J.P. Morgan

J.P. Morgan Commodity Curve Index Rules

Global Index Research Group,
as Index Calculation Agent

and

J.P. Morgan Securities plc,
as Index Sponsor

January 2015
(Last amended and restated February 2020)
This description sets out the rules for the JPMorgan Commodity Curve Index (the “JPMCCI Index Rules” or the “Index Rules”) and reflects the methodology for determining the composition and calculation of the JPMorgan Commodity Curve Index (“JPMCCI”). This document is published by, and is the exclusive property of, J.P. Morgan Securities plc (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 the 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.

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The Index Calculation Agent and the Index Sponsor shall have no liability, contingent or otherwise, to any person or entity for the quality, accuracy, timeliness or completeness of the information or data contained in these Index Rules or the JPMCCI, or for delays, omissions or interruptions in the delivery of the JPMCCI or related data. The Index Calculation Agent and the Index Sponsor make no warranty, express or implied, as to the results to be obtained by any person or entity in connection with any use of the JPMCCI, including but not limited to the trading of or investments in products based on or indexed or otherwise related to the JPMCCI, any data related thereto or any components thereof. The Index Calculation Agent and the Index Sponsor make no express or implied warranties, and hereby expressly disclaim all warranties of merchantability or fitness for a particular purpose or use with respect to the Index Rules, the JPMCCI or any data related thereto. Without limitation any of the foregoing, in no event shall the Index Calculation Agent or the Index Sponsor have any liability for any special, punitive, indirect or consequential damages (including lost profits), in connection with any use by any person of the JPMCCI or any products based on or indexed or otherwise related thereto, even if notified of the possibility of such damages.

Notice

These Index Rules reflect the methodology that will be utilized with respect to the determination and calculation of the JPMCCI. Prior to the end of each calendar year, the Index Calculation Agent will review the current Potential JPMCCI Exchange Commodities, and on the Exchange Commodity Determination Date, the Index Calculation Agent, subject to the review of the JPMCCI Supervisory Committee, will determine the JPMCCI Exchange Commodities based on the Index Rules set forth herein and publish such commodities within thirty (30) calendar days of such Exchange Commodity Determination Date. The “Exchange Commodity Determination Date” will be a date determined by the Index Calculation Agent that occurs on or before the last Scheduled Valuation Day of each calendar year.
These Index Rules will become effective and the Index Calculation Agent will begin calculating JPMCCI with the new JPMCCI Exchange Commodities set forth herein on the first Scheduled Index Valuation Day in any such calendar year, which we refer to as the "JPMCCI Annual Inception Date"; provided, however that the Index Calculation Agent may postpone or reschedule such date in the event of certain market disruption events.

The Index Calculation Agent or the Index Sponsor may amend or supplement these Index Rules in the future and will publish such amendment or supplement no later than thirty (30) calendar days following such amendment or supplement. Moreover, within thirty (30) calendar days of each Exchange Commodity Determination Date, the Index Calculation Agent will supplement Sections H, I, J, K, L and M set forth herein in order to detail the new JPMCCI Exchange Commodities (if any) to be included in the JPMCCI Indices on the JPMCCI Annual Inception Date.

Global Index Research Group, a division of JPMorgan Chase Bank, National Association
New York.

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A. Introduction

A.1 About the JPMCCI

The JPMorgan Commodity Curve Index ("JPMCCI") is a family of indices which aim to provide a systematic and neutral way to gain diversified exposure to commodity futures. JPMCCI is structured as a representative family of indices, reflecting the available market opportunities throughout each commodity futures curve as well as across the commodities asset class.

Used generically the "JPMCCI Index" refers to any or all of the "JPMCCI Indices" (as the context requires). "JPMCCI" used generically refers to characteristics of any and all the family of JPMCCI Indices.

JPMCCI consists of an open interest weighted basket of futures contracts across each futures curve to capture the available investment opportunities in the respective commodity futures markets. Monthly Contract compositions for each commodity are guided by the historical distribution of open interest of contracts across the futures curve in the same calendar month of the preceding three calendar years. You should note, however, that Section N below describes certain historical limitations on the gathering of data.

JPMCCI seeks to mitigate the front-end bias associated with commodity indices and attempts to offer substantial diversification benefits. Investing in multiple contracts per commodity should generally reduce return volatility and increase risk-adjusted returns. Moreover, the stable inter-month composition will limit the impact of monthly synthetic roll on the excess return.

It should be noted that JPMCCI is a “notional” basket of commodity futures contracts because there is no actual portfolio of assets to which any person is entitled or in which any person has any ownership interest. JPMCCI merely identifies certain assets in the market, the performance of which will be used as a reference point for the purposes of calculating the value of JPMCCI.

A.2 JPMCCI Index Types

The Index Calculation Agent will calculate and publish various aggregate JPMCCI Indices that include each of the JPMCCI Eligible Commodities (such indices, the "JPMCCI Aggregate Indices"). The JPMCCI Price Index measures the aggregate price levels of futures contracts included in the aggregate JPMCCI Index. The JPMCCI Excess Return Index captures the return from investing in commodity futures in the JPMCCI, taking into account the effect of monthly composition changes during the roll periods. Finally, the JPMCCI Total Return Index measures a fully collateralized investment in JPMCCI commodity futures, taking into account the monthly rolling of contracts.

In addition to the JPMCCI Aggregate Indices, the Index Calculation Agent will calculate and publish three versions of the JPMCCI Energy Light Indices (i.e., a price, excess and total return version), respectively. The JPMCCI Energy Light Indices are variations on the JPMCCI Aggregate Indices, where the target dollar market weight of the JPMCCI Energy Sector Index is set to a maximum weight of 33% of such JPMCCI Energy Light Index on each Rebalancing Day. For more information the calculation of the JPMCCI Energy Light Indices, see Section G.1.

The Index Calculation Agent will also calculate and publish several types of JPMCCI Sector Indices. As of the date set forth above, the JPMCCI Sector Indices are Energy, Non-Energy, Precious Metals, Industrial Metals, All Metals, Livestock and Agriculture; however, the Index Calculation Agent may introduce additional JPMCCI Sector Indices on an interim basis, and such new JPMCCI Sector Index will be reviewed by the JPMCCI Supervisory Committee on or before the following Exchange Commodity Determination Date. As with the
JPMCCI Aggregate Indices, Price Return, Excess Return and Total Return Indices are calculated in respect of each JPMCCI Sector Index. On each Exchange Commodity Determination Date, the Index Calculation Agent, subject to the review of the JPMCCI Supervisory Committee, will determine the JPMCCI Exchange Commodities to be included in each JPMCCI Sector Index for the following calendar year.

The Index Calculation Agent will also calculate and publish JPMCCI Single Commodity Indices, in relation to each JPMCCI Exchange Commodity. As described herein, Price Return, Excess Return and Total Return Indices are calculated in respect of each JPMCCI Single Commodity Index.

In addition to the JPMCCI Indices, the Index Calculation Agent will calculate and publish the JPMCCI Ex-Front Month Indices, which are variations of the corresponding JPMCCI Index with the exclusion of the first near month futures contract included in the composition of each JPMCCI Exchange Commodity; provided that the Composition of the JPMCCI Exchange Commodity includes at least two Monthly Contracts. For more information the calculation of the JPMCCI Ex-Front Month Indices, see section G.2.

The JPMCCI Indices and their respective Bloomberg Pages are set forth in Section L herein. The Index Levels for each of the JPMCCI Indices are published on their applicable Bloomberg Pages on each Scheduled Index Valuation Day; provided, however that the Index Calculation Agent will not be obliged to publish any Index Levels upon the occurrence or continuation of a Force Majeure Event.

A.3 JPMCCI Supervisory Committee

In order to maintain objectivity in the administration and execution of the JPMCCI and pursuant to the Index Rules set forth below, the Index Calculation Agent has formed the "JPMCCI Supervisory Committee" (whose composition will be published from time to time). The JPMCCI Supervisory Committee shall meet annually to review and approve the composition of the JPMCCI for the following calendar year and any proposed modifications to the Index Rules.

The JPMCCI Supervisory Committee shall be composed of at least three (3) voting members, each of whom will be appointed by the Index Calculation Agent. Each voting member serving on the JPMCCI Supervisory Committee shall be independent. For the purposes of determining whether a particular member of the JPMCCI Supervisory Committee is independent, "independent" means that the individual in question is either (a) an employee of the Global Index Research Group (such person, a “GIRG Member”), a “walled off”, non-broker dealer entity within JPMorgan Chase Bank, National Association or (b) not an employee, director, officer, agent or affiliate of JPMorgan Chase & Co. or any of its affiliates (such person, a “Third Party Unaffiliated Member”) and does not have a personal direct financial interest in JPMCCI or any financial product linked directly to JPMCCI while serving as a voting member of the JPMCCI Supervisory Committee. The JPMCCI Supervisory Committee must have at all times at least two Third Party Unaffiliated Members and at least one GIRG Member. Each decision made by the JPMCCI Supervisory Committee must be approved by at least one Third Party Unaffiliated Member to be effective. All voting members of the JPMCCI Supervisory Committee shall be sufficiently knowledgeable about commodity futures contracts and the commodities markets in general, as determined by the Index Calculation Agent in a good faith and commercially reasonable manner. The Index Calculation Agent may from time to time add or remove voting members of the JPMCCI Supervisory Committee; provided that such addition or removal is not a result of a particular vote of a specific committee member. For the avoidance of doubt, to the extent an employee of the Global Index Research Group is a member of the JPMCCI Supervisory Committee, such person will not be an employee of a broker dealer affiliated with the Index Sponsor.

Additionally, upon the occurrence of a Disrupted Day, or any other extraordinary or unanticipated market events, the Index Calculation Agent may seek the advice of the JPMCCI Supervisory Committee on the necessary adjustments, methodological amendments or data corrections that may need to be implemented to the JPMCCI.
The Index Calculation Agent will from time to time (and in any event within one month of any change in the membership of the JPMCCI Supervisory Committee) make available upon written request the names, titles and company affiliation of the individuals forming the JPMCCI Supervisory Committee.

In the event that the Global Index Research Group (a division of JPMorgan Chase Bank, National Association) ceases to act as Index Calculation Agent, the composition and role of the JPMCCI Supervisory Committee may be reviewed and amended by the successor Index Calculation Agent.

