# CitiFX Alpha Global Carry Index
# Index Methodology

## CitiFX Investment Strategies

12 September 2012

# Table of Contents

# Part A: Introduction

# Introduction

This document constitutes the "**Index Methodology**" in respect of the Index (as defined below) and is made available by Citibank N.A., London Branch in its capacity as the Index Sponsor.

This Index Methodology, incorporates various Index Documents, namely: i) the Miscellaneous Provisions Document as of a date specified below (as amended from time to time, the "**Miscellaneous Provisions Document**"), ii) the Master Definitions as of a date specified below (as amended from time to time, the "**Master Definitions**") and iii) any applicable Strategy Methodologies (each, a "**Strategy Methodology**") shall together comprise the Index Conditions (the "**Index Conditions**") applicable to the Index and must be read and construed together. In the case of any inconsistency between any Index Documents which together make up the Index Conditions, this Index Methodology shall prevail in respect of the Index.

References herein to the "**applicable Strategy Methodology**" are references to such Strategy Methodology (or Strategy Methodologies as the case may be) relating to each relevant Strategy (or Strategies) which constitutes the Index as specified in the Eligible Universe of the relevant Index Methodology.

The Index Level of the Index from time to time is calculated by the Index Calculation Agent with reference to the formulae and rules set out in these Index Conditions. Neither the Index Calculation Agent nor the Index Sponsor is under any obligation to continue to calculate, publish or disseminate the Index or the Index Level.

Full information in respect of the Index is only available on the basis of the combination of this Index Methodology, the Miscellaneous Provisions Document, the Master Definitions and any applicable Strategy Methodologies. Any applicable Strategy Methodology shall generally be read and construed with this Index Methodology as a whole, but in particular, each applicable Strategy Methodology shall be considered in the light of the calculations, determinations and methodologies set out in paragraphs 4 and 5 of Part C (*Calculation of the Index Level*) below.

The terms and conditions of any Index Linked Product may contain provisions as to the consequences of certain events and circumstances. These events and circumstances may include any adjustment made to the Index including, without limitation, any adjustment made as a result of an Adjustment Event or Disruption Event. These consequences may include the early termination of such Index Linked Product and the payment of an amount to reflect the valuation of such Index Linked Product at the time of such early termination. Depending on the terms and conditions of such Index Linked Product, an investor may receive back on such early termination less than the amount of the original investment. The Index Conditions do not include any such terms and conditions of such Index Linked Product. Please refer to the terms and conditions of such Index Linked Product.

Full information in respect of any Index Linked Product is only available on the basis of the combination of the documents which make up the Index Conditions and the confirmation, prospectus or offering document (however described) in respect of such Index Linked Product.

This Index Methodology may be amended from time to time without notice, and will be available from the Index Sponsor. See the Miscellaneous Provisions Document for a description of the circumstances in which a change to this Index Methodology may be required.

Terms used in this Index Methodology but not defined in this Index Methodology shall have the meanings given to them in the Master Definitions.

