CCBI GLOBAL MARKETS (UK) LIMITED

DISCLOSURE ANNEX FOR OTC COMMODITY DERIVATIVE TRANSACTIONS

This Annex supplements and should be read in conjunction with the General Disclosure Statement for OTC Transactions. **Nothing in this Annex amends or supersedes the express terms of any transaction between you and us or any related governing documentation.** Accordingly, descriptions in this Annex of the operation of Commodity Transactions (as defined below) and the consequences of various events are in all cases subject to the actual terms of a Commodity Transaction executed between you and us and its governing documentation (whether or not such qualification is expressly stated).

We refer to Transactions in which the Underliers are physical commodities, contracts for the future delivery of physical commodities, physical events (such as weather, transportation or emissions), rights or indices relating to physical commodities, contracts for the future delivery of physical commodities or physical events (a "**commodity index**") or an index of commodity indices, as "**Commodity Transactions**".

The terms of a Commodity Transaction may incorporate standard definitions, annexes and other market standard terms, including terms, customs and usages from the physical markets for Underliers. Such terms may in turn be amended or customised pursuant to the terms of the Commodity Transaction and its governing documentation. Before entering into a Commodity Transaction, you should obtain and review carefully any such materials incorporated by reference as their content could materially affect your rights and obligations under the Commodity Transaction, its value and its appropriateness for your particular objectives.

Physical Markets and Price Sources

Markets in physical commodities are highly differentiated by location, supply and demand, time and manner of delivery, quality standards for deliverable products and other factors. The depth, liquidity and number and nature of participants may vary greatly among segments in the market for the same commodity. Prices prevailing in different segments generally will differ, and historically observed relationships, if any, between prices in different segments or between different commodities may not continue.

The terms of a Commodity Transaction (including certain physically-settled Commodity Transactions) will specify the source or method of determining the prices, levels or values ("**commodity reference prices**") relevant to the computation of payments and deliveries and the satisfaction of exercise and other conditions, such as automatic exercise and knock-in or knock-out events. Examples of commodity reference prices include price indices compiled and published by market data providers and prices used to settle exchange-traded or cleared futures or other contracts related to an Underlier. You should independently evaluate the appropriateness of the selected commodity reference price(s) to your objectives for entering into a Commodity Transaction, including whether a specified commodity reference price accurately reflects the prevailing cash market fundamentals in a relevant physical market segment.

Market data providers may compile their commodity reference prices from pricing data submitted voluntarily by market participants. You should be aware that price submissions to a market data provider may or may not be based on actual transactions and that the data provider may not be able to audit submissions for their accuracy or completeness. Other factors you should consider include:

- computational procedures used by the market data provider to reduce the impact of potentially unrepresentative data, such as requiring a minimum number of submissions and the rejection of outlying data;
- conflicts of interest that may affect the market data provider;
- the information the market data provider publicly discloses, which may or may not accurately reflect all relevant information available to the market data provider; and
- governance of the market data provider; whether it is subject to regulatory oversight and the nature of such regulatory oversight.

Market data providers may make certain information relevant to this assessment publicly available, and we urge you to consider such information carefully.

Prices of exchange-traded contracts may be affected by the method used for determining the official settlement price, including discretionary determinations of an exchange or clearing house settlement committee (in which we or an affiliate may participate), and by market disruption events as described below.

An exchange, clearing house, market data provider, government agency or other body that determines a commodity reference price may make methodological or other changes that could change the value of the commodity reference price, including changes related to the method by which the commodity reference price is calculated, or the timing for publication of the commodity reference price. In addition, the determining body may alter, discontinue or suspend calculation or dissemination of the commodity reference price, or change the terms of or de-list a contract that defines a commodity reference price. Determining bodies and the institutions that make submissions in the commodity reference price determination process have no obligation to consider your interests in calculating, revising, discontinuing or taking other actions that may affect any commodity reference price.

Market Value Affected by Many Factors

The performance of a Commodity Transaction is unpredictable. Commodity prices are inherently volatile. The market value of a Commodity Transaction may be influenced by many unpredictable factors, such as:

- prevailing spot prices for the Underlier;
- supply and demand for the Underlier;
- market activity;
- liquidity;
- economic, financial, political, regulatory, geographical, biological, or judicial events; and
- the general interest rate environment.

These factors interrelate in complex ways, and the effect of one factor on the market value of the Commodity Transaction may offset or enhance the effect of another factor.

