

# Macquarie Diversified Heavy & Ex-Sector Building Block Indices

**Index Manual  
November 2020**

## NOTICES AND DISCLAIMERS

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### BASIS OF PROVISION

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This Index Manual sets out the rules for the Macquarie Diversified Heavy & Ex-Sector Building Block 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 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.

### DATE OF INDEX MANUAL AND CHANGES TO THE INDICES

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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 Sponsor may, however, supplement, amend or withdraw the Methodology at any time if it determines that an Index is no longer calculable under the existing Methodology. The Index Sponsor may also determine that a change to the Methodology is required or desirable to address an error, ambiguity or omission. Such changes may include changes to eligibility requirements or construction as well as changes to the daily Index calculations. If a supplement or amendment is required and such supplement or amendment materially affects the Index Levels of an existing Index, the Index Sponsor will publish such changes to the Methodology, together with the rationale for such changes, 30 days prior to implementation. However if prior publication of the changes is not practicable, the changes and rationale will be published as soon as is reasonably practicable. The Core Commodities represent a diversified set of liquid commodity futures contracts. Liquidity may change over time and, accordingly, the Index Sponsor may update the Core Commodities & Sectors Table to reflect material changes in Contract liquidity or production significance to the world market. Any changes to the Core Commodities & Sectors Table will affect the composition of each Index. If changes to the Core Commodities are required, the Index Sponsor will publish such changes 30 days prior to implementation. For the purposes of calculating historical levels, the Index Sponsor has modified the Core Commodities & Sectors Table to contain commodities that were traded with sufficient liquidity and had sufficient significance to the world market at the time. The Core Commodities & Sectors Table included in this version of the document has been constructed as of September 2017.

The Index Sponsor may withdraw an Index, at any time and without notice, if no financial instruments (in respect of which it has given consent to refer to any Index) are outstanding. The Index Sponsor may, in any case, withdraw an Index, without reason, provided it publishes its intention to do so at least six months prior to cessation of calculation and publication of Index levels.

If you have been granted written consent by the Index Sponsor to reference an Index in any contract or financial instrument, you should include in such contract or financial instruments robust fall-back provisions to deal with cessation or material modification of the Index.

## ADDITIONAL INDICES

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The Index Sponsor may, at any time, commence calculation and publication of new Indices pursuant to the Methodology. In such circumstances the Index Sponsor will publish a revised version of the Methodology, revised only to augment Appendix A with the new rows in the Diversified Commodity Heavy & Ex-Sector Building Block Index Construction Table relating to the new Indices.

## NOT RESEARCH OR AN OFFER

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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.

This document does not constitute a prospectus, offer, invitation or solicitation to buy or sell financial instruments and is not intended to provide the sole basis for any evaluation of the securities or any other financial instruments which may be discussed within, referred to or based upon an Index. Any offering or potential transaction that may be related to an Index will be made separately and subject to distinct documentation and in such case the information contained herein may be superseded in its entirety by such documentation in final form.

Each Index and any financial instruments based on an 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.

## HISTORICAL VALUES OF THE INDICES

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Hypothetical back-tested historical values of an Index are not indicative of future performance. The Index Sponsor 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.

## DISCLAIMER OF LIABILITY

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The Methodology is published for information purposes only and does not create any legally binding obligation on the part of the Index Sponsor, Index Calculation Agent and/or their affiliates. This document is intended to provide a summary of the indices it purports to describe. The Index Sponsor expressly disclaims (to the fullest extent permitted by applicable law) all warranties (express, statutory or implied) regarding this document and the Methodology or the Indices, 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 Sponsor and Index Calculation Agent do not warrant or guarantee the accuracy or timeliness of calculations of any Index value and do not warrant or guarantee the availability of any Index value on any particular date or at any particular time. The Index Sponsor and 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 an underlying Contract or as a result of a Contract failing to trade for any reason. Although the Index Calculation Agent will obtain information concerning Underlying Contracts from publicly available sources it believes reliable, it will not independently verify this information. Accordingly, no representation, warranty or undertaking (express or implied) is made by the Index Sponsor or Index Calculation Agent as to the accuracy and completeness of information concerning any Index.

In particular, the Index Sponsor and Index Calculation Agent are under no obligation to monitor whether or not a Market Disruption Event has occurred and shall not be liable for any losses resulting from (i) any determination that a Market Disruption Event has occurred or has not occurred in relation to a Contract, (ii) the timing relating to the determination that a Market Disruption Event has occurred in relation to a Contract, or (iii) any actions taken or not taken by the Index Calculation Agent as a result of such determination that an Market Disruption Event has occurred.

## NOTICES

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The Indices are 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 an Index, and the Index Sponsor 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 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 DIVERSIFIED COMMODITY CAPPED BUILDING BLOCK INDICES

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## INTRODUCTION

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Physical commodities are not easily investable on a direct and replicable basis. Futures contracts on commodities, however, represent a widely utilized synthetic proxy for direct investment in commodities. For this reason, market participants wishing to have an exposure to, or invest in, physical commodities may invest in financial indices that reflect the price performance of an exchange traded futures contract relating to a physical commodity. Examples of these financial indices are the Macquarie Single Name Commodity Indices (hereafter **Single Commodity Indices**). Each Macquarie Diversified Heavy & Ex-Sector Building Block Index is constructed as a basket of Single Commodity Indices, providing diversified exposure to commonly traded and highly liquid commodity futures.

### *Construction*

The first step in construction of the Methodology was to identify a group of commonly traded and highly liquid commodity futures, sufficient in number to provide diversification benefits to the Indices. These are represented as the “Core Commodities” as set out in the Definitions section of this Methodology. In the case of all “Heavy” Indices, a “Target Commodity” is then selected (not necessarily from the list of Core Commodities), on which “Target Curve Exposure” is taken and which receives an increased weighting relative to the other commodities in the Index. Once a percentage exposure (the “Target Weight”) has been allocated to the Target Commodity of an Index, the remainder of the Index exposure is spread evenly among all Core Commodities (on which Front Month (F0) exposure is taken) that do not belong to the same Sector as the Target Commodity. Accordingly, the Indices represent a diversified exposure, but with a focus on a particular commodity.

Certain commodities, which may be the Target Commodity of individual Indices, are nonetheless not considered liquid enough to be included in all other Indices and therefore are not included in the group of Core Commodities.