# Part B: Key Information

# Key Information

| | |
|---|---|
| Name of Index: | CitiFX Alpha Global Carry Index (the "**Index**") |
| Summary: | The Index is constituted by a fixed number of different Strategies and tracks the return achieved by a notional portfolio of specified foreign exchange forward contracts which includes, from time to time, some (or all) of the forward contracts set out in Table 3 (*Forward Fixing Rate and Rebalancing Spread Table*) of Part D (*Data*).<br><br>Such notional portfolio is constructed, maintained and rebalanced in accordance with algorithmic signals generated by each Strategy. These signals may be conceptualized as instructions to notionally trade the specified foreign exchange forward contracts in a specific notional amount, with a certain Direction and Settlement Day. Such signals are generated as a result of calculations and determinations embedded in each Strategy. The method by which these algorithmic signals are obtained is set out in detail in each applicable Strategy Methodology.<br><br>Each Strategy has a percentage weight within the Index which is determined on a monthly basis such that the volatility contribution of each Strategy to the overall volatility of the Index is equal in accordance with a proprietary methodology developed by the Index Sponsor. The percentage weights so determined are then further subject to certain maximum percentage weight caps specified in relation to all Strategies in the Eligible Universe.<br><br>Aggregate exposure to the Strategies constituting the Index is determined by targeting a certain level of volatility and such exposure is scaled back if the Index Level falls by a specified amount within a fixed period. |
| Index Sponsor: | Citibank N.A., London Branch |
| Index Calculation Agent: | Citibank N.A., London Branch |
| Total Notional Amount: | 100 as of Index Start Date |
| Index Base Currency: | US Dollars (USD) |
| Index Publication Time: | 11:00 a.m. London time, as of each Index Business Day |
| Index Valuation Time: | 4:00 p.m. London time, as of each Index Business Day |
| Index Launch Date: | 3 June 2008 |
| Index Start Date: | 2 January 2002 |
| Index Start Level: | 100 |
| Index Fee: | Not Applicable |
| Frequency of calculation of the Index Level: | Daily, as of each Index Business Day |
| Frequency of rebalancing: | Monthly, as of each Rebalancing Day |
| Index Electronic Page: | Bloomberg page CAFZGCG <Index> |
| Applicable Miscellaneous Provisions Document: | 7 September 2012 |
| Applicable Master Definitions: | 11 September 2012 |

*The Index was launched by the Index Sponsor as of the Index Launch Date and has been calculated by the Index Calculation Agent for the period from the Index Start Date. Any back-testing or similar performance analysis undertaken by any person in respect of the Index for any reason must be considered illustrative only and may be based on assumptions or estimates not used by the Index Calculation Agent when determining the Index Level.*

# Part C: Calculation of the Index Level

# Calculation of the Index Level

## INDEX CALCULATION PROCESS AND WEIGHTING OF STRATEGIES

### 1. INTRODUCTION

The Index Sponsor is Citibank N.A., London Branch. As at the date of this Index Methodology, the Index Sponsor also acts in the capacity of Index Calculation Agent to calculate and publish the Index in accordance with the Index Conditions. The Index Sponsor may, in its sole discretion and without notice, appoint an alternative Index Calculation Agent at any time.

The Index Calculation Agent's determinations in respect of the Index shall be final. Please refer to the Miscellaneous Provisions Document for further information.

The Index Level is calculated by the Index Calculation Agent as of the Index Valuation Time on each Index Business Day. Subject to the occurrence of an Adjustment Event or Disruption Event, the Index Level for each Index Business Day is published on the Index Electronic Page, generally on the following Index Business Day on or about the Index Publication Time (as specified in Part B (*Key Information*) as of the following Index Business Day. This should be considered the official source for the Index Level and a level obtained from any other source (electronic or otherwise) must be considered unofficial. The Index Level is the closing level of the Index for the relevant Index Business Day. The Index Calculation Agent may also, but is not obliged to, calculate the level of the Index in respect of any other valuation time on any Index Business Day or any other day with the consent of the Index Sponsor.

All of the calculations and determinations described in this Part C are the responsibility of the Index Calculation Agent. The calculations and determinations in this Part C are subject to the occurrence of adjustments made as a consequence of Adjustment Events and Disruption Events as set out in the applicable Miscellaneous Provisions Document. There is no obligation on the Index Calculation Agent to execute any of the calculations and determinations specified herein, nor is the Index Sponsor under any obligation to maintain the Index.

### 2. DAILY INDEX CALCULATION

#### 2.1 Index Level

The "**Index Level**" as of the Index Start Date shall be the Index Start Level.