A.4 The Index Calculation Agent, the Index Sponsor and the Index Rules

The methodology employed in determining the composition and calculation of JPMCCI is set out in the calculations and procedures described in these Index Rules. The Global Index Research Group, a division of JPMorgan Chase Bank, National Association acts as “Index Calculation Agent” in respect of the JPMCCI as of the date of these Index Rules but may be replaced by a substitute index calculation agent at some future date (who shall be regarded for all purposes as the Index Calculation Agent). For the avoidance of doubt, the substitution of any Index Calculation Agent shall not be a deemed termination of JPMCCI or any instruments referencing the JPMCCI. Additionally, as referred to in Section A.3 above, in the event that the Global Index Research Group ceases to act as Index Calculation Agent, the composition and role of the JPMCCI Supervisory Committee may be reviewed, amended or supplemented. The Index Calculation Agent may from time to time revise, amend and/or supplement these Index Rules, and if such rules are amended or supplemented, the Index Calculation Agent shall publish such Index Rules no later than one calendar month following such amendment or supplement.

J.P. Morgan Securities plc will be 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 the 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.

A.5 Definitions

Capitalized terms not otherwise defined herein shall have the following meanings:

**Aggregate Commodity Units**
means, in relation to the JPMCCI Aggregate Indices, JPMCCI Energy Light Indices, JPMCCI Ex-Front Month Indices, and JPMCCI Sector Indices, average monthly units of each JPMCCI Exchange Commodity over a three year period ending on a given calendar year corresponding to contracts outstanding, whose calculation is set out in “Calculation of Aggregate Commodity Units” in Section C below;

**Average Daily Contract Open Interest**
means, with respect to each Threshold Determination Date, in relation to a JPMCCI Exchange Commodity, and each Monthly Contract, the arithmetic average of the Daily Contract Open Interest as defined in Section D, over the first ten Scheduled Trading Days as determined by the Index Calculation Agent in good faith and a commercially reasonable manner.
Composition means in relation to each JPMCCI Exchange Commodity and each month, the portfolio of Monthly Contracts and associated Monthly Contract Weights;

Contract Discontinuation means, with respect to any JPMCCI Exchange Commodity, the declaration, pronouncement or notice that the Relevant Exchange of such JPMCCI Exchange Commodity will discontinue the listing of, any or all, futures contracts related to such JPMCCI Exchange Commodity;

Contract Disappearance Event shall have the meaning set out in Section B.2.1.1 below;

Daily Contract Open Interest means, on any Scheduled Index Valuation Day, in relation to any Monthly Contract and any JPMCCI Exchange Commodity, the number of contracts expiring \( n \) months after month \( m \) outstanding on such day, as published by the Exchange as defined mathematically in Section D.3 below;

Discontinuation Event shall have the meaning set out in Section B.2.1.1 below;

Disrupted Day has the meaning set out in Section D.7 below;

Estimated Market Size means, in respect of a JPMCCI Exchange Commodity, the average of the open interest figures published monthly by the Futures Industry Association during the Observation Period, multiplied by the Settlement Price of such JPMCCI Exchange Commodity's Front Month Contract prevailing on the last Scheduled Index Valuation Day of October in the year of calculation, expressed in U.S. Dollars;

Excess Return Index means each Index which measures the return earned from investing in the Monthly Contracts and their relevant Monthly Contract Weights of the JPMCCI, taking into account the effect of monthly composition changes during Roll Dates, the calculations of whose Index Levels are set out in Section F below;

Exclusion Threshold means, with respect to any date of determination and its respective month \( m \), 80% of the Historical Average Daily Contract Open Interest as determined by the Index Calculation Agent in good faith and a commercially reasonable manner;

Extraordinary Event means:
(x)
(i) the adoption of, or any change in, any applicable law, regulation, rule or order (including, without limitation, any tax law); or
(ii) the promulgation of, or any change in, the interpretation by any court, tribunal, regulatory authority, exchange or trading facility or any other relevant entity
with competent jurisdiction of any applicable law, rule, regulation, order, decision or determination (including, without limitation, as implemented by the U.S. Commodity Futures Trading Commission or any exchange or trading facility),
in each case occurring on or after the Inception Date, the Index Calculation Agent determines in good faith that it is contrary (or upon adoption, it will be contrary) to such law, rule, regulation, order, decision or determination for any market participant that is a broker or financial intermediary (individually or collectively) (a) to purchase, sell, enter into, maintain, hold, acquire or dispose of (in whole or in part) any Potential JPMCCI Exchange Commodity, any JPMCCI Exchange Commodity or any transaction referencing any Potential JPMCCI Exchange Commodity and/or any JPMCCI Exchange Commodity or (b) to hold a position in any Potential JPMCCI Exchange Commodity, any JPMCCI Exchange Commodity or any transaction referencing any Potential JPMCCI Exchange Commodity and/or any JPMCCI Exchange Commodity is (or, but for the consequent disposal or termination thereof) because the holding of such position would place any market participants that is a broker or financial intermediary (individually or collectively) under any such law, rule, regulation or order over the allowable position limit(s) in relation to such Potential JPMCCI Exchange Commodity or JPMCCI Exchange Commodity; or (y) the occurrence or existence of any: (i) suspension or limitation imposed on trading commodity futures contracts (including, without limitation, any Potential JPMCCI Exchange Commodity or any JPMCCI Exchange Commodity); or (ii) or any other event that causes trading in any commodity futures contracts (including, without limitation, any Potential JPMCCI Exchange Commodity or any JPMCCI Exchange Commodity) to cease;

First Notice Day
means the first day that a notice of intent to deliver a JPMCCI Exchange Commodity can be made by a clearinghouse to a buyer in fulfillment of a given month’s futures contract;

Force Majeure Event
any event beyond the control of the Index Calculation Agent, including any act of God, act of governmental authority, or act of public enemy, or due to war, the outbreak or escalation of hostilities, fire, flood, civil commotion, insurrection, labor difficulty including, without limitation, any strike, other work stoppage, or slow-down, severe or adverse weather conditions, power failure, communications line or other technological failure;

Front Month Contract
means, with respect to each JPMCCI Exchange Commodity, the first Monthly Contract with a strictly positive Monthly Contract Weight;
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Futures Industry Association (or FIA)</td>
<td>means the association of futures commission merchants and other parties interested in the U.S. and international futures exchanges, whose current webpage is <a href="http://www.futuresindustry.org/">http://www.futuresindustry.org/</a>, provided that in the event that (i) such organization ceases to exist or (ii) the Index Calculation Agent shall determine that such organization is no longer representative of the U.S. and international futures industry, such successor organization (if any) or other representative association as the Index Calculation Agent shall determine to be properly representative of the U.S. and international futures industry;</td>
</tr>
<tr>
<td>Historical Average Daily Contract Open Interest</td>
<td>with respect to a JPMCCI Exchange Commodity c and a Monthly Contract, shall have the meaning set forth in Section D.2 below;</td>
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<tr>
<td>Historical Monthly Contract Open Interest Percentage</td>
<td>means, in respect of the Monthly Contract for a given JPMCCI Exchange Commodity, the arithmetic average of the Monthly Contract Open Interest Percentage for that Monthly Contract 12, 24 and 36 months prior to the Monthly Contract in consideration, as more specifically set out mathematically in Section D.5 below;</td>
</tr>
<tr>
<td>Inception Date</td>
<td>means 29 December 1989, which corresponds to the date on which the Indices were set with a value of 100. Please see the section entitled Notes on Hypothetical Back-tested Historical Values on page 56 for information the dates on which the initial values of the JPMCCI Indices were published;</td>
</tr>
<tr>
<td>Index or JPMCCI Index</td>
<td>means each of all JPMCCI Single Commodity Indices, JPMCCI Sector Indices, JPMCCI Aggregate Indices, JPMCCI Energy Light Indices and JPMCCI Ex-Front Month Indices;</td>
</tr>
<tr>
<td>Index Calculation Agent</td>
<td>means (a) JPMorgan’s Global Index Research Group or any successor, the employees of which perform calculations with respect to the JPMCCI Indices will be employees of JPMorgan Chase Bank, National Association or (b) any non-U.S. broker dealer, third party appointed by the Index Sponsor;</td>
</tr>
<tr>
<td>Index Level</td>
<td>means the level on any Scheduled Index Valuation Day of a relevant Index, whose calculation is set out in Section F below;</td>
</tr>
<tr>
<td>Index Sponsor</td>
<td>J.P. Morgan Securities plc or any successor or assign;</td>
</tr>
<tr>
<td>JPMCCI</td>
<td>means the JPMorgan Commodity Curve Indices being a family of commodity futures index calculated by the Index</td>
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</table>
Calculation Agent and owned by the Index Sponsor, with the Inception Date set forth herein;

**JPMCCI Exchange Commodity** has the meaning set out in Section B.1 below;

**JPMCCI Sector Index** means each Index in relation to a given Sector (as set out in Table 1 in Section H below);

**JPMCCI Single Commodity Index** means each Index referencing only a single JPMCCI Exchange Commodity;

**Last Trading Day** means the final day on which a given Monthly Contract may trade or be closed out before delivery of the relevant JPMCCI Exchange Commodity must occur;

**Limit Day** means, with respect to a JPMCCI Exchange Commodity and its Relevant Exchange, any day on which there is a limitation, or suspension of, the trading of options or futures contracts imposed by the Relevant Exchange by reason of movements exceeding "limit up" or "limit down" levels permitted by such Relevant Exchange and which has a material adverse effect on trading volumes and liquidity as compared to other Scheduled Trading Days, as determined by the Index Calculation Agent in its commercially reasonable discretion;

**Limit Price** means a Settlement Price on any day which is a Limit Day;

**Monthly Contract** means, in respect of a JPMCCI Exchange Commodity and a given month $m$, the contract considered most associated to that given month as determined by the Index Calculation Agent based (a) in the case of all JPMCCI Exchange Commodities other than JPMCCI Exchange Commodities which are LME industrial metals, on the contract so designated by the Relevant Exchange (being typically the contract which will expire, or in respect of which delivery or settlement will occur immediately following such given month $m$) or (b) in respect of a JPMCCI Exchange Commodity whose Relevant Exchange is the London Metals Exchange the Monthly Contract shall be the relevant contract expiring on the third Wednesday of the given month;

**Monthly Contract Open Interest** has the meaning set out mathematically in "Calculation of Monthly Contract Open Interest" in Section D.3 below;

**Monthly Contract Open Interest Percentage** has the meaning set out in Section D.4 below;

**Monthly Contract Weight** means, with respect to any Exchange Commodity, the weighting attached in the relevant Composition to a given Monthly Contract as calculated in Section D.6;