In addition, certain Indices are intended to reflect a diversified exposure to all but one Commodity Sector. Such Indices will allocate a weight of zero to all commodities contained within a Commodity Sector, by specification of an “Excluded Commodity Sector” in respect of that Index. An example is the Macquarie Diversified Ex-Energy Building Block Index, which is intended to provide a diversified (front month (F0)) exposure to all Core Commodities except for those in the Energy Sector and, accordingly, will allocate a weight of zero to all commodities belonging to the Energy sector.

## INDIVIDUAL INDICES:

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Each Index is fully described using the methodology provided in the Index Calculation section of this document, in conjunction with information specific to individual indices provided in the relevant row of the Diversified Heavy & Ex-Sector Building Block Index Construction Table in Appendix A to this document. In addition, the full description of underlying components of each Index is provided in the Macquarie Single Commodity Indices Index Manual and the Macquarie Roll Yield Enhanced Indices Index Manual. Therefore the replication of an Index requires this document being taken in conjunction with the Macquarie Single Commodity Indices Index Manual and the Macquarie Roll Yield Enhanced Indices Index Manual.



## GENERAL NOTES ON THE INDICES AND THE METHODOLOGY

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The Indices are designed to be replicable and readily accessible to market participants and are calculated daily in Excess 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 an Index on a particular date. See section titled “Worked Examples”.

The Indices are calculated and maintained by the Index Calculation Agent and supervised by the Index Sponsor and Oversight Committee, as described below. Once an Index has been created, the Components and Weights will be fixed and will not be amended going forward (unless there is a change in the Core Commodities). All determinations with regard to the Indices are made following the rules set out in this document, without discretion by the Index Sponsor or Index Calculation Agent.

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

## DOCUMENT STRUCTURE

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Certain capitalized terms are defined in the Definitions section of this manual. The names of all Indices described by this Methodology are set out in the Diversified Heavy & Ex-Sector Building Block Index Construction Table in Appendix A.

## INDEX GOVERNANCE

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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 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 (including any changes to the Core Commodities & Sectors Table), 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

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### THE INDEX SPONSOR

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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 Sponsor may, at any time, publish new indices by publishing a revised version of the Appendix A with new rows in the Diversified Heavy & Ex-Sector Building Block Index Construction Table.

### THE INDEX CALCULATION AGENT

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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 Index 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

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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

**Commodity** is, in respect of each Index, each Commodity in the Commodities Table specified for such Index in the Diversified Heavy & Ex-Sector Building Block Index Construction Table.

### Commodities Table – Front Month (F0):

Commodity	Component	Bloomberg Ticker
WTI Crude Oil	Macquarie Single Commodity Crude Oil (WTI) type A ER Index	MQSDCLER
Brent Crude Oil	Macquarie Single Commodity Brent Crude Oil type A ER Index	MQSDCOER
Gasoline	Macquarie Single Commodity Unleaded Gasoline type A ER Index	MQSDXBER
Gasoil	Macquarie Single Commodity GasOil type A ER Index	MQSDQSER
Heating Oil	Macquarie Single Commodity Heating Oil type A ER Index	MQSDHOER
Natural Gas	Macquarie Single Commodity Natural Gas type A ER Index	MQSDNGER
EUA Emissions	Macquarie Single Commodity EUA Emissions (MO) ER (USD) Index	MQSDMOUE
UK Natural Gas	Macquarie Single Commodity UK Natural Gas (FN) ER (USD) Index	MQSCFNUE
TTF Natural Gas	Macquarie Single Commodity TTF Natural Gas (TZT) ER (USD) Index	MQSCTZTU
Gold	Macquarie Single Commodity Gold type A ER Index	MQSDGCER
Silver	Macquarie Single Commodity Silver type A ER Index	MQSDSIER
Platinum	Macquarie Single Commodity Platinum type A ER Index	MQSDPLER
Palladium	Macquarie Single Commodity Palladium type A ER Index	MQSDPAER
Zinc	Macquarie Single Commodity Zinc type A ER Index	MQSDLXER
Nickel	Macquarie Single Commodity Nickel type A ER Index	MQSDLNER
Aluminium	Macquarie Single Commodity Aluminium type A ER Index	MQSDLAER
Copper (COMEX)	Macquarie Single Commodity Copper (COMEX) type A ER Index	MQSDHGER
Copper (LME)	Macquarie Single Commodity Copper type B ER Index	MQSCLPER
Tin	Macquarie Single Commodity Tin type A ER Index	MQSDLTER
Lead	Macquarie Single Commodity Lead type A ER Index	MQSDLLER
Iron Ore	Macquarie Single SGX Iron Ore 62% (SCO) Monthly Roll ER Index	MQSCIOER
Corn	Macquarie Single Commodity Corn type A ER Index	MQSDCER
Soybeans	Macquarie Single Commodity Soybeans type A ER Index	MQSDSER
Soybean Oil	Macquarie Single Commodity Soybean Oil type A ER Index	MQSDBOER
Soybean Meal	Macquarie Single Commodity Soybean Meal type A ER Index	MQSDSMER
Wheat (Minneapolis)	Macquarie Single Commodity Minneapolis Wheat type A ER Index	MQSDMWER
Wheat (CBOT)	Macquarie Single Commodity Wheat type A ER Index	MQSDWER
Wheat (KCBOT)	Macquarie Single Commodity Kansas Wheat type A ER Index	MQSDKWER
Milling Wheat	Macquarie Single Commodity Milling Wheat 1st Generic ER (USD) Index	MQSG1CAU
Sugar	Macquarie Single Commodity Sugar type A ER Index	MQSDSBER
Sugar (White)	Macquarie Single Commodity White Sugar type A ER Index	MQSDQWER
Coffee	Macquarie Single Commodity Coffee type A ER Index	MQSDKCER

Coffee (Robusta)	Macquarie Single Commodity Robusta Coffee type A ER Index	MQSDDFER
Cocoa	Macquarie Single Commodity Cocoa type A ER Index	MQSDCCER
Cotton	Macquarie Single Commodity Cotton type A ER Index	MQSDCTER
Lean Hogs	Macquarie Single Commodity Lean Hogs type A ER Index	MQSDLHER
Live Cattle	Macquarie Single Commodity Live Cattle type B ER Index	MQSDLCER
Feeder Cattle	Macquarie Single Commodity Feeder Cattle type A ER Index	MQSCFCER

