

Index Administration Services (IAS) COMMODITIES BENCHMARK STATEMENT

1. General Disclosures		
Benchmark family name	IAS Commodities	
Date of initial publication of this document	9 July 2018	
Date of last update to this document	9 July 2018	
ISIN (where available)	There are presently no ISINs available or accessible for the benchmarks covered by this Benchmark Statement	
Determination by contributions of input data	No, the administrator does not receive contributions of "input data" (as defined by the BMR) in relation to this family of benchmarks	
Qualification of the benchmark family	Benchmarks within the IAS Commodity family are administered as "significant" (as defined by the BMR)	
2. Key terms relating to the benchmark or family of benchmarks		
General description of the market or economic reality	The administrator uses listed commodities futures prices and commodities indices as the primary inputs for these indices. These data are supplemented by reference data used for future roll calendars, currency rates and instrument identifiers.	
	All benchmarks in the family are constituted by a selection of commodity futures or commodity indices. Those constituents are selected and weighted in accordance with the relevant methodology.	

	The indices provide a diversified approach to investing in commodities with low correlation to equities and fixed income.	
	Strategies include:	
	 Backwardation – futures contracts with shorter time to expiration have a price that is higher than the commodity futures contracts with longer time to expiration; 	
	- Small cap – basket of commodity futures which have lower traded volume.	
	 Sector Rotation – Basket of commodity futures selected based on returns from sectors including energy, metals, agriculture, and livestock. 	
	Frequency of rebalance/selection varies from monthly, quarterly, and annually.	
Geographical boundaries of the market or economic reality	Commodities are listed on multiple exchanges in different regions of the world: e.g. LME, ICE, CBOT, NYMEX, WCE, and CME. The underlying futures commodity contracts may be volatile and may be subject to temporary distortions or other market disruptions based on numerous factors, including changes in supply and demand, weather, agriculture, trade, government action, etc.	
	FX Spot rates are used to convert amongst four currencies, EUR, GBP, CAD, and USD.	
Other relevant information relating to the market or economic reality	N/A	
3. The potential limitations of the benchmark and the circumstances in which the measurement of the market or economic reality may become unreliable		
Circumstances in which we would lack sufficient input data to determine the benchmark according to the methodology	Underlying data including commodity futures official close prices, price movement limits, expiration and last trading dates are provided by a third party data provider. The benchmarks rely on the continued availability of these data for the determination of the benchmark levels.	
	In the case of a market or data source disruption, the administrator will either proceed with or defer the determination of the respective index levels in accordance with the relevant index manual and the relevant Markit Disruption Events Policy. Where both documents	

prescribe conflicting treatments of a disruption, the index manual supersedes the disruption policy.

Circumstances in which the degree of liquidity of the underlying market becomes insufficient to ensure the integrity and reliability of the benchmark determination according to the methodology

An underlying commodity contract may be suspended, disrupted, or illiquid due to reasons including: price change exceeding limits set by the relevant exchange; imbalance of orders relating to the relevant underlying commodity contract; disparity in bid/ask quotes relating to the underlying commodity contract; and/or closure of relevant exchange in respect of any underlying commodity contract prior to its regular business hours without regard to after hours or other trading outside of regular trading hours.

Any single underlying commodity contract subject to reasons stated above could impact the benchmark and may result in a disruption event.

4. The controls and rules that govern the exercise of judgment or discretion in the calculation of the benchmark or family of benchmarks

Position of each function or body that may exercise discretion in the calculation of a benchmark and governance thereof

The administrator's indices are rules based and do not typically permit the use of discretion unless there are exceptional circumstances that are not addressed by either the index rules or an administrator policy. Such scenarios may include (but are not limited to):

- Failure of data providers;
- Significant changes to the underlying market;
- Complex corporate events;
- Action by governmental or regulatory bodies that causes market disruption;
- Events beyond human control.

In the event that the administrator needs to take action or make a decision that has not been foreseen by the methodology or associated policy, senior members of the administration team will consult with the applicable Index Administration Committee to arrive at a decision that is consistent with the objective of the index in question and that causes minimal disruption to index stakeholders. Where appropriate, and reasonably practicable, the administrator may consult with stakeholders. In any event the administrator will make all reasonable efforts to ensure stakeholders are aware that discretion or judgement has been used and how.