Volatility of Commodity Prices

Commodity prices may change unpredictably, affecting the value of commodities or commodity indices in unforeseeable ways. Market prices may fluctuate rapidly based on numerous factors, including:

- changes in supply and demand relationships (whether actual, perceived, anticipated, unanticipated or unrealised);
- weather;
- agriculture;
- trade;
- fiscal, monetary and exchange control programs;
- domestic and foreign political and economic events and policies;
- disease;
- pestilence;
- technological developments;
- changes in interest rates; and

- monetary and other governmental policies, action and inaction.

The current or "spot" prices of physical commodities may also affect, in a volatile and inconsistent manner, the prices of futures contracts in respect of a commodity. These factors may affect the value of the commodity or a commodity index, and therefore the value of the Commodity Transaction, and may cause such values to move in a sudden and unexpected manner.

Supply and Demand

Supply of and demand for physical commodities tends to be particularly concentrated, so prices are likely to be volatile.

The prices of physical commodities can fluctuate widely due to supply and demand disruptions in major producing or consuming regions or industries.

Certain commodities are used primarily in one industry, and fluctuations in levels of activity in (or the availability of alternative resources to) one industry may have a disproportionate effect on global demand for a particular commodity. Political, economic and other developments that affect that industry may affect the value of a commodity or the commodities included in a commodity index.

In addition, because certain commodities and certain of the commodities underlying a commodity index may be produced in a limited number of countries and may be controlled by a small number of producers, political, economic and supply-related events in such countries or with such producers could have a disproportionate impact on the prices of such commodities.

Suspension or disruptions of market trading in commodities and related futures contracts may adversely affect the value of commodities.

Commodity markets are subject to temporary distortions or other disruptions due to various factors, including the lack of liquidity in the markets, the participation of speculators and government regulation and intervention.

In addition, futures exchanges may have regulations that limit the amount of fluctuation in some futures contract prices that may occur during a single business day. These limits are generally referred to as "daily price fluctuation limits" and the maximum or minimum price of a contract on any given day as a result of these limits is referred to as a "limit price".

Once the limit price has been reached in a particular contract, no trades may be made at a price beyond the limit, or trading may be limited for a set period of time. Limit prices effectively preclude trading in a particular contract or force the liquidation of contracts at potentially disadvantageous times or prices.

These circumstances could adversely affect the value of any commodity or commodity index and therefore any related Commodity Transaction.

Corrections to Published Prices

A price source may announce corrections to a previously published commodity reference price. You should review the terms of a prospective Commodity Transaction to determine how such corrections are treated. The terms of a Commodity Transaction may specify that if the price source for a price that has previously been used to determine a payment or delivery amount under a Commodity Transaction subsequently publishes a correction to that price, and if the correction is announced within a specified time period after the original publication date, then a retroactive adjustment may apply to payments and deliveries, including the payment of accrued interest (at a rate determined by the calculation agent) on amounts payable as a result of the correction.

Market Disruption Events

The terms of a Commodity Transaction may specify that certain events and conditions affecting the market for a commodity or related exchange-traded or cleared contract, or a price source, will be treated as market disruptions and their occurrence may result in the consequences discussed below (see "Consequences of Disruption Events"), including, if applicable, postponement of pricing dates and/or changes in the method by which the price, level or value of an Underlier is determined. Subject to the terms of a Commodity Transaction and the governing documentation, such events may include:

- failure of a price source to publish a price, discontinuance of the price source or cessation of trading of the Underlier;
- divergence by more than a specified amount of alternative price sources from one another, such as between a price published by a market data provider and one derived from quotations obtained by the calculation agent from reference dealers;
- inability of the calculation agent to obtain quotations from the requisite number of reference dealers;
- suspension of or limitations on trading in an Underlier (or in its components in the case of an index or basket) or related instruments, including the triggering of price fluctuation limits, the establishment by a regulator of price caps or floors, or the unscheduled early closing of a market for an Underlier or related instruments (including market closure due to technological failures or force majeure events);
- changes in the method for determining a commodity reference price or in the composition of an Underlier; and

- the imposition of, change in, or removal of certain taxes on positions in the Underlier.

The existence of such disruption events and their consequences may be subject to discretionary determinations by the determining party or calculation agent, which may involve subjective judgment and uncertainty.

You should be aware of the potential risks of any market disruptions and should understand their effect on each prospective Commodity Transaction, including the consequences, if any, of any such event specified under the terms of the Commodity Transaction as well as the possibility that certain events might not be expressly contemplated.