For more information on the Macquarie Single Commodity indices, please refer to the Macquarie Single Commodity Index Manual at <http://static.macquarie.com/dafiles/Internet/mgl/global/shared/corporate/trading-and-hedging/commodities/macquarie-single-commodity-indices.pdf>

### Commodities Table – 3 Month Forward (F3):

Commodity	Component	Bloomberg Ticker
WTI Crude Oil	Macquarie Single Commodity Crude Oil (WTI) type A 3 month forward ER Index	MQSDCL3E
Brent Crude Oil	Macquarie Single Commodity Brent Crude Oil type A 3 month forward ER Index	MQSDCO3E
Gasoline	Macquarie Single Commodity Unleaded Gasoline type A 3 month forward ER Index	MQSDXB3E
Gasoil	Macquarie Single Commodity GasOil type A 3 month forward ER Index	MQSDQS3E
Heating Oil	Macquarie Single Commodity Heating Oil type A 3 month forward ER Index	MQSDHO3E
Natural Gas	Macquarie Single Commodity Natural Gas type A 3 month forward ER Index	MQSDNG3E
Gold	Macquarie Single Commodity Gold type A 3 month forward ER Index	MQSDGC3E
Silver	Macquarie Single Commodity Silver type A 3 month forward ER Index	MQSDSI3E
Platinum	-	-
Palladium	-	-
Zinc	Macquarie Single Commodity Zinc type A 3 month forward ER Index	MQSDLX3E
Nickel	Macquarie Single Commodity Nickel type A 3 month forward ER Index	MQSDLN3E
Aluminium	Macquarie Single Commodity Aluminium type A 3 month forward ER Index	MQSDLA3E
Copper (COMEX)	Macquarie Single Commodity Copper (COMEX) type A 3 month forward ER Index	MQSDHG3E
Copper (LME)	Macquarie Single Commodity Copper type B 3 month forward ER Index	MQSCLP3E
Tin	Macquarie Single Commodity Tin type A 3 month forward ER Index	MQSDLT3E
Lead	Macquarie Single Commodity Lead type A 3 month forward ER Index	MQSDLL3E
Corn	Macquarie Single Commodity Corn type A 3 month forward ER Index	MQSDC3E
Soybeans	Macquarie Single Commodity Soybeans type A 3 month forward ER Index	MQSDS3E
Soybean Oil	Macquarie Single Commodity Soybean Oil type A 3 month forward ER Index	MQSDBO3E
Soybean Meal	Macquarie Single Commodity Soybean Meal type A 3 month forward ER Index	MQSDSM3E
Wheat (Minneapolis)	Macquarie Single Commodity Minneapolis Wheat type A 3 month forward ER Index	MQSDMW3E
Wheat (CBOT)	Macquarie Single Commodity Wheat type A 3 month forward ER Index	MQSDW3E
Wheat (KCBOT)	Macquarie Single Commodity Kansas Wheat type A 3 month forward ER Index	MQSDKW3E
Sugar	Macquarie Single Commodity Sugar type A 3 month forward ER Index	MQSDSB3E
Sugar (White)	Macquarie Single Commodity White Sugar type A 3 month forward ER Index	MQSDQW3E
Coffee	Macquarie Single Commodity Coffee type A 3 month forward ER Index	MQSDKC3E

Coffee (Robusta)	Macquarie Single Commodity Robusta Coffee type A 3 month forward ER Index	MQSDDF3E
Cocoa	Macquarie Single Commodity Cocoa type A 3 month forward ER Index	MQSDCC3E
Cotton	Macquarie Single Commodity Cotton type A 3 month forward ER Index	MQSDCT3E
Lean Hogs	Macquarie Single Commodity Lean Hogs type A 3 month forward ER Index	MQSDLH3E
Live Cattle	Macquarie Single Commodity Live Cattle type A 3 month forward ER Index	MQSDLC3E
Feeder Cattle	Macquarie Single Commodity Feeder Cattle type B 3 month forward ER Index	MQSCFC3E

For more information on the Macquarie Single Commodity indices, please refer to the Macquarie Single Commodity Index Manual at <http://static.macquarie.com/dafiles/Internet/mgl/global/shared/corporate/trading-and-hedging/commodities/macquarie-single-commodity-indices.pdf>

### Commodities Table – Annual Roll:

Commodity	Component	Bloomberg Ticker
WTI Crude Oil	Macquarie WTI Crude Oil Annual Roll Index Version A	MQSYCLRA
Brent Crude Oil	Macquarie Brent Crude Oil Annual Roll Index Version A	MQSYCORA
Gasoline	Macquarie Unleaded Gasoline Annual Roll Index Version A	MQSYXBRA
Gasoil	Macquarie Gas Oil Annual Roll Index Version A	MQSYGORA
Heating Oil	Macquarie Heating Oil Annual Roll Index Version A	MQSYHORA
Natural Gas	Macquarie Natural Gas Annual Roll Index Version A	MQSYNGRA
Gold	-	-
Silver	-	-
Platinum	-	-
Palladium	-	-
Zinc	Macquarie Zinc Annual Roll Index Version A	MQSYLXRA
Nickel	Macquarie Nickel Annual Roll Index Version A	MQSYLNRA
Aluminium	Macquarie Aluminium Annual Roll Index Version A	MQSYLARA
Copper (COMEX)	Macquarie High Grade Copper Annual Roll Index Version A	MQSYHGRA
Copper (LME)	Macquarie Copper Annual Roll Index Version A	MQSYLPRA
Tin	-	-
Lead	Macquarie Lead Annual Roll Index Version A	MQSYLLRA
Corn	Macquarie Corn Annual Roll Index Version A	MQSYCXRA
Soybeans	Macquarie Soybeans Annual Roll Index Version A	MQSYSXRA
Soybean Oil	Macquarie Soybean Oil Annual Roll Index Version A	MQSYBORA
Soybean Meal	Macquarie Soybean Meal Annual Roll Index Version A	MQSYSMRA
Wheat (Minneapolis)	Macquarie Minneapolis Wheat Annual Roll Index Version A	MQSYMWRA
Wheat (CBOT)	Macquarie Wheat (Chicago) Annual Roll Index Version A	MQSYWXRA
Wheat (KCBOT)	Macquarie Wheat (Kansas) Annual Roll Index Version A	MQSYKWRA
Sugar	Macquarie Sugar Annual Roll Index Version A	MQSYSBRA
Sugar (White)	Macquarie White Sugar Annual Roll Index Version A	MQSYQWRA
Coffee	Macquarie Coffee Annual Roll Index Version A	MQSYKCRA