**Observation Period** means, with respect to any given year and any JPMCCI Exchange Commodity, the thirty six (36) month period ending on the date for which the latest set of complete
historical Monthly Contract Open Interest figures are made available for international and U.S. commodity futures exchanges by the Futures Industry Association as of November of such year, provided that the Observation Period may be shorter in respect of JPMCCI Exchange Commodities that have a shorter trading history or as data limitations necessitate, as determined by the Index Calculation Agent in a good faith and commercially reasonable manner;

**Permitted Exchange**

has the meaning set out in Section B.1 below;

**Portfolio Continuity Factor**

means, with respect to JPMCCI Aggregate Indices, JPMCCI Energy Light Indices, JPMCCI Ex-Front Month Indices and JPMCCI Sector Indices, the factor employed to prevent discontinuities in the relevant Index when rebalancing from one set of Aggregate Commodity Units to another, as set out in Section E.2 below;

**Potential JPMCCI Exchange Commodity**

has the meaning set out in Section B.1 below;

**Price Return Index**

means each Index that measures the current aggregate Settlement Prices of JPMCCI Exchange Commodities included in the JPMCCI, the calculations of whose Index Levels are set out in Section F below;

**Rebalancing Day**

means each Roll Date in January of each year on which the composition of JPMCCI Exchange Commodities in the JPMCCI Aggregate Indices, the JPMCCI Energy Light Indices, the JPMCCI Ex-Front Month Indices and the JPMCCI Sector Indices, are adjusted by progressively phasing out the Aggregate Commodity Units of the previous year and phasing in the Aggregate Commodity Units of the current year;

**Relevant Exchange**

means, with respect to each Potential JPMCCI Exchange Commodity and each JPMCCI Exchange Commodity, the primary futures exchange on which futures contracts of that Potential JPMCCI Exchange Commodity or JPMCCI Exchange Commodity, as applicable, are traded;

**Roll Date**

means each of the first ten Scheduled Index Valuation Days of each calendar month, subject to the provisions of Section D.8 below. On each such day and over all such days for that month, the progressive rolling of compositions from those of the previous month to those of the current month for all JPMCCI Exchange Commodities based on Roll Weights will be effected as more specifically described in mathematical terms in Section D.8 below;

**Roll Weight**

means, with respect to each Roll Date, and a JPMCCI Exchange Commodity the proportion of the pre-roll monthly Composition attributable to a particular Monthly
Contract and retained on that Roll Date, as more exactly and mathematically described in Section D.8 below;

**Scheduled Index Valuation Day** means, with respect to any JPMCCI Index, each Scheduled Trading Day in respect of at least 50% of Exchange Commodities in the JPMCCI;

**Scheduled Trading Day** means, with respect to a JPMCCI Exchange Commodity a day on which the Relevant Exchange for such JPMCCI Exchange Commodity is scheduled to be open for trading for its regular trading sessions and to publish a Settlement Price.

**Settlement Price** means, with respect to each JPMCCI Exchange Commodity and a Scheduled Trading Day, the settlement price in respect of a Monthly Contract as published by the Relevant Exchange for such JPMCCI Exchange Commodity;

**Sufficient Estimated Market Size** means, with respect to a Potential JPMCCI Exchange Commodity, that its Estimated Market Size is no less than USD 250,000,000 and no less than 10 basis points (0.10%) of the aggregate sum of all the Estimated Market Sizes for all of the Potential JPMCCI Exchange Commodities ("Threshold Test"); provided, however that if a Potential JPMCCI Exchange Commodity has met the Threshold Test, in the event of a decline in its Estimated Market Size it shall not cease to be a Potential JPMCCI Exchange Commodity or a JPMCCI Exchange Commodity, if applicable, until the first Exchange Commodity Determination Date on which its Estimated Market Size shall be less than USD 150,000,000 or less than 6 basis points (0.06%) of the aggregate sum of all of the Estimated Market Sizes for all Potential JPMCCI Exchange Commodities;

**Threshold Determination Date** means, with respect to a Discontinuation Event, the eleventh (11th) Scheduled Trading Day of any calendar month;

**Threshold Event** shall have the meaning set out in Section B.2.1.1 below;

**Total Return Index** means each Index measuring a fully collateralized investment in a JPMCCI Single Commodity Index, a JPMCCI Sector Index, a JPMCCI Aggregate Index, a JPMCCI Energy Light Index, a JPMCCI Ex - Front Month Index (taking into account the Excess Return and the U.S. Treasury Bill Return), the calculation of such Index Levels is set out in Section F below;

**United States Dollars** means the lawful currency of the United States of America;

**U.S. Treasury Bill Return** means, with respect to a Total Return Index, the return on U.S. treasury bills as calculated by the Index Calculation Agent as set out in Section F.3 below.
B. Exchange Commodity Inclusion

B.1 Overview and Operation of Exchange Commodity Inclusion Process

JPMCCI is intended to serve as a benchmark to measure the performance of the broader futures market, as well as a practical investment vehicle through which market participants can take a view on the commodities market. As such, a balance is struck between the need to reflect the general price movements of commodity futures broadly in the various energy, metal, agriculture and livestock markets on the one hand, and on the other to ensure that the JPMCCI includes only a practical number and types of futures contracts that are accessible to the investor community.

A two-stage process is followed by the Index Calculation Agent under the supervision of the JPMCCI Supervisory Committee to select futures contracts to be included in the JPMCCI in any given year. First, the Index Calculation Agent identifies “Potential JPMCCI Exchange Commodities” and, second, the Index Calculation Agent selects “JPMCCI Exchange Commodities” for inclusion in JPMCCI. “Potential JPMCCI Exchange Commodity” means each physical commodity futures contract (but in respect of which physical delivery is not a requirement for inclusion in this definition) which:

(a) is traded on a Permitted Exchange (ii) is denominated in U.S. Dollars, (iii) is of Sufficient Estimated Market Size (iv) is of Adequate Liquidity; and

(b) is not a commodity futures contract which (i) is an Ineligible Commodity or (ii) lacks Sufficient Trading History (unless the Index Calculation Agent determines that a Sufficient Trading History Waiver is appropriate) or (c) lacks Sufficient Data,

as determined by the Index Calculation Agent, in a good faith and commercially reasonable manner, and subject to the review of the JPMCCI Supervisory Committee.

“Permitted Exchange” means, with respect of a Potential JPMCCI Exchange Commodity, the Relevant Exchange which meets the geographical or other criteria published by the Index Calculation Agent from time to time;

“Adequate Liquidity” means, with respect to a Potential JPMCCI Exchange Commodity, that such commodities futures contract is sufficiently liquid for general trading, as determined by the Index Calculation Agent, in a good faith and commercially reasonable manner, and subject to the review of the JPMCCI Supervisory Committee.

“Ineligible Commodity” means a commodity futures contract which, in the determination of the Index Calculation Agent is a “mini contract” (as defined by the Relevant Exchange), a swap contract, a basis contract, a spread contract or a weather contract.

“Sufficient Trading History” means, with respect to a Potential JPMCCI Exchange Commodity, a futures contract which has traded on the Relevant Exchange for no less than one year from the year of its inclusion; provided, however that the Index Calculation Agent may determine in its sole discretion that a “Sufficient Trading History Waiver” shall be applicable in respect of a commodity futures contract which has not so traded but is determined by the Index Calculation Agent to be a suitable futures contract for inclusion in the relevant JPMCCI Index by reason that its significance in terms of investor interest is so great that omission would in the good faith and commercially reasonable determination of the Index Calculation Agent significantly undermine the representativeness of the JPMCCI; provided, further that such waiver would be subject to the review of the JPMCCI Supervisory Committee.
“Sufficient Data” means in respect of a futures contract, the existence, in the determination of the Index Calculation Agent of a sufficient body of data to enable the Index Calculation Agent to determine appropriately its historical performance and analyze performance; the determination of sufficient historical data will be determined on the basis of the existence of independent historical data available to the Index Calculation Agent, but the Index Calculation Agent may determine that historical performance in respect of a futures contract may be reasonably calculated by the Index Calculation Agent in the absence of such available data (i.e., see Section N herein).

“JPMCCI Exchange Commodity” means, with respect to the version of JPMCCI established in a particular calendar year (e.g., the 2008 version of JPMCCI established in November 2007), each Potential JPMCCI Exchange Commodity chosen for inclusion in JPMCCI in that calendar year. The Index Calculation Agent shall select for inclusion in JPMCCI, subject to the review of the JPMCCI Supervisory Committee, each Potential JPMCCI Exchange Commodity which (a) is not related to Milk, Electricity or Coal, (b) is not Sugar #14 (traded on the NYBOT) and (b) with respect to Aluminum (e.g., High Grade Primary Aluminum, Aluminum Alloy and North American Special Aluminum Alloy), the Aluminum futures contract with the highest open interest.

Within thirty (30) calendar days of each Exchange Commodity Determination Date, the Index Calculation Agent shall publish the JPMCCI Exchange Commodities for inclusion in the JPMCCI for the following calendar year. Additionally, the JPMCCI Sector Indices will consist initially of seven commodity sectors: Energy, Non-Energy, Precious Metals, Industrial Metals, All Metals, Livestock and Agriculture. The constituents of the JPMCCI Sector Indices are determined by the Index Calculation Agent on each Exchange Commodity Determination Date, subject to the review and approval of the JPMCCI Supervisory Committee. The Index Calculation Agent may introduce additional JPMCCI Sector Indices on any future date.

B.2 Rules for Exclusion and/or Substitution of a JPMCCI Exchange Commodity and Cancellation of any JPMCCI Index

B.2.1 Rules for the Exclusion of a JPMCCI Exchange Commodity and the Modification of certain JPMCCI Indices upon the announcement of a Contract Discontinuation by a Relevant Exchange

B.2.1.1 JPMCCI Aggregate Index, JPMCCI Energy Light Index, JPMCCI Ex-Front Month Index and JPMCCI Sector Indices

With respect to any JPMCCI Exchange Commodity and any Monthly Contract to be referenced by the applicable JPMCCI Index, upon the announcement of a Contract Discontinuation by a Relevant Exchange, the Index Calculation Agent may exclude an affected JPMCCI Exchange Commodity from any JPMCCI Aggregate Index, JPMCCI Energy Light Index, JPMCCI Ex-Front Month Index or JPMCCI Sector Index.

In order to make its determination, the Index Calculation Agent will determine whether a Discontinuation Event has occurred.

A “Discontinuation Event” is either (a) a Contract Disappearance Event or (b) a Threshold Event, where:

“Contract Disappearance Event” means, with respect to any Threshold Determination Date and any applicable Monthly Contract, the applicable Monthly Contract does not exist or will not exist on each Roll Date during immediately following two calendar months.