Consequences of Disruption Events

The terms and conditions of a Commodity Transaction may specify alternative methods, or "**disruption fallbacks**", that apply when disruption events occur for determining any affected commodity reference price. If the applicable disruption fallbacks so provide, then consequences including the following may occur:

- the price sources used by the calculation agent under the Commodity Transaction for determining the price or level of the Underlier may not be the same as those used prior to the disruption event;

- the calculation agent may determine any affected prices or levels in a manner specified under the terms of the Commodity Transaction, which may include taking into account quotations obtained from dealers in the relevant market, unpublished or unannounced sources and other information that the calculation agent deems relevant, and employing its own calculations and estimates;

- the calculation agent may calculate the affected price using the methodology that was in place at the time the Commodity Transaction was entered into, such that the prices referenced in the Commodity Transaction may not reflect the price currently published by the price source;

- the value of the affected price or level used by the calculation agent to determine any amount payable may be materially different from the value provided by any previously used published price source;

- the determination of the affected price or level may be deferred until the relevant disruption event is no longer continuing, which may result in the use of a price prevailing on a date other than the originally chosen pricing date ("price postponement"), or may result in the use of the price as of the original pricing date if such price is published before an alternative fallback becomes applicable;

- the value of the price or level may be determined at a different time than the date on which it was originally scheduled to be determined, or the value of an average price or level may be based on different pricing dates than originally scheduled;
- the terms of the Commodity Transaction may require the parties to negotiate fallback arrangements in good faith; and/or
- the termination of the Commodity Transaction.

The determinations or negotiations called for by a disruption fallback may need to occur under uncertain market conditions. Depending on the terms of your Commodity Transaction, the operation of a disruption fallback may be subject to a specified maximum duration, after which time a different disruption fallback may prevail. Two or more disruption fallbacks may operate concurrently. You should evaluate carefully the interaction of various disruption fallbacks with one another and with any impossibility, illegality or force majeure provisions of the master agreement and other documentation, if any, governing the Commodity Transaction.

Application of disruption fallbacks (including related determinations by the calculation agent, if applicable) may have a significantly detrimental effect on the economics of a Commodity Transaction.

Multiple Underliers

For Commodity Transactions with more than one Underlier, including for example basis swaps, calendar spreads and basket transactions, it may be important for your intended purpose whether or not disruption fallbacks could result in the use of different pricing dates for different Underliers. You should review the terms of each prospective Commodity Transaction carefully, including to determine whether or not the prospective Commodity Transaction includes “common pricing” provisions to address the possible divergence of pricing dates.

Physical Settlement

If you enter into a physically settled Commodity Transaction, you (either directly or through a third party acting on your behalf) must have the operational capability to make or take delivery of the Underlier in accordance with the terms of the Commodity Transaction and you should be thoroughly familiar with delivery practices, procedures, customs and usages of the physical market and the governing contractual provisions, laws and regulations. Issues with which you should be familiar include:

- delivery instruments (e.g., warehouse receipts, bills of lading, warehouse releases, consignment agreements or other instruments);

- the time and location at which title to the Underlier and/or risk of loss passes to the recipient;
- the conditions, if any, under which delivery may be excused, delayed or prevented;
- quality or quantity discrepancies with respect to a delivered commodity;
- the possibility that congestion in the deliverable supply of a commodity could prevent you from acquiring the commodity to meet your delivery obligations or make it significantly more costly for you to do so;
- the consequences of failing to make or take delivery in accordance with the terms of a Commodity Transaction, including the applicable measure of damages and additional liabilities such as borrowing costs, imbalance charges, storage, transportation costs such as demurrage, regulatory penalties, and other costs, damages or expenses recoverable in a particular Commodity Transaction;
- the various modes of delivering or transporting the commodity subject to a Commodity Transaction and related legal instruments (e.g., rail/trucking and other freight and handling agreements, container line contracts of carriage, charter parties and contracts of affreightment), as well as any regulatory, health and safety, compliance and other related procedures, rules, tariffs and regulations incident thereto;
- indemnification obligations of the parties, including with respect to title defects and liabilities to third parties;
- limitations on liability or exclusions thereto, if any;
- features of transmission, transportation or electronic tracking systems generally, including, in particular, those that may result in mis-delivery or under-delivery and the process for reconciling outstanding balances among users of the system and between the parties to a Commodity Transaction;
- availability of insurance and scope of applicable policy coverage;
- settlement risk when payment dates occur after delivery dates; and
- in the case of physically settled Commodity Transactions subject to the rules of an exchange or clearing house, the rules and procedures covering delivery, including notice requirements and the procedures for matching long and short positions for delivery.