Coffee (Robusta)	-	-
Cocoa	Macquarie Cocoa Annual Roll Index Version A	MQSYCCRA
Cotton	Macquarie Cotton Annual Roll Index Version A	MQSYCTRA
Lean Hogs	Macquarie Lean Hogs Annual Roll Index Version A	MQSYLHRA
Live Cattle	Macquarie Live Cattle Annual Roll Index Version A	MQSYLCRA
Feeder Cattle	Macquarie Feeder Cattle Annual Roll Index Version A	MQSYFCRA

For more information on the Macquarie Single Commodity indices, please refer to the Macquarie Single Commodity Index Manual at <http://static.macquarie.com/dafiles/Internet/mgl/global/shared/corporate/trading-and-hedging/commodities/macquarie-single-commodity-indices.pdf>

### Commodities Table – Roll Yield Enhanced:

Commodity	Component	Bloomberg Ticker
WTI Crude Oil	Macquarie WTI Crude Oil Roll Yield Enhanced Index	MQSRCLER
Brent Crude Oil	Macquarie Brent Crude Oil Roll Yield Enhanced Index	MQSRCOER
Gasoline	Macquarie Gasoline Roll Yield Enhanced Index	MQSRXBER
Gasoil	Macquarie Gasoil Roll Yield Enhanced Index	MQSRQSER
Heating Oil	Macquarie Heating Oil Roll Yield Enhanced Index	MQSRHOER
Natural Gas	Macquarie Natural Gas Roll Yield Enhanced Index	MQSRNGER
Gold	Macquarie Gold Roll Yield Enhanced Index	MQSRGCER
Silver	Macquarie Silver Roll Yield Enhanced Index	MQSRSIER
Platinum	-	-
Palladium	-	-
Zinc	Macquarie Zinc Roll Yield Enhanced Index	MQSRLXER
Nickel	Macquarie Nickel Roll Yield Enhanced Index	MQSRLNER
Aluminium	Macquarie Aluminium Roll Yield Enhanced Index	MQSRLAER
Copper (COMEX)	Macquarie Copper (COMEX) Roll Yield Enhanced Index	MQSRHGER
Copper (LME)	Macquarie Copper (LME) Roll Yield Enhanced Index	MQSRLPER
Tin	Macquarie Tin Roll Yield Enhanced Index	MQSRLTER
Lead	Macquarie Lead Roll Yield Enhanced Index	MQSRLLER
Corn	Macquarie Corn Roll Yield Enhanced Index	MQSRCER
Soybeans	Macquarie Soybeans Roll Yield Enhanced Index	MQRSRER
Soybean Oil	Macquarie Soybean Oil Roll Yield Enhanced Index	MQSRBOER
Soybean Meal	Macquarie Soybean Meal Roll Yield Enhanced Index	MQRSRMER
Wheat (Minneapolis)	Macquarie Wheat (Minneapolis) Roll Yield Enhanced Index	MQSRMWER
Wheat (CBOT)	Macquarie Wheat (CBOT) Roll Yield Enhanced Index	MQSRWER
Wheat (KCBOT)	Macquarie Wheat (KCBOT) Roll Yield Enhanced Index	MQSRKWER
Sugar	Macquarie Sugar Roll Yield Enhanced Index	MQSRSEBER
Sugar (White)	Macquarie White Sugar Roll Yield Enhanced Index	MQSRQWER
Coffee	Macquarie Coffee Roll Yield Enhanced Index	MQSRKCER

Coffee (Robusta)	Macquarie Coffee (Robusta) Roll Yield Enhanced Index	MQSRDFER
Cocoa	Macquarie Cocoa Roll Yield Enhanced Index	MQSRCCER
Cotton	Macquarie Cotton Roll Yield Enhanced Index	MQSRCTER
Lean Hogs	Macquarie Lean Hogs Roll Yield Enhanced Index	MQSRLHER
Live Cattle	Macquarie Live Cattle Roll Yield Enhanced Index	MQSRLCER
Feeder Cattle	Macquarie Feeder Cattle Roll Yield Enhanced Index	MQSRFCER

For more information on the Macquarie Roll Yield Enhanced indices, please refer to the Macquarie Roll Yield Enhanced Indices Index Manual at <http://static.macquarie.com/daffles/Internet/mgl/global/shared/corporate/trading-and-hedging/commodities/macquarie-roll-yield-enhanced-indices.pdf>.

**Component** means, in respect of each Index and any Index Business Day, the underlying constituent Single Commodity Indices that i) comprise such Index and ii) have been given a non-zero weight in respect of such Index Business Day. The total number of Components in respect of any Index is denoted by  $n$ .

For example, the Macquarie Diversified Heavy F3 WTI Crude Oil Building Block Index is comprised of a total of 18 Components (1 Macquarie Single Commodity 3 Month Forward Type A Excess Return Index on which the Target Weight is applied and 17 Macquarie Single Commodity Type A Excess Return Indices on which equally weighted exposure is taken. See Worked Example section)

The list of possible Components is set out in the Commodities Tables above.

**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.

**Core Commodities** are the set of commodities set out in the Core Commodities & Sectors Table below, across which Index exposure will be distributed, in accordance with, and subject to the exclusions set out in the Index Calculation section. The Core Commodities & Sectors Table may be modified from time to time by the Index Sponsor to reflect any material changes in Contract liquidity or production significance to the world market. If the Oversight Committee approves changes to the Core Commodities & Sectors Table, a revised Index Manual will be published. Revised Target Holdings reflecting the new set of Core Commodities will be applied on the Holdings Calculation Date that falls on or immediately after the date that falls one month after publication.