“Threshold Event” means, with respect to any Threshold Determination Date, the Average Daily Contract Open Interest is less than or equal to the Exclusion Threshold for any such Monthly Contract.

If a Discontinuation Event is deemed to have occurred, the Index Calculation Agent will exclude the applicable JPMCCI Exchange Commodity for each Roll Date in the calendar month immediately following such
Threshold Determination Date, by assigning the Aggregate Commodity Unit ("ACU") equal to zero (0) for that affected JPMCCI Exchange Commodity in each JPMCCI Aggregate Index, JPMCCI Energy Light Index, JPMCCI Ex-Front Month Index and JPMCCI Sector Index and recalculate the Portfolio Continuity Factor in accordance with Section E of these Index Rules.

B.2.1.2 JPMCCI Single Commodity Indices

With respect to any JPMCCI Single Commodity Index, upon the announcement of a Contract Discontinuation by a Relevant Exchange and the occurrence of a Threshold Event, the Index Calculation Agent will modify the relevant JPMCCI Single Commodity Index so that such Index only references the Front Month Contract for such JPMCCI Exchange Commodity and such synthetic exposure will be applied on each Roll Dates following the Threshold Determination Date.

If a Contract Disappearance Event has occurred, the Index Calculation Agent will cease to calculate the relevant single commodity indices, unless the JPMCCI Supervisory Committee determines there is a natural, liquid replacement for the commodity in which case, from the following Roll Date, the Index Calculation Agent may begin calculating a JPMCCI Index for such successor commodity in accordance with the JPMCCI methodology using such natural liquid replacement, as determined by the JPMCCI Supervisory Committee.

B.2.2 Rules for Exclusion and/or Substitution of a JPMCCI Exchange Commodity and the Cancellation of any JPMCCI Index upon the occurrence of an Extraordinary Event

If the Index Calculation Agent determines, in good faith and a commercially reasonable manner, that the occurrence or existence of an Extraordinary Event affects a JPMCCI Index (an "Affected Index"), then the Index Calculation Agent may take the following action with the aim of maintaining the objective of the Affected Index: (i) the Index Calculation Agent may replace one or more JPMCCI Exchange Commodities in the Affected Index with other Potential JPMCCI Exchange Commodities that it determines, in good faith and a commercially reasonable manner, are natural substitutes for the JPMCCI Exchange Commodities being replaced, or (ii) the Index Calculation Agent may exclude one or more JPMCCI Exchange Commodities from the Affected Index and recalculate the weight of the JPMCCI Exchange Commodities remaining in the Affected Index so that the aggregate weight of all such JPMCCI Exchange Commodities sum to 100%. With respect to the replacement of one or more JPMCCI Exchange Commodities, the weight assigned to each Potential JPMCCI Exchange Commodity will generally be equal to the weight of the JPMCCI Exchange Commodity that it is replacing, however, the Index Calculation Agent may assign a different weight to a Potential JPMCCI Exchange Commodity if it determines, in good faith and a commercially reasonable manner, that this is appropriate to maintain the objective of the Affected Index. With respect to the exclusion of one or more JPMCCI Exchange Commodities, the weight of the Affected Index's remaining JPMCCI Exchange Commodities will be adjusted accordingly so that the aggregate weight of all components sum to 100%. The Index Calculation Agent shall endeavor to effect any replacement and re-weighting (if any) or exclusion and re-weighting (if any) as soon as practicable in light of the prevailing circumstances and if possible during the immediately following set of Roll Dates. In making the calculation of Aggregate Commodity Units and Monthly Contract Weights upon any such replacement and re-weighting (if any) or exclusion and re-weighting (if any), the Index Calculation Agent shall rely on a combination of data based on the JPMCCI Exchange Commodity(ies) being removed and the Potential JPMCCI Exchange Commodity(ies) that will be introduced as a result of the Index Calculation Agent's determination. The methodology by which this substitution will be effected shall be announced by the Index Calculation Agent as soon as reasonably practicable in the circumstances then prevailing at www.jpmorgan.com/jpmcci. Notwithstanding anything to the contrary, the Index Calculation Agent shall obtain the approval of the JPMCCI Supervisory Committee prior to making any replacement and re-weighting or exclusion or re-weighting or any other changes pursuant to this Rule B.2.2.

The Index Calculation Agent is under no obligation to continue the calculation and publication of any JPMCCI Index and upon the occurrence or existence of an Extraordinary Event, the Index Calculation Agent or the Index Sponsor may decide to cancel any JPMCCI Index if it determines, acting in good faith, that the objective of the relevant JPMCCI Index can no longer be achieved.
B.3 Representation of Exchange Commodities and Monthly Contract Open Interest

When there is more than one Potential JPMCCI Exchange Commodity relating to a particular underlying physical commodity, the Index Calculation Agent may, where deemed appropriate and subject to the approval of the JPMCCI Supervisory Committee, aggregate the Monthly Contract Open Interest of similar non-selected Potential JPMCCI Exchange Commodities with those of the relevant JPMCCI Exchange Commodity. This combination will effectively increase the number of Aggregate Commodity Units for the relevant JPMCCI Exchange Commodity, thereby more accurately reflecting the significance of the relevant JPMCCI Exchange Commodity. As at the date of these Index Rules, the Monthly Contracts affected by such combinations are set out in Table 2 in Section H. The Index Calculation Agent shall publish any changes to or additions to the combinations set forth in Table 2 in Section H on or before the effective date of any changes and/or additions.

B.4 Final Inclusion Determination and Rebalancing Announcement

The Index Calculation Agent will present to the JPMCCI Supervisory Committee for review the JPMCCI Exchange Commodities for any given year after the completion of the procedures set forth above.

The Index Calculation Agent shall publish the determination of the JPMCCI Exchange Commodities for a given year within thirty (30) calendar days of the relevant Exchange Commodity Determination Date.

C. Aggregate Commodity Units

C.1 Open Interest Commodity Weighting Scheme

JPMCCI is designed to be a representative index synthetically reflecting the available market opportunities in a given commodity asset class. The amount of investment opportunity available in each JPMCCI Exchange Commodity can be estimated from historical open interest, which is analogous to face amount outstanding in bond markets or shares outstanding in equity markets. Therefore JPMCCI uses historical open interest as the basis for determining the nominal weights for JPMCCI Exchange Commodities in the JPMCCI Aggregate Indices and JPMCCI Sector Indices.

C.2 Annual Calculation of Aggregate Commodity Units: JPMCCI Aggregate and JPMCCI Sector Indices only

The number of Aggregate Commodity Units \( ACU^c_y \) for JPMCCI Exchange Commodity \( c \) for year \( y \), denominated in physical units, is:

\[
ACU^c_y = \frac{F^c \times \sum_{i=M_y} COI^c_i}{M_y} \quad \text{where:} \quad COI^c_i \text{ is the Monthly Contract Open Interest reported by the Futures Industry Association for JPMCCI Exchange Commodity } c \text{ in month } i.
\]
**D. Monthly calculation of Monthly Contract Weights**

**D.1 Open Interest Monthly Contract Weighting: calculated in respect of each JPMCCI Exchange Commodity and each JPMCCI Single Commodity Index**

Just as historical open interest guides the allocation of weights among different JPMCCI Exchange Commodities through the Aggregate Commodity Units, the Composition and Monthly Contract Weights each month for each JPMCCI Exchange Commodity are guided by the historical distribution of open interest across the commodity’s futures curve.

Each JPMCCI Single Commodity Index and each JPMCCI Exchange Commodity in relation to a JPMCCI Sector Index or JPMCCI Aggregate Index (as the case may be) includes one or more Monthly Contracts of the same JPMCCI Exchange Commodity (except in circumstances of substitution of contracts, where the Monthly Contracts may be of different Exchange Commodities).

The Composition for a particular month is derived by averaging the distribution of Monthly Contract Open Interest in the same calendar month of the previous three years, in order to capture shifts of open interest along the curve as set out in greater detail and mathematically in Section D.3-D.6 below. (As an example only, the composition for the month of January 2007 is based on the average of the distribution of open interest of contracts along the curve in January 2006, January 2005 and January 2004).

**D.2 Calculation of the Historical Average Daily Contract Open Interest**

The “Average Daily Contract Open Interest” for a month m JPMCCI Exchange Commodity c Monthly Contract expiring n months after month m, is calculated as follows:

\[
ADCOI_{m,n}^c = F^c \times \frac{\sum_{D_{d,m,n}} DCOI_{d,m,n}^c}{|D_m^c|}
\]

where:

- \( F^c \) is the number of physical units underlying JPMCCI Exchange Commodity c represented by one contract, given the contract specification (e.g. number of barrels represented by one crude oil contract)
- \( M_y \) is the set of all months in the Observation Period
- \(|M_y|\) is the number of months in the Observation Period
- \( DCOI_{d,m,n}^c \) is the Daily Contract Open Interest on day d of month m, denominated in number of contracts, for JPMCCI Exchange Commodity c Monthly Contract expiring n months after the month m
\[ D_m^c \] is the set of all days from and including the first calendar day of the month to but excluding the Threshold Determination Date in month \( m \) for which open interest data for one or more Monthly Contracts of JPMCCI Exchange Commodity \( c \) is obtainable by the Index Calculation Agent from the relevant exchange.

\[ |D_m^c| \] is the number of days within \( D_m^c \).

(As an example only, if \( m \) corresponds to March 2000 and \( n = 14 \), the Monthly Contract being referred to is the May 2001 contract.)

The “Historical Average Daily Contract Open Interest” is calculated as the

\[
HADCOI_{y,n}^c = \text{average}_{i=12,24,36} (ADCOI_{m-i,n}^c)
\]

D.3 Calculation of the Monthly Contract Open Interest

“Monthly Contract Open Interest” \( MCOI_{m,n}^c \) in month \( m \), denominated in physical units, for the JPMCCI Exchange Commodity \( c \) Monthly Contract expiring \( n \) months after month \( m \), is:

\[
MCOI_{m,n}^c = F^c \times \sum_{d \in D_m^c} DCOI_{d,m,n}^c
\]

where:

\( DCOI_{d,m,n}^c \) is the Daily Contract Open Interest on day \( d \) on month \( m \), denominated in number of contracts, for JPMCCI Exchange Commodity \( c \) Monthly Contract expiring \( n \) months after the month \( m \).