You should be aware, however, that not all contracts or transactions with such physical delivery features are Commodity Transactions or Transactions and that various differences in the applicable regulatory regimes and other circumstances may follow from this distinction.

Diversification of Commodity Indices

Commodity indices comprised of one or more contracts on physical commodities are likely to be less diversified than other funds, investment portfolios or indices investing in or tracking a broader range of products and, therefore, could experience greater volatility. Investors should also be aware that some commodity indices are more diversified than others in terms of both the number of and variety of futures contracts. A Commodity Transaction involving a less-diversified commodity index Underlier may carry risks similar to a concentrated position in a limited number of industries or sectors, or in one industry or sector.

Exchange-Traded Futures Contracts

The Underlier to your Commodity Transaction may be a commodity futures contract. Commodity futures contracts normally specify a certain date for delivery of the underlying physical commodity. Futures contracts trade on regulated futures exchanges. Physical products, and other derivatives on commodities, trade in the over-the-counter market and on various types of physical and electronic trading facilities and markets. An exchange-traded futures contract provides for the purchase and sale of a specified type and quantity of a product or financial instrument during a stated delivery month for a fixed price. A futures contract on an index of products provides for the payment and receipt of cash based on the level of the index at settlement or liquidation of the contract. A futures contract provides for a specified settlement month in which the cash settlement is made or in which the product or financial instrument is to be delivered by the seller (whose position is described as “short”) and acquired by the purchaser (whose position is described as “long”). A market participant wishing to maintain its exposure to a futures contract on a particular product with the nearest expiration must close out its position in the expiring contract and establish a new position in the contract for the next delivery month, a process referred to as “rolling”. For example, a market participant with a long position in November crude oil futures that wishes to maintain a position in the nearest delivery month will, as the November contract nears expiration, sell the November futures contract, which serves to close out the existing long position, and buy a December futures contract. This will “roll” the November position into a December position, and, when the November contract expires, the market participant will still have a long position in the nearest delivery month.

There is no purchase price paid or received on the purchase or sale of a futures contract. Instead, an amount of cash or cash equivalents must be deposited with a clearing house, via each party’s clearing member, as “initial margin”. This amount varies based on the requirements imposed by the relevant clearing house. This margin deposit provides collateral for the obligations of the parties to the futures contract.

By depositing margin with the clearing house, a market participant may be able to earn interest on its margin funds, thereby increasing the total return that it may realise from an investment in futures contracts. The market participant normally makes to, and receives from, its clearing member subsequent daily payments as the price of the futures contract fluctuates. These payments are called "variation margin" and are made as the existing positions in the futures contract become more or less valuable, a process known as "marking to market".

Futures contracts are traded on organised exchanges. At any time prior to the expiration of a futures contract, subject to the availability of a liquid secondary market, a trader may elect to close out its position by taking an opposite position on the exchange on which the trader obtained the position. This operates to terminate the position and fix the trader's profit or loss. Futures contracts are cleared through the facilities of a centralised clearing house and a clearing member which is a member of the clearing house. The clearing house guarantees the performance of each clearing member that is a party to a futures contract by, in effect, taking the opposite side of the transaction. Clearing houses do not guarantee the performance by clearing members of their obligations to their customers.

The above features of exchange-traded commodity futures contracts may impact the value of a Commodity Transaction with a commodity futures contract or index comprised of commodity futures contracts as the Underlier.

Indices Composed of Futures Contracts

Many commodity indices are comprised, at least in part, of exchange-traded futures contracts. As exchange-traded futures contracts that comprise a commodity index approach expiration, they are replaced by similar contracts that have a later expiration via the "rolling" process.

If the market for these contracts is in "backwardation", which means that the prices are lower in the distant delivery months than in the nearer delivery months, then the "rolling" process would create a positive "roll yield". The actual realisation of a potential roll yield will be dependent upon the level of the related spot price relative to the unwind price of the commodity futures contract at the time of sale of the contract.

If the market for these contracts is in "contango", which means that the prices of contracts are higher in the distant delivery months than in the nearer delivery months, then the "rolling" process would create a negative "roll yield", which could adversely affect the value of a commodity index.

Commodity indices are typically based solely on futures contracts traded on regulated futures exchanges. However, a commodity index may include over-the-counter contracts traded on trading facilities that are subject to lesser degrees of regulation or, in some cases, no substantive regulation. As a result, trading in such contracts and the manner in which prices and volumes are reported by the relevant trading facilities may not be subject to the provisions of, and the protections afforded by, statutes and regulations that govern trading on regulated futures exchanges.