Ex-post evaluation process

As above, the exercise of judgment or discretion in the calculation of the IAS Commodities benchmarks would need to be approved by the Index Administration Committee (IAC) prior to the publication of any benchmark to ensure that no conflict of interest arises and the benchmark continues to reflect the underlying economic reality. The decision of the IAC would be recorded and notes on the nature of the judgment or discretion that have been exercised would be published on made available to the public. To the extent there is feedback or comment on the use of judgment or discretion, the IAC will review those comments at the earliest opportunity.

5. Review of the methodology and changes to, or cessation of, the benchmark or family of benchmarks

The methodology

The administrator uses listed commodities futures prices and commodities indices as the primary inputs for these indices. These data are supplemented by reference data used for future roll calendars, currency rates and instrument identifiers.

All benchmarks in the family are constituted by a selection of commodity futures or commodity indices. Those constituents are selected and weighted in accordance with the relevant methodology.

The indices provide a diversified approach to investing in commodities with low correlation to equities and fixed income.

Strategies include:

- Backwardation futures contracts with shorter time to expiration have a price that is higher than the commodity futures contracts with longer time to expiration;
- Small cap basket of commodity futures which have lower traded volume.
- Sector Rotation Basket of commodity futures selected based on returns from sectors including energy, metals, agriculture, and livestock.

Frequency of rebalance/selection varies from monthly, quarterly, and annually.

Commodities are listed on multiple exchanges in different regions of the world: e.g. LME, ICE, CBOT, NYMEX, WCE, and CME. The underlying futures commodity contracts may be volatile and may be subject to temporary distortions or other market disruptions based

on numerous factors, including changes in supply and demand, weather, agriculture, trade, government action, etc.

FX Spot rates are used to convert amongst four currencies, EUR, GBP, CAD, and USD.

Each IAS Commodity benchmark or group of IAS Commodity benchmarks is documented in a corresponding index manual which is made available to stakeholders upon request.

Generally, IAS benchmarks are administered and calculated by IAS on behalf of a third party which retains the intellectual property rights in the index. The initial idea and rationale for a given benchmark methodology is provided to IAS by the relevant third party and undergoes a process of review and approval by the IAS IAC prior to implementation. Any subsequent changes to the determination methodologies or proposed termination of the index are subject to the IAS change management and consultation process.

All benchmark methodologies are assessed prior to their implementation by IAS with respect to their methodological and operational complexity and risks associated with the required data inputs. IAS has put in place policies and procedures applicable to all IAS-administered indices ensuring appropriate level of risk management, error identification resolution, handling of market disruptions, escalation to the IAS IACIAC, periodic review of the fitness of the benchmarks. Additional benchmark- specific governance and control arrangements may be put in place as deemed appropriate by the IAS IAC. Policies and procedures are documented in the administrator Control Framework.

Possible impacts of changes to, or the cessation of the benchmarks upon the financial contracts, financial instruments that reference the benchmark or the measurement of the performance of investment funds

Generally, IAS will publicly consult on any planned material change or the cessation of an IAS Commodity benchmark to allow stakeholders to indicate where changes to or the termination of a benchmark are expected to have adverse impacts. IAS will make reasonable efforts to address stakeholder concerns expressed in response to such consultation and to allow for reasonable advance notice for stakeholders in order to unwind existing contracts or instruments or seek an appropriate substitute benchmark. However, there may be circumstances where external factors beyond the control of the administrator could lead to short-term changes to or the termination of an IAS Commodity index without proper consultation or adequate notice period, e.g. where a continuous disruption of the underlying market or an underlying data point requires a change to the methodology or

	impacts the viability of a benchmark. This may have a direct impact on investors with positions in financial contracts or financial instruments referencing the benchmark.	
Additional information		
Additional information	For more information, including to request index specific methodologies, please visit https://ihsmarkit.com/products/index-administration-services.html or contact us support@markit.com	

IMPORTANT:

This Benchmark Statement will be updated whenever the information it provides is no longer correct or sufficiently precise and at least where:

- (a) there is a change in the type of the benchmark;
- (b) there is a material change in the methodology for determining the benchmark or, where the benchmark statement refers to a family of benchmarks, in the methodology for determining any benchmark within the family of benchmarks.

This Benchmark Statement will be updated at least every two years.

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CONTACT US

For more information, including to request index specific methodologies, please visit https://ihsmarkit.com/products/index-administration-services.html or contact us support@markit.com

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