\( D_m^c \) is the set of all days in month \( m \) for which open interest data for one or more Monthly Contracts of JPMCCI Exchange Commodity \( c \) is obtainable by the Index Calculation Agent from the relevant information source.

(As an example only, if \( m \) corresponds to March 2000 and \( n = 14 \), the Monthly Contract being referred to is the May 2001 contract.)

D.4 Calculation of the Monthly Contract Open Interest Percentage

“Monthly Contract Open Interest Percentage” \( MCOIP_{m,n}^c \) in month \( m \), for JPMCCI Exchange Commodity \( c \) Monthly Contract expiring \( n \) months after month \( m \), is:

\[
MCOIP_{m,n}^c = \frac{MCOI_{m,n}^c}{\sum_i MCOI_{m,i}^c}
\]
D.5 Monthly Calculation of the Historical Monthly Contract Open Interest Percentage

The "Historical Monthly Contract Open Interest Percentage" $HMCOIP^c_{m,n}$ in month $m$, for the JPMCCI Exchange Commodity $c$ Monthly Contract expiring $n$ months after month $m$, is:

$$HMCOIP^c_{m,n} = \text{average}(MCOIP^c_{m-i,n})_{i=1,2,4,36}$$

(As an example, the HMCOIP for the NYMEX Crude Oil May-2000 contract in January 2000 is the arithmetic average of:

(a) the MCOIP for the NYMEX Crude Oil May-1997 contract in January 1997;
(b) the MCOIP for the NYMEX Crude Oil May-1998 contract in January 1998;
(c) the MCOIP for the NYMEX Crude Oil May-1999 contract in January 1999.)

D.6 Monthly Contract Weight

In the determination of the Monthly Contract Weights and Composition for each JPMCCI Exchange Commodity and each JPMCCI Single Commodity Index of any commodity and any month in which Composition is reviewed, the following Monthly Contracts are excluded:

(a) Monthly Contracts with a Historical Monthly Contract Open Interest Percentage of less than 3%;
(b) Monthly Contracts due to expire, in respect of which there will be a Last Trading Day or First Notice Day on or prior to the last anticipated Roll Date or, in the case of Monthly Contracts whose Relevant Exchange is the London Metals Exchange, Monthly Contracts in respect of which there will be a Last Trading Day in the month in which the last anticipated Roll Date falls;

(As an example, for the January 2007 composition of NYMEX Brent Crude, only the Apr-2007 and longer dated Monthly Contracts are eligible for inclusion. The Mar-2007 contract has a last trade date of February 13, 2007; the contract ceases to trade before it can be completely phased out during the February roll, and therefore cannot be included in the January 2007 composition.)

The "Monthly Contract Weight" $CW^c_{m,n}$ in month $m$ for JPMCCI Exchange Commodity $c$ Monthly Contract expiring $n$ months after month $m$ is:

$$CW^c_{m,n} = \frac{HMCOIP^c_{m,n}}{\sum_{i \in N_m^c} HMCOIP^c_{m,i}}$$

where:

$N_m^c$ is the set of all Monthly Contracts for JPMCCI Exchange Commodity $c$ in month $m$

For Monthly Contracts which are excluded by the exclusion rules above, $CW^c_{m,n} = 0$. 
D.7 Disruptions

A “Disrupted Day” means in respect of a JPMCCI Exchange Commodity a Scheduled Trading Day on which:

(a) the Settlement Price for any Monthly Contract in respect of the relevant JPMCCI Exchange Commodity is not obtainable;

(b) the Settlement Price for any Monthly Contract in respect of the relevant JPMCCI Exchange Commodity is a Limit Price (a Limit Day);

(therefor the avoidance of doubt, in respect of a JPMCCI Single Commodity Index, only disruption as set out in (a) and (b) in respect of the JPMCCI Exchange Commodity, constituting such JPMCCI Single Commodity Index shall be relevant in the determination of a Disrupted Day)

Disruption and Calculation and Publication of Indices

Index Levels will be published on each Scheduled Index Valuation Day even if such day is a Limit Day for a given JPMCCI Exchange Commodity, provided, however that the Index Calculation Agent will not be obliged to publish any Index Level upon the occurrence or continuation of a Force Majeure Event. If for any reason a Settlement Price is not obtainable in respect of a given JPMCCI Exchange Commodity and Monthly Contract, then the Settlement Price last previously obtainable (which shall usually be the Settlement Price in respect of the previous Scheduled Index Valuation Day) will be used for calculation of the relevant Index Level. If the Settlement Price is a Limit Price, the Limit Price will be used in the calculation of the relevant Index Level.

Disruption and Roll Dates

If any Roll Date is a Disrupted Day, then the roll for the affected Exchange Commodity is postponed as set out below.

D.8 Roll Weights

In respect of each JPMCCI Exchange Commodity, on each Roll Date of the relevant month, the Composition will be amended by the phased removal from the Composition of one tenth of the Composition of the previous month and the replacement of it by one tenth of the current month; provided that if in respect of the relevant JPMCCI Exchange Commodity that scheduled Roll Date is a Disrupted Day, then (i) the Composition shall not be amended on that day and (ii) the portion of the Composition which would have been amended on that day shall be amended on the next following Scheduled Index Valuation Day which is not a Disrupted Day.

The “Roll Weight” $RW_d^c$ of the pre-roll Composition of JPMCCI Exchange Commodity $c$ at the close of Scheduled Index Valuation Day $d$ is:

A. If $d$ is the first anticipated Roll Date but is a Disrupted Day, then

$$RW_d^c = 1$$

B. If $d$ is an anticipated Roll Date other than the first anticipated Roll Date but is a Disrupted Day;

$$RW_d^c = RW_{d-1}^c$$
C. If \( d \) is any anticipated Roll Date which is not a Disrupted Day:

\[
RW_d^c = 1 - \frac{\text{Min}(10, IVD_d)}{10}
\]

where: \( IVD_d \) is the number ofScheduled Index Valuation Days since the beginning of the month, as of
Scheduled Index Valuation Day \( d \).

E. Annual Calculation and Use of the Portfolio Continuity Factor\(^1\)

E.1 Purpose of the Portfolio Continuity Factor

Portfolio Continuity Factors are introduced to prevent discontinuities in the JPMCCI Aggregate Indices and
the JPMCCI Sector Indices when rebalancing from one set of Aggregate Commodity Units, which are
denominated in physical units, to the next set of Aggregate Commodity Units.

E.2 Calculation of Portfolio Continuity Factor for the JPMCCI Aggregate Index

The “Portfolio Continuity Factor” \( PCF_y \) for period \( y \) is:

\[
PCF_y = PCF_{y-1} \times \frac{\sum_{c} ACU_{y}^{c} \times \sum_{n} CW_{m_{y-1,n}}^{c} \times CP_{d_{y-1,m_{y-1,n}}^{*}}^{c}}{\sum_{c} ACU_{y-1}^{c} \times \sum_{n} CW_{m_{y-1,n}}^{c} \times CP_{d_{y-1,m_{y-1,n}}^{*}}^{c}}
\]

where:

\( m_{y-1}^{*} \) means December in period \( y-1 \), unless the PCF\(_y\) is being calculated in accordance
with a Discontinuation Event, in which case, \( m_{y-1}^{*} \) means the calendar month during
which a Discontinuation Event occurred.

\( d_{y-1}^{*} \) means the last Scheduled Index Valuation Day in period \( y-1 \), unless the PCF\(_y\) is being
calculated in accordance with a Discontinuation Event, in which case, \( d_{y-1}^{*} \) means
the last Scheduled Index Valuation Day of the calendar month during which a
Discontinuation Event occurred.

\(^1\) To the extent a Discontinuation Event has occurred, the Index Calculation Agent shall calculate the
Portfolio Continuity Factor for application the Roll Dates immediately following the Threshold Determination
Date on which the Average Monthly Contract Open Interest is less than the Exclusion Threshold.
\( CP_{d,m,n}^c \) means the Settlement Price denominated in U.S. dollars per physical unit of the commodity underlying the JPMCCI Exchange Commodity as of day \( d \), for the JPMCCI Exchange Commodity \( c \) Monthly Contract expiring \( n \) months after month \( m \).

At inception \( PCF_{\text{inception}} \) is set so that \( JPMCCIPR_d \) (see below) is equal to 100.

### E.3 Portfolio Continuity Factors for JPMCCI Sector Indices

Portfolio Continuity Factors for JPMCCI Sector Indices are calculated in the same manner as for the JPMCCI Aggregate Index, except that only the Aggregate Commodity Units of the JPMCCI Exchange Commodities relevant to the JPMCCI Sector Index in question will be used in the calculations.

### F. Index Calculations

All Index Levels calculated (Price Index, Excess Return Index, and Total Return Index) are rounded to the nearest fifth decimal.

#### F.1 JPMCCI Single Commodity Price Index

The JPMCCI Single Commodity Price Index Level \( JPMCCIPR_d^c \) for JPMCCI Exchange Commodity \( c \) on Scheduled Index Valuation Day \( d \) is:

\[
JPMCCIPR_d^c = RW_d^c \times \sum_n CW_{m_j-1,n}^c \times CP_{d,m_{j-1},n}^c + (1 - RW_d^c) \times \sum_n CW_{m_j,n}^c \times CP_{d,m_j,n}^c
\]

where:

\( m_d \) is the month on which Scheduled Index Valuation Day \( d \) falls.

#### F.2 JPMCCI Single Commodity Excess Return Index

The JPMCCI Single Commodity Excess Return Index Level \( JPMCCIER_d^c \) for JPMCCI Exchange Commodity \( c \) on Scheduled Index Valuation Day \( d \) is:

\[
JPMCCIER_d^c = JPMCCIER_{d-1}^c \times (1 + CDER_d^c)
\]

where \( CDER_d^c \) for JPMCCI Exchange Commodity \( c \) on Scheduled Index Valuation Day \( d \) means the following:
\[
CDER_d^c = \frac{\sum_{n} RW_{d-1}^c \times CW_{m_{d-1},n}^c \times CP_{d,m_{d-1},n}^c + (1 - RW_{d-1}^c) \times \sum_{n} CW_{m_{d-1},n}^c \times CP_{d,m_{d-1},n}^c}{\sum_{n} RW_{d-1}^c \times CW_{m_{d-1},n}^c \times CP_{d,m_{d-1},n}^c + (1 - RW_{d-1}^c) \times \sum_{n} CW_{m_{d-1},n}^c \times CP_{d,m_{d-1},n}^c - 1}
\]

On the Inception Date, each JPMCCI Single Commodity Excess Return Index Level or \( JPMCCI_{\text{inception}}^c \) = 100.