A commodity index is not a substitute for physical commodities or the futures contracts that may underlie such index, and returns on a commodity index may not reflect the returns that could be obtained by owning the components of such index.

These features of indices comprised of commodity futures contracts may impact the value of a Commodity Transaction with a commodity index Underlier.

Additional Risks Associated with Commodity Transactions

Additional Risks Associated with Commodity Transactions Linked to the Price of Aluminum, Copper, Lead, Nickel, Tin or Zinc (each a "Base Metal")

Commodity Transactions that are linked to the price of Base Metals may be subject to a number of additional factors that might cause price volatility, including:

- changes in the level of industrial activity using Base Metals, including the availability of substitutes such as man-made or synthetic substitutes;
- disruptions in the supply chain, from mining to storage to smelting or refining;
- adjustments to inventory;
- variations in production costs, including storage, labour and energy costs;
- costs associated with regulatory compliance, including environmental regulations; and
- changes in industrial, government and consumer demand, both in individual consuming nations and internationally.

These factors interrelate in complex ways, and the effect of one factor on the market value of Commodity Transactions linked to the price of Base Metals, may offset or enhance the effect of another factor.

The London Metal Exchange's (the "LME") use of or omission to use price controls may result in limited appreciation but unlimited depreciation in the price of Base Metals contracts traded on the LME and, therefore, the value of Commodity Transactions linked to the price of Base Metals futures contracts.

Futures contracts on Base Metals that are traded on the LME are not subject to daily price fluctuation limits to restrict the extent of daily fluctuations in the prices of such contracts. In a declining market, therefore, it is possible that prices for one or more contracts traded on the LME would continue to decline without limitation within a trading day or over a period of trading days. A steep decline in the price of the futures contract could have a significant adverse impact on the value of any Commodity Transaction linked to Base Metals futures contracts traded on the LME.

Moreover, the LME has discretion to impose "backwardation limits" by permitting short sellers who are unable to effect delivery of an underlying commodity or borrow such commodity at a price per day that is no greater than the backwardation limit to defer their delivery obligations by paying a penalty in the amount of the backwardation limit to buyers for whom delivery was deferred. Backwardation limits tend to either constrain appreciation or cause depreciation of the prices of futures contracts expiring in near delivery months. Impositions of such backwardation limits could adversely affect the value of any Commodity Transaction linked to Base Metals futures contracts.

Contracts traded on the LME may call for delivery on a daily, weekly or monthly basis. As a result, there may be a risk of concentration of positions in contracts trading on the LME on particular delivery dates, since, for example, contracts calling for delivery on a daily, weekly or monthly basis could call for delivery on the same or approximately the same date. Such a concentration of positions, in turn, could cause temporary aberrations in the prices of contracts traded on the LME for delivery dates to which such positions relate. To the extent that such aberrations are in evidence on a given pricing date with respect to the price of any such futures contract, they could adversely affect the value of any Commodity Transaction linked to such futures contracts.

<u>Additional Risks Associated with Commodity Transactions Linked to the Price of Cocoa, Coffee, Corn, Cotton, Soybeans, Soybean Oil, Sugar or Wheat (each an "Agricultural Commodity")</u>

Commodity Transactions that are linked to the price of Agricultural Commodities may be subject to a number of additional factors that might cause price volatility, including:

- weather conditions, including floods, drought and freezing conditions;
- changes in government policies;
- changes in global demand for food or clothing;
- planting decisions; and
- changes in bio-diesel or ethanol demand.

These factors interrelate in complex ways, and the effect of one factor on the market value of Commodity Transactions linked to the price of Agricultural Commodities may offset or enhance the effect of another factor.

<u>Additional Risks Associated with Commodity Transactions Linked to the Price of Crude Oil, Heating Oil, Natural Gas or Unleaded Gasoline (each an "Energy Commodity")</u>

Commodity Transactions linked to the price of Energy Commodities may be subject to a number of additional factors that might cause price volatility, including:

- changes in global demand for (whether by consumers or the agricultural, manufacturing and transportation industries) and supply of the relevant Energy Commodity and its related end-products;
- governmental regulations and policies, such as environmental or consumption policies;
- speculative actions and/or stockpiling;
- currency exchange rates;
- political events, labour activity and, in particular, direct government intervention (such as embargoes) or supply disruptions (or resolutions thereof) in major oil producing regions of the world (such as disruptions caused by war, natural events, accidents or acts of terrorism);
- discoveries of new oil reserves and development of new technologies; and
- general interest rate environment and global economic trends.