**Commodity Sectors** is an input to the Weights calculation used to link certain commodities for the purpose of controlling concentration risk. The Commodity Sectors are specified below:

**Core Commodities & Sectors Table:**

Commodity	Core Commodity	Sector
WTI Crude Oil	Yes	Energy
Brent Crude Oil	Yes	Energy
Gasoline	Yes	Energy



Gasoil	No	Energy
Heating Oil	Yes	Energy
Natural Gas	Yes	Energy
EUA Emissions	No	Energy
UK Natural Gas	No	Energy
TTF Natural Gas	No	Energy
Gold	Yes	Precious Metals
Silver	Yes	Precious Metals
Platinum	No	Precious Metals
Palladium	No	Precious Metals
Zinc	Yes	Base Metals
Nickel	Yes	Base Metals
Aluminium	Yes	Base Metals
Copper (COMEX)	Yes	Base Metals
Copper (LME)	No	Base Metals
Tin	No	Base Metals
Lead	No	Base Metals
Iron Ore	No	Base Metals
Corn	Yes	Grains
Soybeans	Yes	Grains
Soybean Oil	Yes	Grains
Soybean Meal	Yes	Grains
Wheat (Minneapolis)	No	Grains
Wheat (CBOT)	Yes	Grains
Wheat (KCBOT)	Yes	Grains
Milling Wheat	No	Grains
Sugar	Yes	Softs
Coffee	Yes	Softs
Sugar (White)	No	Softs
Coffee (Robusta)	No	Softs
Cocoa	No	Softs
Cotton	Yes	Softs
Lean Hogs	Yes	Livestock
Live Cattle	Yes	Livestock
Feeder Cattle	No	Livestock

**Excess Return Index Starting Level** is the level of each Excess Return Index on the relevant Index Start Date. The Excess Return Index Starting Level is 100.

**Excluded Commodity Sectors** is an input to the Weights calculation used to specify certain groups of commodities for the purpose of controlling concentration risk. The Excluded Commodity Sectors in

respect of an Ex-Sector Index are specified in the relevant row of the Diversified Heavy & Ex-Sector Building Block Index Construction Table in Appendix A.

**Front Month** is the curve exposure in the F0 index, with roll schedule in respect of each Commodity as defined in the Single Commodity Indices Index Manual. For additional clarity, this represents the exposure taken with respect to the front end of the commodity futures curve, typically where the expiration of the relevant contract is in the immediate near term.

**3 Month Forward** is the curve exposure in the F3 index, with roll schedule in respect of each Commodity as defined in the Single Commodity Indices Index Manual. For additional clarity, this represents a version of the Front Month that is offset by three months such that it references the contract that the Front Month would take exposure to in three months' time, representing medium term exposure.

**Annual Roll** is the curve exposure in the Annual Roll index, with roll schedule in respect of each Commodity as defined in the Single Commodity Indices Index Manual. For additional clarity, the contracts are rolled once a year (with some exceptions due to liquidity constraints) and exposure is taken further down the futures curve with respect to Front Month and 3 Month Forward.

**Roll Yield Enhanced** is the curve exposure in the Roll Yield Enhanced index, where roll schedule in respect of each Commodity is determined using the Roll Yield Enhanced Indices Index Manual. For additional clarity, the contracts are determined with respect to a set of eligible contracts where the expected roll yield is calculated for each such contract and the selected contract is the one with the most positive (or least negative) roll yield.

**Holdings Calculation Date** is the Index Business Day on which the Target Holdings are periodically calculated. The Holdings Calculation Date is specified as the ninth (9<sup>th</sup>) Index Business Day of a given calendar month.

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

**Index Calendar** in respect of an Index, is the calendar of days in respect of which an Index Level will be published, as specified in the relevant row of the Diversified Heavy & Ex-Sector Building Block Index Construction Table in Appendix A.

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

**Index Name** is the Index Name specified in the Diversified Heavy & Ex-Sector Building Block Index Construction Table in Appendix A.

**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 [...].

**Index Ticker** is the index ticker specified in the Diversified Heavy & Ex-Sector Building Block Index Construction Table in Appendix A.

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

**Observation Date** is the ninth (9<sup>th</sup>) Index Business Day of a given calendar month.

**Single Commodity Indices** are the Macquarie Single Commodity Indices or the Macquarie Roll Yield Enhanced Indices, as described in the Introduction section of this Manual.

**Single Commodity Indices Index Manual** means the index manual relating to the Single Commodity Indices, found at <http://static.macquarie.com/dafiles/Internet/mgl/global/shared/corporate/trading-and-hedging/commodities/macquarie-single-commodity-indices.pdf>.

**Roll Yield Enhanced Indices Index Manual** means the index manual relating to the Roll Yield Enhanced Indices, found at <http://static.macquarie.com/dafiles/Internet/mgl/global/shared/corporate/trading-and-hedging/commodities/macquarie-roll-yield-enhanced-indices.pdf>.

**Target Commodity** is an input to the Weights calculation which defines the commodity, if any, which will be allocated the Target Weight. The Target Commodity for the Index is specified in the Diversified Heavy & Ex-Sector Building Block Index Construction Table in Appendix A.

**Target Curve Exposure** in respect of each Diversified Heavy Building Block Index is either Front Month (F0), 3 Month Forward (F3), Annual Roll or Roll Yield Enhancement.

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

**Target Weight** is an input to the Weights calculation used to allocate weight to the Target Commodity. The Target Weight is specified as 30%.

**Trading Facility** means each regulated futures exchange, facility or platform on or through which the Contracts underlying an Index are traded.

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

**Weights** are the weights periodically established for each Index as described in Section 1 (*Weight Calculation*) of the Index Calculation section of this Manual.

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## INDEX CALCULATION

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On a daily basis each Index replicates the returns obtained by holding a basket of Single Commodity Indices, the Weights of which are determined according to Section 1 below and rebalanced periodically according to section 2. The following sections detail how the Index Calculation Agent will calculate the daily Index Level of each Index based on the inputs set out in the Definitions Section and from the relevant row in the Diversified Heavy & Ex-Sector Building Block Index Construction Table in Appendix A.

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### SECTION 1: WEIGHT CALCULATION

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Each Index is meant to represent a basket containing a specific sub-set of commodities. This section describes the rules for interpreting the information from the Diversified Heavy & Ex-Sector Building Block Index Construction Table in Appendix A and determining the Weights of each Diversified Heavy & Ex-Sector Building Block Index.

In respect of each Index, the Index Sponsor will calculate the Weights of that Index according to a set of algorithmic rules. These rules are defined as follows:

1. The Target Commodity in respect of the Index (if such a commodity is specified in the relevant row in the Diversified Heavy & Ex-Sector Building Block Index Construction Table in Appendix A) is allocated a weight equal to the Target Weight in respect of that Index. The Target Commodity of each Diversified Heavy Building Block Index will take exposure to either the Front Month (F0), 3 Month Forward (F3), Annual Roll or Roll Yield Enhanced depending on the Curve Position type. Any Commodities belonging to the same Commodity Sector as the Target Commodity are allocated a weight of zero.
2. The remaining weight is allocated equally among those Core Commodities that have yet to be allocated a weight, such that the total weight across all such Core Commodities and the Target Commodity is equal to 100%. These Core Commodities identified in this step will take Front Month (F0) exposure.
3. Any Commodity which has not been allocated a weight according to points 1-4 above is allocated a weight of zero.