### F.3 JPMCCI Single Commodity Total Return Index

The JPMCCI Single Commodity Total Return Index Level or \( JPMCCI_{d}^c \) for JPMCCI Exchange Commodity \( c \) on Scheduled Index Valuation Day \( d \) is:

\[
JPMCCI_{d}^c = JPMCCI_{d-1}^c \times (1 + CDER_d^c + TBR_d) \times \prod_{a \in A} \left(1 + TBR_a^c\right)
\]

where:

\( TBR_d \) is the “U.S. Treasury Bill Return” on calendar day \( d \), calculated as follows:

\[
TBR_d = \left(1 - \frac{1}{100} \times \frac{1}{360} \times TBRATE_{d-1} \right)^{\frac{91}{360}} - 1
\]

\( TBRATE_{d-1} \) is the 91-day auction high rate for U.S. Treasury Bills on the most recent weekly auction date available on the calendar day immediately preceding the calendar day \( d \).

\( A \) is the set of calendar days in between the immediately preceding Scheduled Index Valuation Day and the Scheduled Index Valuation Day \( d \) (exclusive).

On the Inception Date, JPMCCI Single Commodity Total Return Index Level or \( JPMCCI_{\text{inception}}^c \) = 100.

### F.4 JPMCCI Aggregate Price Index

The JPMCCI Aggregate Price Index Level or \( JPMC\text{II}C_{d}^{\text{ACU}} \) on Scheduled Index Valuation Day \( d \) is:

\[
JPMC\text{II}C_{d}^{\text{ACU}} = \frac{1}{PCF_{y_{nd-1}}} \times \sum_{c} ACU_{y_{nd-1},c}^c \times RW_{d-1}^c \times \sum_{n} CW_{m_{d-1},n}^c \times CP_{d,m_{d-1},n}^c + \frac{1}{PCF_{y_{nd}}} \times \sum_{c} ACU_{y_{nd},c}^c \times (1 - RW_{d}^c) \times \sum_{n} CW_{m_{d},n}^c \times CP_{d,m_{d},n}^c
\]

where:
On the Inception Date, the JPMCCI Aggregate Price Index Level or \(JPMCCIPR_{\text{inception}} = 100\).

### F.5 JPMCCI Aggregate Excess Return Index

The JPMCCI Aggregate Excess Return Index Level or \(JPMACCIER_d\) on Scheduled Index Valuation Day \(d\), is:

\[
JPMACCIER_d = JPMACCIER_{d-1} \times (1 + ADER_d)
\]

where the “Aggregate Daily Excess Return” \(ADER_d\) for Scheduled Index Valuation Day \(d\) is:

\[
ADER_d = \frac{A}{B} - 1
\]

where:

\[
A = \left\{ \frac{1}{PCF_{y_{m_d}-1}} \times \sum_c ACU^c_{y_{m_d}-1} \times RW^c_{d-1} \times \sum_n CW^c_{m_d,n-1,n} \times CP^c_{d,m_d,n-1,n} + \frac{1}{PCF_{y_{m_d-1}}} \times \sum_c ACU^c_{y_{m_d-1}} \times \left(1 - RW^c_{d-1}\right) \times \sum_n CW^c_{m_d,n-1,n} \times CP^c_{d,m_d,n-1,n} \right\}
\]

\[
B = \left\{ \frac{1}{PCF_{y_{m_d-1}}} \times \sum_c ACU^c_{y_{m_d-1}} \times RW^c_{d-1} \times \sum_n CW^c_{m_d,n-1,n} \times CP^c_{d,m_d,n-1,n} + \frac{1}{PCF_{y_{m_d-1}}} \times \sum_c ACU^c_{y_{m_d-1}} \times \left(1 - RW^c_{d-1}\right) \times \sum_n CW^c_{m_d,n-1,n} \times CP^c_{d,m_d,n-1,n} \right\}
\]

On the Inception Date, the JPMCCI Aggregate Excess Return Index Level \(JPMACCIER_{\text{inception}} = 100\).

### F.6 JPMCCI Aggregate Total Return Index

The JPMCCI Aggregate Total Return Index Level or \(JPMACCITR_d\) on Scheduled Index Valuation Day \(d\), is:

\[
JPMACCITR_d = JPMACCITR_{d-1} \times (1 + ADER_d + TBR_d) \times \prod_{a < A} (1 + TBR_a)
\]

On the Inception Date, JPMCCI Aggregate Total Return Index Level or \(JPMACCITR_{\text{inception}} = 100\).
F.7 JPMCCI Sector Index Calculations

JPMCCI Sector Price Indices, JPMCCI Excess Return Sector Indices and JPMCCI Total Return Sector Indices are calculated in the same manner as for the JPMCCI Aggregate Indices, except that only the Aggregate Commodity Units of those JPMCCI Exchange Commodities included in the relevant JPMCCI Sector Index are used in the calculations.

F.8 Publication of corrected Index Levels

In the event that a Settlement Price used to calculate any Index Level is subsequently corrected and the correction is published by the Relevant Exchange before the next following Rebalancing Day, or any other element used in the calculation of any index level is determined by the Index Calculation Agent prior to the next following Rebalancing Day to have been incorrect, then the Index Calculation Agent may, if practicable and the correction is deemed material by the Index Calculation Agent, adjust or correct the relevant Index Level published on any relevant Scheduled Index Valuation Day and publish such corrected Index Level as soon as it is reasonably practicable.

G. Variations on the JPMCCI Indices

G.1 JPMCCI Energy Light Indices (JPMCCI EL)

The JPMCCI Energy Light Indices are variations on the JPMCCI Aggregate Indices where the target dollar market weight of the JPMCCI Energy Sector Index is set to a maximum weight of 33% on the last Rebalancing Day.

First, the Index Calculation Agent will calculate the Estimated Post-Rebalance Market Capitalization $EPRMC_y^c$ for each of the JPMCCI Exchange Commodities in the JPMCCI Energy Sector Index $c$, denominated in USD, calculated on the first Rebalancing Day:

$$EPRMC_y^c = \sum_{c} ACU_y^c \times \sum_n CW_{m_{n-1}, n}^c \times CP_{d_{n-1}, m_{n-1}, n}$$

where

$$ACU_y^c$$ is the ACU of JPMCCI Exchange Commodity $c$ in JPMCCI Energy Sector Index $e$.

Second, the Index Calculation Agent will determine if the $ACU_y^c$ adjustment is necessary and is calculated as follows:

$$\sum_{c} EPRMC_y^c$$

- If $\sum_{c} EPRMC_y^c \leq 33\%$, then the $ACU_y^c$ will remain unchanged;
If \( \sum c_y \) > 33\%, then the \( ACU_y \) will be adjusted to a new \( ACU_y^{\text{new}} \), such that

\[
\sum_{c_y} EPRMC_c y = 33\%, \quad \text{while maintaining their original } ACU_y \text{ proportion.}
\]

Once \( ACU_y^{\text{new}} \) are calculated, they will be set for the remainder of the year, consistent with the methodology of the JPMCCI Aggregate Index. The levels of the JPMCCI Energy Light Index will float according to the market price of the underlying monthly contracts, with the possibility that the market weight of the JPMCCI Energy Sector Index may exceed 33%.

The target market weights, as well as the ACUs and PCFs, of the JPMCCI Energy Light Index are available on www.jpmorgan.com/jpmcci.

\section*{G.2 JPMCCI Ex-Front Month Indices}

The JPMCCI Ex-Front Month Indices (each a "JPMCCI ExFM Index" and collectively, the "JPMCCI ExFM Indices") are variations on the JPMCCI Indices (including, but not limited to, variations on the JPMCCI Energy Light Indices), the variation being the exclusion of the first near month futures contract included in the composition of each JPMCCI Exchange Commodity; provided that the Composition of the JPMCCI Exchange Commodity includes at least two Monthly Contracts. The rules with respect to the JPMCCI Aggregate, Energy Light, Sector, and Single Commodity Index apply to the JPMCCI ExFM Aggregate, Energy Light, Sector, and Single Commodity Indices with the following modification set forth below.

In respect of the JPMCCI Ex-Front Month Energy Light Indices, due to the exclusion of the first near month futures contract and the reallocation of such exposure along the futures curve, the target dollar market weight of the Energy Sector on the last Rebalancing Day of each JPMCCI Ex-Front Month Energy Light Index may be greater or less than 33\%. For example, the target dollar market weight of the JPMCCI Ex-Front Month Energy Sector Indices within the JPMCCI Ex-Front Month Energy Light Indices was as follows:

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Weight on the last Rebalancing Day in January of</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
</tr>
<tr>
<td>NYMEX Crude Oil</td>
<td>16.038%</td>
</tr>
<tr>
<td>NYMEX Gasoline</td>
<td>1.902%</td>
</tr>
<tr>
<td>NYMEX Heating Oil</td>
<td>2.259%</td>
</tr>
<tr>
<td>NYMEX Natural Gas</td>
<td>5.147%</td>
</tr>
<tr>
<td>ICE Brent Crude</td>
<td>5.406%</td>
</tr>
<tr>
<td>ICE Gas Oil</td>
<td>2.603%</td>
</tr>
<tr>
<td>CBOT Ethanol</td>
<td>0.000%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33.355%</strong></td>
</tr>
</tbody>
</table>
The levels of the JPMCCI Ex-Front Month Energy Light Index will float according to the market price of the underlying monthly contracts, hence the market weight of the JPMCCI Ex-Front Month Energy Sector Index may differ from the weight calculated as of the last Rebalancing Day. The monthly contract composition of the JPMCCI ExFM Indices are identical to that of the JPMCCI Indices, with the exclusion of the first nearby Monthly Contract that has a strictly positive weight within each given JPMCCI Exchange Commodity, provided that the Composition of the JPMCCI Exchange Commodity includes at least two Monthly Contracts.

The JPMCCI ExFM "Monthly Contract Weight" $CW_{ExFM,m,n}^c$ in month $m$ for JPMCCI Exchange Commodity $c$, Monthly Contract expiring $n$ months after month $m$ is as follows:

- If there exist an $n_1$ and $n_2$, with $n_1 \neq n_2$, such that $CW_{m,n_1}^c > 0$ and $CW_{m,n_2}^c > 0$, then:
  - if $n = n'$, then $CW_{ExFM,m,n'}^c = 0$,
  - otherwise, $CW_{ExFM,m,n}^c = \frac{CW_{m,n}^c}{1 - CW_{m,n'}^c}$;
- Otherwise:
  $CW_{ExFM,m,n}^c = CW_{m,n'}^c$.

