				Friday	7 Jan 2004
		Nearby	MQSRLLBE					