The "**Index Level**" as of the Index Valuation Time on each Index Business Day t following the Index Start Date shall be an amount determined by the Index Calculation Agent in relation to the Index Business Day t-1 immediately preceding Index Business Day t in accordance with the formula set out below.

$$\text{IndexLevel}_t = \text{IndexLevel}_{t\text{-}1} + \text{IndexReturn}_t + \text{AggregateNotionalRebate}_t$$

where:

| | | |
|---|---|---|
| $\text{Index Level}_t$ | = | Index Level as of Index Business Day t |
| $\text{Index Level}_{t\text{-}1}$ | = | Index Level as of the Index Business Day t-1 immediately preceding Index Business Day t |
| $\text{Index Return}_t$ | = | Means the Index Return determined in accordance with paragraph 2.2 below as of Index Business Day t |
| Aggregate Notional $\text{Rebate}_t$ | = | Means the Aggregate Notional Rebate (if any) determined in accordance with paragraph 5.6 below as of Index Business Day t |

## 2.2 Index Return

### 2.2.1 Calculation of the Index Return

The "**Index Return**" as of the Index Valuation Time on each Index Business Day t shall be a notional value denominated in the Index Base Currency determined as the sum of the Strategy Return (as defined in paragraph 2.2.2 below) of each Strategy i specified in the Eligible Universe as of Index Business Day t in accordance with the formula set out below:

$$\text{IndexReturn}_t = \sum_{i=1}^{M} \text{StrategyReturn}_{i,t}$$

where:

| | | |
|---|---|---|
| Index Return$_t$ | = | The Index Return as of the Index Valuation Time on each Index Business Day t, expressed as a notional value denominated in the Index Base Currency |
| $\sum_{i=1}^{M}$ | = | Means the sum of the series of values achieved by calculating the formula following such symbol for each i from 1 through to M (inclusive), such that, for example: $\sum_{i=1}^{M}(i+y)$ = [(1 + y) + (2 + y) + (3 + y)…… (M + y)] |
| M | = | The number of Strategies which constitute the Eligible Universe |
| i | = | Represents an arithmetic progression where the first term is 1 and there are N number of terms with a common difference of 1 between the terms (i.e. i = 1, 2, 3, 4, ....., M) |
| Strategy Return$_{i,t}$ | = | The Strategy Return (determined in accordance with paragraph 2.2.2 below) of Strategy i as of Index Business Day t |

### 2.2.2 Calculation of the Strategy Return

As of the Index Valuation Time on each Index Business Day t, the Index Calculation Agent determines the "**Strategy Return**" as the daily notional profit or loss of each Strategy i specified in the Eligible Universe resulting from the difference between: i) the notional value of all Forward Contracts notionally held by such Strategy i in respect of each Selected Currency Pair p determined by Strategy i from time to time, as of the Index Valuation Time on such Index Business Day t and ii) the notional value of such Forward Contracts notionally held by the Strategy as of the Index Business Day immediately preceding Index Business Day t.

In turn, the notional value of all Forward Contracts notionally held by the Strategy as of the Index Valuation Time on each Index Business Day t shall be determined as the aggregate of:

a) the notional value of all Forward Contracts scheduled to notionally settle as of a Settlement Day that is later than Index Business Day t (such Forward Contracts, "**Outstanding Forward Contracts**");

b) the notional value of all Forward Contracts scheduled to notionally settle as of a Settlement Day that falls on the same calendar date as such Index Business Day t; and

c) (because an Index Business Day may not necessarily be a Currency Pair Business Day in relation to certain Forward Contracts) the notional value of Forward Contracts (if any) scheduled to notionally settle as of a Settlement Day which falls on any Currency Pair Business Day prior to Index Business Day t, **but subsequent to** the previous determination of the relevant Strategy Return on Index Business Day t-1

(such Forward Contracts together with Forward Contracts described in b) above, "**Settling Forward Contracts**").