Where $n' = \min(n)$ such that $CW_{m,n}^c > 0$

The JPMCCI ExFM Portfolio Continuity Factors $PCF_{ExFM,m,n}$, and the JPMCCI ExFM Indices are each calculated in the same manner as the JPMCCI Indices, except $CW_{m,n}^c$ is replaced by $CW_{ExFM,m,n}^c$ for all relevant JPMCCI Exchange Commodities.

For the avoidance of doubt, a Disrupted Day for a JPMCCI Index will also be a Disrupted Day for a JPMCCI ExFM Index. For example, on a Scheduled Trading Day, if the Settlement Price for the first nearby NYMEX Crude Oil Monthly Contract included in the JPMCCI is a Limit Price, then such Scheduled Trading Day would be a Disrupted Day for the JPMCCI NYMEX Crude Oil Index and it would also be a Disrupted Day for the JPMCCI ExFM NYMEX Crude Oil Index; notwithstanding the fact that the JPMCCI ExFM NYMEX Crude Oil Index does not reference the front Monthly Contract of NYMEX Crude Oil.

The PCFs of the JPMCCI Ex-Front Month Index are available on [www.jpmorgan.com/jpmcci](http://www.jpmorgan.com/jpmcci).
H. JPMCCI Exchange Commodities included in the JPMCCI Aggregate Indices, JPMCCI Energy Light Indices, JPMCCI Sector Indices and their corresponding JPMCCI Ex-FM variations in 2015

Table 1

Table 1 below shows the JPMCCI and the JPMCCI Ex-FM Sector Indices for 2015 and the JPMCCI Exchange Commodities included in each. The JPMCCI and JPMCCI Ex-FM Aggregate Indices and the JPMCCI and JPMCCI Ex-FM Energy Light Indices each include all 33 JPMCCI Exchange Commodities set out below.

<table>
<thead>
<tr>
<th>Energy</th>
<th>Agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYMEX Crude Oil</td>
<td>CBOT Corn</td>
</tr>
<tr>
<td>NYMEX Gasoline</td>
<td>CBOT Soybeans</td>
</tr>
<tr>
<td>NYMEX Heating Oil</td>
<td>CBOT Soybean Meal</td>
</tr>
<tr>
<td>NYMEX Natural Gas</td>
<td>CBOT Soybean Oil</td>
</tr>
<tr>
<td>ICE Brent Crude</td>
<td>CBOT Wheat</td>
</tr>
<tr>
<td>ICE Gas Oil</td>
<td>CME Winter Wheat</td>
</tr>
<tr>
<td>ICE Gas Oil</td>
<td>MGE Spring Wheat</td>
</tr>
<tr>
<td></td>
<td>NYBOT Cocoa</td>
</tr>
<tr>
<td></td>
<td>NYBOT Coffee</td>
</tr>
<tr>
<td></td>
<td>NYBOT Cotton</td>
</tr>
<tr>
<td></td>
<td>NYBOT Sugar</td>
</tr>
<tr>
<td></td>
<td>LIFFE Robusta Coffee</td>
</tr>
<tr>
<td></td>
<td>LIFFE White Sugar</td>
</tr>
<tr>
<td>Precious Metals</td>
<td>Livestock</td>
</tr>
<tr>
<td>COMEX Gold</td>
<td>CME Feeder Cattle</td>
</tr>
<tr>
<td>COMEX Silver</td>
<td>CME Lean Hogs</td>
</tr>
<tr>
<td>NYMEX Palladium</td>
<td>CME Live Cattle</td>
</tr>
<tr>
<td>NYMEX Platinum</td>
<td></td>
</tr>
<tr>
<td>Industrial Metals</td>
<td></td>
</tr>
<tr>
<td>LME Aluminum</td>
<td></td>
</tr>
<tr>
<td>LME Copper</td>
<td></td>
</tr>
<tr>
<td>LME Lead</td>
<td></td>
</tr>
<tr>
<td>LME Nickel</td>
<td></td>
</tr>
<tr>
<td>LME Tin</td>
<td></td>
</tr>
<tr>
<td>LME Zinc</td>
<td></td>
</tr>
<tr>
<td>COMEX Copper</td>
<td></td>
</tr>
</tbody>
</table>

Heating Oil was removed from the aggregate and energy light indices in May 2012 following the rules in section B.2. Heating Oil reentered the aggregate and energy light indices from January 2013. Orange Juice was removed from the aggregate and energy light indices in January 2013. Ethanol and Rough Rice were removed from the aggregate and energy light indices in January 2014. Gas Oil was removed from the aggregate and energy light indices in January 2014 and reentered from January 2015.

Table 2

Table 2 sets out a chart below detailing the combined exchanges of the relevant JPMCCI Single Commodity Indices.

For WTI Crude Oil and Heating Oil, the open interest for the NYMEX and ICE contracts were combined starting with the February 2006 contract for WTI Crude Oil, and the April 2006 contract for Heating Oil. For Gold and Silver, the open interest for the COMEX and CBOT contracts were combined starting with the
October 2004 contract for both Gold and Silver. For Gasoline, the open interest for the phased out NYMEX Unleaded Gasoline and successor NYMEX RBOB Gasoline contracts were combined, when the NYMEX Unleaded Gasoline contracts were phased out in July 2006. For Robusta Coffee, the open interest for the phased out Liffe Robusta Coffee and successor Liffe Robusta Coffee 10 were combined when the Liffe Robusta Coffee contracts were phased out in January 2009.

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Combined for Exchange Commodity</th>
<th>since</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICE Crude Oil</td>
<td>NYMEX Crude Oil</td>
<td>Feb-2006</td>
</tr>
<tr>
<td>ICE Heating Oil</td>
<td>NYMEX Heating Oil</td>
<td>Apr-2006</td>
</tr>
<tr>
<td>CBOT Gold</td>
<td>COMEX Gold</td>
<td>Oct-2004</td>
</tr>
<tr>
<td>CBOT Silver</td>
<td>COMEX Silver</td>
<td>Oct-2004</td>
</tr>
<tr>
<td>NYMEX Unleaded Gasoline</td>
<td>NYMEX RBOB Gasoline</td>
<td>July 2006</td>
</tr>
<tr>
<td>Liffe Robusta Coffee</td>
<td>Liffe Robusta Coffee 10</td>
<td>Jan 2009</td>
</tr>
</tbody>
</table>

The latest estimated post-rebalance weights for the JPMCCI Aggregate Index, the JPMCCI Sector Indices, and JPMCCI Energy Light Index calculated using the latest Aggregate Commodity Units are available on www.jpmorgan.com/jpmcci.

I. Commodity Inclusion Process
The latest list of futures markets which were reviewed for inclusion in JPMCCI is available on www.jpmorgan.com/jpmcci.

J. Aggregate Commodity Units and Portfolio Continuity Factors for JPMCCI from 1989 to current

J.1 Aggregate Commodity Units for JPMCCI Aggregate Index
These are available on www.jpmorgan.com/jpmcci.

J.2 Portfolio Continuity Factors for the JPMCCI Aggregate Index and JPMCCI Ex-Front Month Index from 1989 to current.
These are available on www.jpmorgan.com/jpmcci.

J.3 Aggregate Commodity Units (ACU) and Portfolio Continuity Factors (PCF) for JPMCCI Energy Light Index and for the JPMCCI Ex-Front Month Energy Light Index
These are available on www.jpmorgan.com/jpmcci.