The set of weights allocated is then used for Index calculation.

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### SECTION 2: HOLDINGS CALCULATION

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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,  $t$ .

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#### TARGET HOLDINGS CALCULATION ON A HOLDINGS CALCULATION DATE

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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 Commodity  $i$  be denoted by  $W_{i,R}$  so that  $\{W_{1,R}, \dots, W_{n,R}\}$  are the Weights corresponding to the Commodities in the Index as determined in Section 1. Analogously, let  $\{C_{1,R}, \dots, C_{n,R}\}$  be the set of Component Levels of the Components corresponding to each Commodity on 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:

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

where  $I_R$  is the Index Level on the Holdings Calculation Date  $R$ .

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### DAILY HOLDINGS CALCULATION

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

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### SECTION 3: DAILY INDEX CALCULATION

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

See the Worked Examples section for an example of the calculation of an Index Level.

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#### SECTION 4: MARKET DISRUPTION EVENTS

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Each of the Heavy & Ex-Sector Indices is comprised of a number of Single Commodity Indices, which in turn are 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 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) 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 reasonably 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.

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#### INDEX CALCULATION UNDER MARKET DISRUPTION EVENTS

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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 Single

Commodity Indices that the Index represents, in respect of that Index Business Day and in accordance with the Single Commodity Indices Index Manual. 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  $\{H'_{1,R}, \dots, H'_{m,R}\}$  of the Underlying Contracts  $\{F_1 \dots F_m\}$  of the Index which replicate 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  $\{TH'_{1,t}, \dots, TH'_{m,t}\}$  of the Underlying Contracts, which replicate 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 Calculation Agent will resume calculation of the index in accordance with section 2



## WORKED EXAMPLES

### WEIGHTS CALCULATION

The Weights calculation for the Macquarie Diversified Heavy F3 WTI Crude Oil Building Block Index is as follows:

- WTI Crude Oil is the Target Commodity, therefore it receives a weight of 30%
- Brent Crude Oil, Gasoline, Gasoil, Heating Oil and Natural Gas are in the same Sector as the Target Commodity, therefore they receive a weight of zero
- There are 17 Core Commodities (not belonging to the Energy Sector) and will each be allocated a weight of  $(100\%-30\%)/17 = 4.411764706\%$

### HOLDINGS CALCULATION

The Target Holding calculation for the Component corresponding to WTI Crude Oil for the Macquarie Diversified Heavy F3 WTI Crude Oil Building Block Index on the 14<sup>th</sup> of January 2013 was as follows:

- The Weight for Crude Oil was 30%
- The Level of the Component corresponding to Crude Oil (Macquarie Single Commodity WTI Crude Oil 3 Month Forward Type A Excess Return Index) was 230.2796658
- The Level of the Index was 100.000
- The Target Holding for the Component corresponding to Crude Oil in respect of the 14<sup>th</sup> January 2013 is therefore equal to :

$$TH_{i,R} = 100.000 \times \frac{0.30}{230.2796658} = 0.130276375$$

### INDEX LEVEL CALCULATION

The Excess Return Index Level calculation for the Macquarie Diversified Heavy F3 WTI Crude Oil Building Block Index on the 15<sup>th</sup> January 2013 is as follows:

- The Index Level of the Index on the immediately preceding Index Business Day (the 14<sup>th</sup> January 2013) is 100.000

The data required for the calculation of the Index is presented in the following table:

Commodity	Weight	Ticker	Holdings	Component Level (14-Jan-13)	Component Level (15-Jan-13)	Holding Multiplied by Change in Level
WTI Crude Oil	30.000%	MQSDCL3E	0.13027637	230.27966580	227.94436757	-0.30423419
Brent Crude Oil	0.000%	MQSDCOER	0.00000000	241.36697609	238.48202409	0.00000000

Gasoline	0.000%	MQSDXBER	0.00000000	187.38411738	184.28797662	0.00000000
Heating Oil	0.000%	MQSDHOER	0.00000000	172.40489414	169.67063997	0.00000000
Natural Gas	0.000%	MQSDNGER	0.00000000	1.76828829	1.80754869	0.00000000
Gold	4.118%	MQSDGCER	0.01261254	326.47240087	329.32385879	0.03596413
Silver	4.118%	MQSDSIER	0.01054968	390.31019542	395.56702512	0.05545786
Zinc	4.118%	MQSDLXER	0.03036749	135.59394238	135.54278772	-0.00155344
Nickel	4.118%	MQSDLNER	0.03256261	126.45322936	128.25069056	0.05853003
Aluminium	4.118%	MQSDLAER	0.05124018	80.35973122	80.33024502	-0.00151088
Copper (COMEX)	4.118%	MQSDHGER	0.01279798	321.74186630	322.05174427	0.00396581
Corn	4.118%	MQSDCER	0.05276994	78.03015911	78.73070612	0.03696783
Soybeans	4.118%	MQSDSER	0.02404981	171.21329105	170.66994845	-0.01306729
Soybean Oil	4.118%	MQSDBOER	0.04058045	101.46872674	102.31346143	0.03427972
Soybean Meal	4.118%	MQSDSMER	0.01464208	281.22004328	277.44799000	-0.05523072
Wheat (CBOT)	4.118%	MQSDWER	0.09228943	44.61667255	45.53285585	0.08455403
Wheat (KCBOT)	4.118%	MQSDKWER	0.04407637	93.42073817	95.09403008	0.07375263
Sugar	4.118%	MQSDSBER	0.02740429	150.25558006	148.02957147	-0.06100218
Coffee	4.118%	MQSDKCER	0.05533480	74.41333657	74.02500866	-0.02148805
Cotton	4.118%	MQSDCTER	0.08730222	47.16543091	47.59636506	0.03762151
Lean Hogs	4.118%	MQSDLHER	0.12467842	33.02614062	32.93215616	-0.01171783
Live Cattle	4.118%	MQSDLCER	0.05683316	72.45149427	72.27675041	-0.00993125

**Sum** -0.058642255

The Index Level in respect of the Macquarie Diversified Heavy F3 WTI Crude Oil Building Block Index on the 15th of January 2013 is calculated as follows:

$$I_{15 \text{ Jan } 2013} = 100.000 + (-0.058642255) = 99.94135775$$

## CONTACTS

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## APPENDIX A

Appendix A may be supplemented from time to time by the addition of new Indices.