These factors interrelate in complex ways, and the effect of one factor on the market value of Commodity Transactions linked to the price of Energy Commodities may offset or enhance the effect of another factor.

<u>Additional Risks Associated with Commodity Transactions Linked to the Price of Gold, Silver, Platinum or Palladium (each a "Precious Metal")</u>

Commodity Transactions linked to the price of Precious Metals may be subject to a number of additional factors that might cause price volatility, including:

- disruptions in the supply chain, from mining to storage to smelting or refining;
- adjustments to inventory;
- variations in production costs, including storage, labor and energy costs;
- costs associated with regulatory compliance, including environmental regulations;
- changes in industrial, government and consumer demand, both in individual consuming nations and internationally;
- precious metal leasing rates;
- currency exchange rates;
- level of economic growth and inflation; and
- the degree to which consumers, governments and corporate and financial institutions hold physical gold as a safe haven asset (hoarding) which may be caused by a banking

crisis/recovery, a rapid change in the value of other assets (both financial and physical) or changes in the level of geopolitical tension.

These factors interrelate in complex ways, and the effect of one factor on the market value of Commodity Transactions linked to the price of Precious Metals may offset or enhance the effect of another factor.

Additional Considerations for Specific Product Types

The following is a discussion of certain material risks, terms and characteristics of some common types of Commodity Transactions. The categories employed below are illustrative only, and are intended to assist you in understanding key features of certain prospective Commodity Transactions. The discussion should not be viewed as a comprehensive description of any particular Commodity Transaction that may be under discussion between you and us.

<u>Commodity swaps</u>

• ***Fixed-for-floating swaps:*** In a fixed-for-floating commodity swap, one party (the "fixed price payer") makes periodic payments based on a fixed price for a specified commodity that is agreed upon at the execution of the swap, while the other party (the "floating price payer") makes payments based on a floating price for such commodity that is reset periodically. The floating price may be a spot price for the specified commodity, the price for a specified nearest futures contract for such commodity or an average price of such spot prices or futures contracts prices calculated over a period. From the perspective of the fixed price payer, an increase in the overall price of the relevant commodity in the market will cause the swap to increase in value, because the fixed price payer's contractually specified fixed price obligations will be lower than the commodity price then prevailing in the market. Conversely, if the overall price of the relevant commodity falls, the value of the swap to the fixed price payer will decline. From the perspective of the floating price payer, the value changes will be reversed.

• ***Index return swaps:*** There are two main types of index return swaps: excess return swaps and total return swaps. In either case, payments are made by the parties (either on a periodic basis or only upon termination of the transaction) based on the fee paid to the seller of the swap and on a floating commodity reference price determined by reference to changes in the level of a commodity index from an initial level to a level observed on one or more valuation dates. The commodity index is typically an index comprised of futures contracts on various commodities. Indices can be broad-based (i.e., comprised of futures contracts on a wide range of commodities such as energy, agricultural, metals, etc.) or based upon one or more particular sectors (e.g., energy commodities only, all commodities except agricultural, etc.) or based on a particular commodity (e.g., crude oil). One party will receive a payment based upon the change in the level of the index between two valuation dates (multiplied by the notional amount of the swap). In an excess return swap, the change in the level of the index will be equal to the returns generated by the change in price of each of the futures contracts that comprise the index. In a total return swap, the change in the level of the index will be equal to the returns generated by the change in price of each of the futures contracts that comprise the index plus a return based upon interest earned on any cash collateral posted upon the purchase of the futures contracts comprising the index.

• ***Basis swaps:*** In a commodity basis swap, periodic payments are exchanged based on two floating commodity reference prices. The two floating commodity reference prices are often related to each other. For example, one of the floating commodity reference prices may be for a liquid, highly-traded commodity or contract while the other is for a similar but less frequently traded commodity or contract. Alternatively, one of the floating prices may be a spot price for a commodity while the other is a futures price (or forward price) for the same commodity. The value of a basis swap generally is sensitive to changes in the relationship between the two floating commodity reference prices, which in turn depends on market conditions affecting the supply and demand for the relevant reference commodities. An alternative structure for a commodity basis swap involves a fixed price payment (which may be negative) on one leg and a floating price payment equal to the difference between two specified floating prices on the other leg. If a leg is a negative amount, the applicable "payer" will receive that amount from its counterparty instead of paying such amount.