K. Market Sizes 1990 to current
These are available on www.jpmorgan.com/jpmcci.
## L. JPMCCI Index Bloomberg Tickers

<table>
<thead>
<tr>
<th>Bloomberg Tickers for JPMCCI Index and JPMCCI Energy Light Index</th>
<th>Price Index</th>
<th>Excess Return Index</th>
<th>Total Return Index</th>
<th>Weight</th>
<th>Energy Light Weights</th>
<th>Remaining Maturity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate</td>
<td>JMCXPI</td>
<td>JMCXER</td>
<td>JMCXTR</td>
<td></td>
<td></td>
<td>JMCXD</td>
</tr>
<tr>
<td>Energy Light</td>
<td>JMCXELPI</td>
<td>JMCXLER</td>
<td>JMCXELTR</td>
<td></td>
<td></td>
<td>JMCXELD</td>
</tr>
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<td>Energy</td>
<td>JMCXENPI</td>
<td>JMCXENER</td>
<td>JMCXENTR</td>
<td>JMCXENW</td>
<td>JMCXENW</td>
<td>JMCXEND</td>
</tr>
<tr>
<td>Non-Energy</td>
<td>JMCXNEPI</td>
<td>JMCXNEER</td>
<td>JMCXNETR</td>
<td>JMCXNEW</td>
<td>JMCXNEW</td>
<td>JMCXNED</td>
</tr>
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<td>Industrial Metals</td>
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<td>JMCXIMER</td>
<td>JMCXIMTR</td>
<td>JMCXIMW</td>
<td>JMCXIMW</td>
<td>JMCXIMD</td>
</tr>
<tr>
<td>Precious Metals</td>
<td>JMCXPMPI</td>
<td>JMCXPMER</td>
<td>JMCXPMTR</td>
<td>JMCXPMW</td>
<td>JMCXPMW</td>
<td>JMCXPMD</td>
</tr>
<tr>
<td>All Metals</td>
<td>JMCXMEPI</td>
<td>JMCXMEER</td>
<td>JMCXMETR</td>
<td>JMCXMEW</td>
<td>JMCXMEW</td>
<td>JMCXMED</td>
</tr>
<tr>
<td>Energy and Metals</td>
<td>JMCXNAPI</td>
<td>JMCXNAER</td>
<td>JMCXNATR</td>
<td>JMCXNAW</td>
<td>JMCXNAW</td>
<td>JMCXNAD</td>
</tr>
<tr>
<td>Agriculture</td>
<td>JMCXAGPI</td>
<td>JMCXAGER</td>
<td>JMCXAGTR</td>
<td>JMCXAGW</td>
<td>JMCXAGW</td>
<td>JMCXAGD</td>
</tr>
<tr>
<td>Livestock</td>
<td>JMCXLIPI</td>
<td>JMCXLIER</td>
<td>JMCXLITR</td>
<td>JMCXLW</td>
<td>JMCXLW</td>
<td>JMCXLD</td>
</tr>
<tr>
<td>Agriculture and Livestock</td>
<td>JMCXALPI</td>
<td>JMCXALER</td>
<td>JMCXALTR</td>
<td>JMCXALW</td>
<td>JMCXALW</td>
<td>JMCXALD</td>
</tr>
<tr>
<td>NYMEX Crude Oil</td>
<td>JMCXCLPI</td>
<td>JMCXCLER</td>
<td>JMCXCLTR</td>
<td>JMCXCLW</td>
<td>JMCXCLW</td>
<td>JMCXCLD</td>
</tr>
<tr>
<td>NYMEX Gasoline</td>
<td>JMCXBBPI</td>
<td>JMCXBER</td>
<td>JMCXBBTR</td>
<td>JMCXBBW</td>
<td>JMCXBBW</td>
<td>JMCXBBD</td>
</tr>
<tr>
<td>NYMEX Heating Oil</td>
<td>JMCXHOPPI</td>
<td>JMCXHORE</td>
<td>JMCXHOTR</td>
<td>JMCXHOW</td>
<td>JMCXHOW</td>
<td>JMCXHOD</td>
</tr>
<tr>
<td>NYMEX Natural Gas</td>
<td>JMCXNPGI</td>
<td>JMCXNGER</td>
<td>JMCXNGTR</td>
<td>JMCXNGW</td>
<td>JMCXNGW</td>
<td>JMCXNGD</td>
</tr>
<tr>
<td>ICE Brent Crude</td>
<td>JMCXCOPI</td>
<td>JMCXCOER</td>
<td>JMCXCOTR</td>
<td>JMCXCOW</td>
<td>JMCXCOW</td>
<td>JMCXCOD</td>
</tr>
<tr>
<td>ICE Gas Oil</td>
<td>JMCXQSPI</td>
<td>JMCXQSER</td>
<td>JMCXQSTR</td>
<td>JMCXQSW</td>
<td>JMCXQSW</td>
<td>JMCXQSD</td>
</tr>
<tr>
<td>CBOT Ethanol</td>
<td>JMCXDPJ</td>
<td>JMCXDLER</td>
<td>JMCXDLTR</td>
<td>JMCXDELW</td>
<td>JMCXDELW</td>
<td>JMCXDLD</td>
</tr>
<tr>
<td>COMEX Gold</td>
<td>JMCXGCPI</td>
<td>JMCXGGER</td>
<td>JMCXGCTR</td>
<td>JMCXGCW</td>
<td>JMCXGCW</td>
<td>JMCXGCD</td>
</tr>
<tr>
<td>COMEX Silver</td>
<td>JMCXSPI</td>
<td>JMCXSIER</td>
<td>JMCXSTR</td>
<td>JMCXSIIW</td>
<td>JMCXSIIW</td>
<td>JMCXSID</td>
</tr>
<tr>
<td>NYMEX Palladium</td>
<td>JMCXPAPI</td>
<td>JMCXPAER</td>
<td>JMCXPATR</td>
<td>JMCXPAW</td>
<td>JMCXPAW</td>
<td>JMCXPAD</td>
</tr>
<tr>
<td>NYMEX Platinum</td>
<td>JMCXPLPI</td>
<td>JMCXPLER</td>
<td>JMCXPLTR</td>
<td>JMCXPLW</td>
<td>JMCXPLW</td>
<td>JMCXPLD</td>
</tr>
<tr>
<td>LME Aluminum</td>
<td>JMCXAPLI</td>
<td>JMCXALER</td>
<td>JMCXALTR</td>
<td>JMCXALW</td>
<td>JMCXALW</td>
<td>JMCXALD</td>
</tr>
<tr>
<td>LME Copper</td>
<td>JMCXAPLI</td>
<td>JMCXALER</td>
<td>JMCXALTR</td>
<td>JMCXALW</td>
<td>JMCXALW</td>
<td>JMCXALD</td>
</tr>
<tr>
<td>LME Lead</td>
<td>JMCXLIPI</td>
<td>JMCXLER</td>
<td>JMCXLTR</td>
<td>JMCXLLW</td>
<td>JMCXLLW</td>
<td>JMCXLD</td>
</tr>
<tr>
<td>LME Nickel</td>
<td>JMCXLPPI</td>
<td>JMCXNER</td>
<td>JMCXNTR</td>
<td>JMCXNLW</td>
<td>JMCXNLW</td>
<td>JMCXLD</td>
</tr>
<tr>
<td>LME Zinc</td>
<td>JMCXLPPI</td>
<td>JMCXNER</td>
<td>JMCXNTR</td>
<td>JMCXNLW</td>
<td>JMCXNLW</td>
<td>JMCXLD</td>
</tr>
<tr>
<td>LME Tin</td>
<td>JMCXLPPI</td>
<td>JMCXNTER</td>
<td>JMCXNTTR</td>
<td>JMCXNTLW</td>
<td>JMCXNTLW</td>
<td>JMCXLT</td>
</tr>
<tr>
<td>COMEX Copper</td>
<td>JMCXHPPI</td>
<td>JMCXGER</td>
<td>JMCXGTR</td>
<td>JMCXHGW</td>
<td>JMCXHGW</td>
<td>JMCXHD</td>
</tr>
<tr>
<td>CBOT Corn</td>
<td>JMCXCPPI</td>
<td>JMCXCEER</td>
<td>JMCXCTR</td>
<td>JMCXCW</td>
<td>JMCXCW</td>
<td>JMCXCD</td>
</tr>
<tr>
<td>CBOT Soybeans</td>
<td>JMCXSPI</td>
<td>JMCXSER</td>
<td>JMCXSCTR</td>
<td>JMCXSW</td>
<td>JMCXSW</td>
<td>JMCXSD</td>
</tr>
<tr>
<td>CBOT Soybean Meal</td>
<td>JMCXSMPI</td>
<td>JMCXSMER</td>
<td>JMCXSMTR</td>
<td>JMCXSMW</td>
<td>JMCXSMW</td>
<td>JMCXSMD</td>
</tr>
<tr>
<td>CBOT Soybean Oil</td>
<td>JMCXBOPPI</td>
<td>JMCXBOPER</td>
<td>JMCXBOPTR</td>
<td>JMCXBOW</td>
<td>JMCXBOW</td>
<td>JMCXBD</td>
</tr>
<tr>
<td>CBOT Wheat</td>
<td>JMCXWPI</td>
<td>JMCXWER</td>
<td>JMCXWTR</td>
<td>JMCXWW</td>
<td>JMCXWW</td>
<td>JMCXWD</td>
</tr>
<tr>
<td>CBOT Rough Rice</td>
<td>JMCXRPPPI</td>
<td>JMCXRRER</td>
<td>JMCXRRT</td>
<td>JMCXRRW</td>
<td>JMCXRRW</td>
<td>JMCXRRD</td>
</tr>
<tr>
<td>CME Winter Wheat</td>
<td>JMCXKUPI</td>
<td>JMCXKWER</td>
<td>JMCXKWTR</td>
<td>JMCXKW</td>
<td>JMCXKW</td>
<td>JMCXKD</td>
</tr>
<tr>
<td>MGE Spring Wheat</td>
<td>JMCXMWPI</td>
<td>JMCXMWTR</td>
<td>JMCXMWTR</td>
<td>JMCXMWW</td>
<td>JMCXMWW</td>
<td>JMCXMW</td>
</tr>
<tr>
<td>NYBOT Cocoa</td>
<td>JMCXCPPI</td>
<td>JMCXCCER</td>
<td>JMCXCTR</td>
<td>JMCXCCW</td>
<td>JMCXCCW</td>
<td>JMCXCD</td>
</tr>
<tr>
<td>NYBOT Coffee</td>
<td>JMCXKCPPI</td>
<td>JMCXKCRER</td>
<td>JMCXKCTR</td>
<td>JMCXCKW</td>
<td>JMCXCKW</td>
<td>JMCXKD</td>
</tr>
<tr>
<td>NYBOT Cotton</td>
<td>JMCXTPPI</td>
<td>JMCXCTER</td>
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## Bloomberg Tickers for JPMCCI Ex-FM Index and JPMCCI Ex-FM Energy Light Index

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<th>Bloomberg Tickers</th>
<th>Price Index</th>
<th>Excess Return Index</th>
<th>Total Return Index</th>
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M. Table (for indicative purposes only) of days anticipated not to be Scheduled Trading Days in respect of Relevant Exchanges for the current year

These are available on www.jpmorgan.com/jpmcci.

N. Note on Hypothetical Back-tested Historical Calculations

The hypothetical back-tested historical values of the JPMCCI Index should not be taken as an indication of future performance, and no assurance can be given as to the values of the JPMCCI Index on a future date. The hypothetical back-tested historical values of the JPMCCI Index were calculated on materially the same basis on which the JPMCCI Index is now calculated; however, certain historical information used in calculating the JPMCCI Index was not available to the Index Calculation Agent in determining hypothetical back-tested historical values. Below are the material variations and assumptions used in calculating the hypothetical back-tested historical values prior to initial published values of the JPMCCI Indices (other than the JPMCCI Energy Light and JPMCCI Ex – Front Month Indices) on November 9, 2007. The JPMCCI Energy Light, the JPMCCI Ex – Front Month Indices with the exception of the JPMCCI Ex-Front Energy Light Month Indices were first published on June 11, 2008, November 14, 2008 respectively. The JPMCCI Ex-Front Month Energy Light Indices were first published on 30 August 2011.

The Index Calculation Agent and the Index Sponsor expressly disclaim any responsibility for (i) any errors or omissions in calculating the back-tested information and (ii) any uses to which the back-tested information may be put by any person.

Aggregate Commodity Units Prior to 2003

Prior to 2003, certain open interest information was not published by the Futures Industries Association for periods prior to November 1999. The first reliable Observation Period spanned from November 1999 to October 2002. Therefore, the Aggregate Commodity Units were set to equal to the Aggregate Commodity Units based on figures calculated in 2003.

Data unavailability with regard to Historical Monthly Contract Interest Percentages

Historically, in any year during which any HMCOIP cannot be calculated due to missing MCOIP data, all the HMCOIPs of that year were set to the HMCOIPs of the following year for which complete MCOIP data was available. For example, if reliable open interest data was not available prior to 1997 (included), then all the HMCOIPs for 1998 to 2000, all of which rely on MCOIPs of 1997, would have been set to the HMCOIPs of 2001, assuming that MCOIPs for 1998, 1999 and 2000 were intact.

O. Versions of the Index Rules

Each version of the Index Rules for an Index and the effective date of any revised version of the Index Rules will be reflected in the table below. Copies of the latest version of the Index Rules are available pursuant to Section A.4 above.

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<td>Updated the Energy Light Weight ticker for Ex-FM NYMEX Palladium</td>
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