### DIVERSIFIED HEAVY & EX-SECTOR BUILDING BLOCK INDEX CONSTRUCTION TABLE

Target Commodity	Curve Position	Index Type	Index Ticker	Index Calendar
WTI Crude Oil	F0	Heavy	MQCPCL0H	NYMEX
Brent Crude Oil	F0	Heavy	MQCPC00H	NYMEX
Gasoline	F0	Heavy	MQCPXB0H	NYMEX
Gasoil	F0	Heavy	MQCPG00H	NYMEX
Heating Oil	F0	Heavy	MQCPH00H	NYMEX
Natural Gas	F0	Heavy	MQCPNG0H	NYMEX
EUA Emissions	F0	Heavy	MQCPM00H	NYMEX
UK Natural Gas	F0	Heavy	MQSCFN0H	NYMEX
TTF Natural Gas	F0	Heavy	MQSCTZ0H	NYMEX
Gold	F0	Heavy	MQCPGC0H	NYMEX
Silver	F0	Heavy	MQCPSI0H	NYMEX
Platinum	F0	Heavy	MQCPPL0H	NYMEX
Palladium	F0	Heavy	MQCPPA0H	NYMEX
Zinc	F0	Heavy	MQCPLX0H	NYMEX
Nickel	F0	Heavy	MQCPLN0H	NYMEX
Aluminium	F0	Heavy	MQCPLA0H	NYMEX
Copper (COMEX)	F0	Heavy	MQCPHG0H	NYMEX
Copper (LME)	F0	Heavy	MQCPLP0H	NYMEX
Tin	F0	Heavy	MQCPLT0H	NYMEX
Lead	F0	Heavy	MQCPLL0H	NYMEX
Iron Ore	F0	Heavy	MQSCIO0H	NYMEX
Corn	F0	Heavy	MQCPCX0H	NYMEX
Soybeans	F0	Heavy	MQCPSX0H	NYMEX
Soybean Oil	F0	Heavy	MQCPB00H	NYMEX
Soybean Meal	F0	Heavy	MQCPSM0H	NYMEX
Wheat (Minneapolis)	F0	Heavy	MQCPMW0H	NYMEX
Wheat (CBOT)	F0	Heavy	MQCPWX0H	NYMEX
Wheat (KCBOT)	F0	Heavy	MQCPKW0H	NYMEX
Milling Wheat	F0	Heavy	MQSGCA0H	NYMEX
Sugar	F0	Heavy	MQCPSB0H	NYMEX
Sugar (White)	F0	Heavy	MQCPQW0H	NYMEX
Coffee	F0	Heavy	MQCPKC0H	NYMEX
Coffee (Robusta)	F0	Heavy	MQCPDF0H	NYMEX
Cocoa	F0	Heavy	MQCPC00H	NYMEX

Cotton	F0	Heavy	MQCPCT0H	NYMEX
Lean Hogs	F0	Heavy	MQCPLH0H	NYMEX
Live Cattle	F0	Heavy	MQCPLC0H	NYMEX
Feeder Cattle	F0	Heavy	MQCPFC0H	NYMEX
WTI Crude Oil	F3	Heavy	MQCPCL3H	NYMEX
Brent Crude Oil	F3	Heavy	MQCPCO3H	NYMEX
Gasoline	F3	Heavy	MQCPXB3H	NYMEX
Gasoil	F3	Heavy	MQCPGO3H	NYMEX
Heating Oil	F3	Heavy	MQCPHO3H	NYMEX
Natural Gas	F3	Heavy	MQCPNG3H	NYMEX
Gold	F3	Heavy	MQCPGC3H	NYMEX
Silver	F3	Heavy	MQCPSI3H	NYMEX
Platinum	F3	Heavy	-	NYMEX
Palladium	F3	Heavy	-	NYMEX
Zinc	F3	Heavy	MQCPLX3H	NYMEX
Nickel	F3	Heavy	MQCPLN3H	NYMEX
Aluminium	F3	Heavy	MQCPLA3H	NYMEX
Copper (COMEX)	F3	Heavy	MQCPHG3H	NYMEX
Copper (LME)	F3	Heavy	MQCPLP3H	NYMEX
Tin	F3	Heavy	MQCPLT3H	NYMEX
Lead	F3	Heavy	MQCPLL3H	NYMEX
Corn	F3	Heavy	MQCPCX3H	NYMEX
Soybeans	F3	Heavy	MQCPSX3H	NYMEX
Soybean Oil	F3	Heavy	MQCPBO3H	NYMEX
Soybean Meal	F3	Heavy	MQCPSM3H	NYMEX
Wheat (Minneapolis)	F3	Heavy	MQCPMW3H	NYMEX
Wheat (CBOT)	F3	Heavy	MQCPWX3H	NYMEX
Wheat (KCBOT)	F3	Heavy	MQCPKW3H	NYMEX
Sugar	F3	Heavy	MQCPSB3H	NYMEX
Sugar (White)	F3	Heavy	MQCPQW3H	NYMEX
Coffee	F3	Heavy	MQCPKC3H	NYMEX
Coffee (Robusta)	F3	Heavy	MQCPDF3H	NYMEX
Cocoa	F3	Heavy	MQCPCC3H	NYMEX
Cotton	F3	Heavy	MQCPCT3H	NYMEX
Lean Hogs	F3	Heavy	MQCPLH3H	NYMEX
Live Cattle	F3	Heavy	MQCPLC3H	NYMEX
Feeder Cattle	F3	Heavy	MQCPFC3H	NYMEX
WTI Crude Oil	Annual Roll	Heavy	MQCPCLAH	NYMEX
Brent Crude Oil	Annual Roll	Heavy	MQCPCOAH	NYMEX
Gasoline	Annual Roll	Heavy	MQCPXBAH	NYMEX
Gasoil	Annual Roll	Heavy	MQCPGOAH	NYMEX