• ***Range accrual swaps:*** In a typical range accrual swap, one payment leg is either a fixed or floating commodity reference price. The other payment leg can either be fixed or floating as well, but payments will only accrue at the specified rate on days on which a certain condition is met. For example, payments may only accrue for the second payer on days when the commodity reference price is within a specified range. The party paying the simple fixed or floating payment assumes the risk that the commodity reference price will stay outside of the specified range in which payments accrue (or, more generally, that the specified accrual condition does not occur). The condition for accrual may be observed daily, weekly, monthly or such other time period as agreed upon by the parties. The range can stay the same throughout the life of the swap or could change according to a predefined schedule.

• ***Extendable swaps:*** An extendable swap is a swap that provides a party (typically the fixed price payer) with the option to lengthen the term of the swap beyond the original termination date. The fixed price payer may want to exercise its right to extend the swap if the relevant commodity reference price is rising, since the fixed price payer would benefit from continuing to pay a fixed price that is now likely below market levels while receiving a floating price for an underlying commodity that is increasing in price. Fixed price payers are likely to pay a premium for this extension option in the form of paying a higher fixed price than they otherwise would for a more vanilla fixed-for-floating commodity swap.

• ***Variance swaps:*** A variance swap typically is a Commodity Transaction under which a "variance buyer" and a "variance seller" agree to exchange payments based on the difference between (i) an amount proportional to the observed variance (as defined under the terms of the variance swap) in the prices or levels of a specified commodity Underlier realised over a stated observation period and (ii) a fixed amount of variance that is agreed upon at execution. If this difference is positive, the variance buyer will receive a payment from the variance seller based on such difference, and if negative, the variance seller will receive a payment from the variance buyer based on such difference. If specified in the terms of the variance swap, the payment by the variance seller may be subject to an agreed cap. In the absence of a cap, the variance seller's potential loss under a variance swap is potentially unlimited. Variance is not a measure of the rate of return on an Underlier.

The variance of a commodity Underlier may be affected by a number of factors. For example, government intervention or regulation in commodities markets may have the effect of keeping commodity prices relatively stable, which will tend to decrease the variance of the relevant commodity price, or may cause commodity prices to change unpredictably, which will tend to increase the variance of the relevant commodity price. Variance also may be affected by changes in supply and demand relationships for commodities; eco-political events and policies and international trade conditions, including conflicts in producing or transit countries; weather and acts of nature; agricultural conditions; governmental fiscal, monetary and exchange control programs; changes in exchange rates; changes in interest rates; and speculation in commodities.

The terms of commodity variance swaps may specify that the observed variance is computed based on the settlement prices of a commodity futures contract on a particular exchange. You should be aware that under this methodology technical factors that may affect the settlement price, including the imposition or triggering of price fluctuation limits or changes in the methodology by which an exchange determines an official settlement price, may affect the computed variance and could adversely affect the economics of a Commodity Transaction.

In some cases, your objective in entering into a variance swap may be to hedge or offset other exposure you may have. There can be no assurance that prior observed relationships, if any, between realised variance and such other exposure will continue, or that payments under the variance swap will match such other exposure

• ***Volatility swaps:*** A volatility swap is similar to a variance swap, except that payments under a volatility swap are determined by reference to observed volatility (as defined under the terms of the volatility swap), rather than variance, in the prices or levels of a specified commodity Underlier realised over a stated observation period.

Physically-settled commodity forwards

A physically-settled commodity forward is an agreement under which one party is obligated to deliver a commodity Underlier on a specified future date and the other party is obligated to pay a price (the "forward price") that is fixed (or in some cases determined under a formula) on the trade date. In a physically-settled commodity forward the commodity must be actually delivered and accepted on the specified date.

Because physically-settled forwards involve actual delivery of a commodity, you should be particularly aware of the specific terms of a physically-settled commodity forward that deal with such delivery and acceptance. For example, you should be aware of those terms that specify when title to the commodity passes, who bears the risk of loss during transportation, inspection of the commodity that is delivered and consequences for failure to deliver or accept delivery of the commodity.

Commodity options

A commodity option is an option where the Underlier is a commodity, a contract for future delivery of a commodity, or rights or indices relating to commodities. Under a conventional cash-settled commodity option, the purchaser of the option pays a premium in exchange for the right to receive upon exercise of the option (i) in the case of a call option, the excess, if any, of the commodity reference price (as determined pursuant to the terms of the option) above the option's strike price, or (ii) in the case of a put option, the excess, if any, of the option's strike price above the commodity reference price. Under a conventional physically-settled option structure, the purchaser of a call option has the right to purchase a specified quantity of the underlying commodity at the strike price, and the purchaser of a put option has the right to sell a specified quantity of the underlying commodity at the strike price.

• ***Cap/floor:*** A cap or a floor is an option in which the buyer of the cap or floor receives a payment only if the floating price of a commodity exceeds an agreed upon strike price (in the case of a cap) or falls below the strike price (in the case of a floor), on a specified date or dates. If the buyer of a cap or floor pays the entire premium at the commencement of the transaction, only the buyer will have counterparty credit risk. If the buyer of a cap or floor pays the premium during or at the conclusion of the trade, both the buyer and seller will have counterparty credit risk.

• ***Collar:*** A collar is a type of option in which one of the parties purchases a cap and sells a floor. The premium received from selling the floor may offset all or a portion of the premium for the purchased cap, or may in some instances be greater than the cap premium.

• ***Barrier:*** A barrier option is an option under which the right to exercise may be created or extinguished, or the terms of which may change in some other pre-defined manner, upon the occurrence of an event or condition (a "barrier event") defined by reference to observed values of the underlying commodity during the term of the option. A barrier event may consist, for example, of the price of the underlying commodity reaching or exceeding a predetermined barrier price. A barrier option that becomes potentially exercisable upon the occurrence of a barrier event is known as a "knock-in" option, while a barrier option that is extinguished upon the occurrence of a barrier event is known as a "knock-out" option. Other types of barrier options include "one-touch" barrier options (the holder of the option receives a payment if the price of the underlying commodity reaches or surpasses a predetermined barrier price by its expiration date) and "no-touch" barrier options (the holder of the option receives a payment if the price of the underlying commodity never reaches a predetermined barrier price by its expiration date). The value of a barrier option may change non-linearly and abruptly, particularly as the relevant commodity reference price approaches the level that triggers the barrier event.

• ***Binary:*** A binary, or "digital," option is an option in which the buyer of the option, in exchange for a premium, either receives a fixed amount or nothing at all. If the commodity reference price on the specified observation date(s) is above or below the applicable strike price, the buyer will receive the specified fixed amount, regardless of the extent by which the commodity reference price may exceed or be less than the strike price, as the case may be. The binary payout may contain more than one component; for instance it may increase, decrease or terminate depending on whether the commodity reference price crosses one or more barrier levels during a specified period. Other variations may involve an option that has a "knock-in" to a binary payout, or a traditional option that has a "knock-out" or barrier into a binary payout, if the commodity reference price on a specified observation date or in a specified observation period exceeds or is less than a certain level. Unlike traditional options, the ultimate payout of a binary option is fixed and, therefore, a purchaser's benefit is capped.

• ***Accumulator:*** An accumulator is a contract pursuant to which one party is obligated to purchase from the other party a specified quantity of a commodity at a pre-determined price on a series of pre-determined dates over a specified period of time. If the commodity reference price is either above or below a pre-determined "knock-out" price, all accumulations remaining in the specified period are cancelled. The notional amount of the contract may increase periodically, based on whether a predefined condition is triggered (e.g., if the commodity reference price falls below a certain level during the specified period). Therefore, the notional amount may increase at a time when the price for the underlying commodity is falling, but the price at which the purchaser must pay for the underlying commodity remains fixed. This feature may magnify losses for the purchaser of an accumulator. An accumulator is unlike a typical option contract in that it typically involves, like a forward contract, the obligation and not the option to buy the underlying commodity. An accumulator may be cash-settled or physically-settled.

<u>Commodity swaptions</u>

A commodity swaption is an option that provides one party with the right, but not the obligation, to enter into a commodity swap at an agreed-upon fixed price on the specified future exercise date or dates. In a "pay-fixed" commodity swaption, the holder of the swaption has the right to enter into a commodity swap as a payer of the fixed price and receiver of the floating price, whereas in a "receive-fixed" swaption, the holder has the right to enter into a commodity swap as a receiver of the fixed price and a payer of the floating price. In either case, the writer of the swaption has the obligation to enter into the opposite side of the commodity swap from the holder.

<u>Commodity basket transactions</u>

A Commodity Transaction may be based upon a basket of commodities or futures contracts and therefore have multiple commodity reference prices. For example, a fixed-for-floating commodity swap may have a fixed rate for a specified basket of commodities that is agreed upon at the execution of the swap, while the floating rate is based on the rates for such basket of commodities. The value of commodity basket transactions will depend on factors affecting each of the commodities or contracts included in the basket. You also should be aware of whether a

Commodity Transaction with multiple Underliers has “common pricing” provisions. “Common pricing” provisions provide that no date will be a pricing date under the terms of the relevant Commodity Transaction unless such date is a day on which all referenced commodity reference prices are scheduled to be published or announced.