Heating Oil	Annual Roll	Heavy	MQCPHOAH	NYMEX
Natural Gas	Annual Roll	Heavy	MQCPNGAH	NYMEX
Gold	Annual Roll	Heavy	-	-
Silver	Annual Roll	Heavy	-	-
Platinum	Annual Roll	Heavy	-	-
Palladium	Annual Roll	Heavy	-	-
Zinc	Annual Roll	Heavy	MQCPLXAH	NYMEX
Nickel	Annual Roll	Heavy	MQCPLNAH	NYMEX
Aluminium	Annual Roll	Heavy	MQCPLAAH	NYMEX
Copper (COMEX)	Annual Roll	Heavy	MQCPHGAH	NYMEX
Copper (LME)	Annual Roll	Heavy	MQCPLPAH	NYMEX
Tin	Annual Roll	Heavy	-	-
Lead	Annual Roll	Heavy	MQCPLLAH	NYMEX
Corn	Annual Roll	Heavy	MQCPCXAH	NYMEX
Soybeans	Annual Roll	Heavy	MQCPSXAH	NYMEX
Soybean Oil	Annual Roll	Heavy	MQCPBOAH	NYMEX
Soybean Meal	Annual Roll	Heavy	MQCPSMAH	NYMEX
Wheat (Minneapolis)	Annual Roll	Heavy	MQCPMWAH	NYMEX
Wheat (CBOT)	Annual Roll	Heavy	MQCPWXAH	NYMEX
Wheat (KCBOT)	Annual Roll	Heavy	MQCPKWAH	NYMEX
Sugar	Annual Roll	Heavy	MQCPSBAH	NYMEX
Sugar (White)	Annual Roll	Heavy	MQCPQWAH	NYMEX
Coffee	Annual Roll	Heavy	MQCPKCAH	NYMEX
Coffee (Robusta)	Annual Roll	Heavy	-	-
Cocoa	Annual Roll	Heavy	MQCPCCAH	NYMEX
Cotton	Annual Roll	Heavy	MQCPCTAH	NYMEX
Lean Hogs	Annual Roll	Heavy	MQCPLHAH	NYMEX
Live Cattle	Annual Roll	Heavy	MQCPLCAH	NYMEX
Feeder Cattle	Annual Roll	Heavy	MQCPFCAH	NYMEX
WTI Crude Oil	Roll Yield Enhanced	Heavy	MQCPCLRH	NYMEX
Brent Crude Oil	Roll Yield Enhanced	Heavy	MQCPCORH	NYMEX
Gasoline	Roll Yield Enhanced	Heavy	MQCPXBRH	NYMEX
Gasoil	Roll Yield Enhanced	Heavy	MQCPGORH	NYMEX
Heating Oil	Roll Yield Enhanced	Heavy	MQCPHORH	NYMEX
Natural Gas	Roll Yield Enhanced	Heavy	MQCPNGRH	NYMEX
Gold	Roll Yield Enhanced	Heavy	MQCPGCRH	NYMEX
Silver	Roll Yield Enhanced	Heavy	MQCPSIRH	NYMEX
Platinum	Roll Yield Enhanced	Heavy	-	NYMEX
Palladium	Roll Yield Enhanced	Heavy	-	NYMEX
Zinc	Roll Yield Enhanced	Heavy	MQCPLXRH	NYMEX
Nickel	Roll Yield Enhanced	Heavy	MQCPLNRH	NYMEX

Aluminium	Roll Yield Enhanced	Heavy	MQCPLARH	NYMEX
Copper (COMEX)	Roll Yield Enhanced	Heavy	MQCPHGRH	NYMEX
Copper (LME)	Roll Yield Enhanced	Heavy	MQCPLPRH	NYMEX
Tin	Roll Yield Enhanced	Heavy	MQCPLTRH	NYMEX
Lead	Roll Yield Enhanced	Heavy	MQCPLLRH	NYMEX
Corn	Roll Yield Enhanced	Heavy	MQCPCXRH	NYMEX
Soybeans	Roll Yield Enhanced	Heavy	MQCPSXRH	NYMEX
Soybean Oil	Roll Yield Enhanced	Heavy	MQCPBORH	NYMEX
Soybean Meal	Roll Yield Enhanced	Heavy	MQCPSMRH	NYMEX
Wheat (Minneapolis)	Roll Yield Enhanced	Heavy	MQCPMWRH	NYMEX
Wheat (CBOT)	Roll Yield Enhanced	Heavy	MQCPWXRH	NYMEX
Wheat (KCBOT)	Roll Yield Enhanced	Heavy	MQCPKWRH	NYMEX
Sugar	Roll Yield Enhanced	Heavy	MQCPSBRH	NYMEX
Sugar (White)	Roll Yield Enhanced	Heavy	MQCPQWRH	NYMEX
Coffee	Roll Yield Enhanced	Heavy	MQCPKCRH	NYMEX
Coffee (Robusta)	Roll Yield Enhanced	Heavy	MQCPDFRH	NYMEX
Cocoa	Roll Yield Enhanced	Heavy	MQCPCRH	NYMEX
Cotton	Roll Yield Enhanced	Heavy	MQCPCTRH	NYMEX
Lean Hogs	Roll Yield Enhanced	Heavy	MQCPLHRH	NYMEX
Live Cattle	Roll Yield Enhanced	Heavy	MQCPLCRH	NYMEX
Feeder Cattle	Roll Yield Enhanced	Heavy	MQCPFCRH	NYMEX

For each of the Diversified Heavy Building Block Indices specified above, the exposure taken by the Target Commodity is defined by the Curve Position stated. All other Commodities within the basket take Front Month (F0) exposure.

Sector	Curve Position	Index Type	Index Ticker	Index Calendar
Energy	F0	Ex-Sector	MQCPENOX	NYMEX
Precious Metals	F0	Ex-Sector	MQCPPMOX	NYMEX
Base Metals	F0	Ex-Sector	MQCPBMOX	NYMEX
Grains	F0	Ex-Sector	MQCPGNOX	NYMEX
Softs	F0	Ex-Sector	MQCPSTOX	NYMEX
Livestock	F0	Ex-Sector	MQCPLSOX	NYMEX

For each of the Diversified Ex-Sector Building Block Indices specified above, Front Month (F0) exposure is taken by all Commodities represented in the Index.

The Index Name in respect of each Index Ticker defined in the tables above shall be:

If the Index Type is “Heavy” then, Macquarie Diversified Heavy [Curve Position] [Target Commodity] Building Block Index.

If the Index Type is Ex-Sector” then, Macquarie Diversified Ex-[Sector] [Curve Position] Building Block Index.