The determination process described above is set out in detail in the following formula:

$$\text{Strategy Return}_{i,t} = \left( \text{Ex Rate}_{i,t} \, X \sum_{j=1}^{M} \text{Notional Value}^{O}_{j,i,t} \right) + \left( \text{Ex Rate}_{i,r-1} X \sum_{j=1}^{P} \text{Notional Value}^{S}_{j,i,t} \right) - \left( \text{Ex Rate}_{i,t-1} \times \sum_{j=1}^{N} \text{Notional Value}^{O}_{j,i,t-1} \right)$$

where:

| | | |
|---|---|---|
| $\text{Strategy Return}_{i,t}$ | = | The Strategy Return of Strategy i as of Index Business Day t |
| $\text{NotionalValue}^{O}_{j,i,t}$ | = | Means the notional value of each Outstanding Forward Contract j in respect of each Selected Currency Pair p determined with respect to Strategy i as of the Index Valuation Time on Index Business Day t in accordance with the formula set out in paragraph 5.4 below |
| $\text{Ex Rate}_{i,t}$ | = | Means if: a) the Index Base Currency is in US Dollars, a value equal to 1 otherwise b) the Citi Official Spot Rate prevailing as of the Index Valuation Time on Index Business Day t, for the spot exchange of the notional value of the Outstanding Forward Contract j into a notional value denominated in the Index Base Currency |
| M | = | Means the number of Outstanding Forward Contracts in respect of each Selected Currency Pair p determined with respect to Strategy i as of Index Business Day t |
| $\text{NotionalValue}^{S}_{j,i,t}$ | = | Means the notional value of each Settling Forward Contract j in respect of each Selected Currency Pair p determined with respect to Strategy i as of the Index Valuation Time on Index Business Day t in accordance with the formula set out in paragraph 5.4 below |
| $\text{Ex Rate}_{i,\,r-1}$ | = | Means if: a) the Index Base Currency is in US Dollars, a value equal to 1 otherwise b) the Citi Official Spot Rate prevailing as of the Index Valuation Time on the Rebalancing Day immediately preceding the relevant Settlement Day for each Settling Forward Contract j, for the spot exchange of the notional value of such Settling Forward Contract j into a notional value denominated in the Index Base Currency |
| P | = | Means the number of Settling Forward Contracts in respect of each Selected Currency Pair p determined with respect to Strategy i as of Index Business Day t |
| $\text{NotionalValue}^{O}_{j,i,t-1}$ | = | Means the notional value of each Outstanding Forward Contract j in respect of each Selected Currency Pair p determined with respect to Strategy i as of the Index Valuation Time on the Index Business Day immediately preceding Index Business Day t in accordance with the formula set out in paragraph 5.4 below |
| $\text{Ex Rate}_{i,t-1}$ | = | Means if: a) the Index Base Currency is in US Dollars, a value equal to 1 otherwise b) the Citi Official Spot Rate prevailing as of the Index Valuation Time on the Index Business Day immediately preceding Index Business Day t, for the spot exchange of the notional value of the Outstanding Forward Contract j into a notional value denominated in the Index Base Currency |

N = Means the number of Outstanding Forward Contracts in respect of each Selected Currency Pair p determined with respect to Strategy i as of the Index Business Day immediately preceding Index Business Day t

$\sum_{i=1}^{M}$ = Means the sum of the series of values achieved by calculating the formula following such symbol for each i from 1 through to M (inclusive), such that, for example:

$$\sum_{i=1}^{M}(i+y) = [(1 + y) + (2 + y) + (3 + y)\ldots\ldots (M + y)]$$

## 2.3 Drawdown Trigger Index Exposure

As of 9:00 a.m. London time on each Index Business Day t, the "**Drawdown Trigger Index Exposure**" is determined by the Index Calculation Agent in accordance with the following algorithm:

$$\text{Drawdown Trigger Index Exposure}_t = \begin{cases} \text{Exposure Reduction Multiplier} \times \text{Exposure}_{r-1}, \text{if } 1 - \frac{IL_{t-1}}{IL_{MAX}} > \text{Drawdown Trigger} \\ \text{Exposure}_{r-1}, \text{otherwise} \end{cases}$$

where:

Drawdown Trigger Index Exposure$_t$ = The Drawdown Trigger Index Exposure as of Index Business Day t

Exposure Reduction Multiplier = The value specified as the Exposure Reduction Multiplier set out in Table 2 (*Index Calculation Parameters*) of Part D (*Data*)

Exposure$_{r-1}$ = Means the Exposure determined in accordance with paragraph 2.3.1 below as of the Rebalancing Day r-1 immediately preceding Index Business Day t)

$IL_{t-1}$ = Means the Index Level determined in accordance with paragraph 2.1 above as of the Index Business Day immediately preceding Index Business Day t

$IL_{MAX}$ = The highest Index Level published as of the Index Publication Time on each Index Business Day over a three month period immediately preceding, but excluding, Index Business Day t

Drawdown Trigger = The value specified as the Drawdown Trigger set out in Table 2 (*Index Calculation Parameters*) of Part D (*Data*)

### 2.3.1 Exposure

Subject to the occurrence of an Adjustment Event or Disruption Event, the "**Exposure**" shall be determined by the Index Calculation Agent as of each Rebalancing Day r. For the avoidance of doubt, the applicable Exposure as of each Rebalancing Day r shall be determined only following the determination of Percentage Weights set out in paragraph 3 below, **but prior to**, the determination of the Drawdown Trigger Index Exposure as of such Rebalancing Day r. In order to determine the Exposure, the Index Calculation Agent follows a three-step process:

a) first, determining the Constant Exposure Percentage Index Return as of each Index Business Day t in the six calendar months immediately preceding, and including, the date which is scheduled to fall two Index Business Days prior to Rebalancing Day r in accordance with paragraph 2.3.1.1 below;

b) second, determining the annualized standard deviation of the Constant Exposure Percentage Index Return in the six calendar months immediately preceding, and including, the date which is scheduled to fall two Index Business Days prior to Rebalancing Day r in accordance with paragraph 2.3.1.2 below; and

c) finally, the Index Calculation Agent determines the Exposure in accordance with paragraph 2.3.1.3 below as a percentage value of the quotient of (a) the Volatility Target (as defined in Table 2 below of Part D (*Data*)) as numerator and (b) the annualised standard deviation of the Constant Exposure Percentage Index Return determined in accordance with paragraph 2.3.1.2 below.

This determination process, including the relevant formulae used by the Index Calculation Agent to determine the Exposure in respect of the Index, is set out in detail below:

#### 2.3.1.1 Determining the Constant Exposure Percentage Index Returns

As of each Index Business Day in the six calendar months immediately preceding ,and including,the date which is scheduled to fall two Index Business Days prior to Rebalancing Day r, the "**Constant Exposure Percentage Index Return**" shall be a value expressed as a percentage determined by the Index Calculation Agent in accordance with the following formula:

$$\text{Constant Exposure Percentage Index Return}_t = \frac{\text{Index Return}_t}{\text{Index Notional Amount}_{t-1}}$$

where:

| | | |
|---|---|---|
| Constant Exposure Percentage Index Return$_t$ | = | The Constant Exposure Percentage Index Return achieved by the Index as of Index Business Day t, expressed as a percentage |
| Index Return$_t$ | = | The Index Return as of Index Business Day t, determined in accordance with paragraph 2.2 above |
| Index Notional Amount$_{t-1}$ | = | The Index Notional Amount as of the Index Business Day immediately preceding Index Business Day t, determined in accordance with paragraph 4.3 below |

#### 2.3.1.2 Determining the Standard Deviation of the Constant Exposure Percentage Index Returns

The standard deviation represents the extent to which observations of the Constant Exposure Percentage Index Return have varied from the average of the same over a period of time and is a measure of volatility of the Constant Exposure Percentage Index Return over such period. A high standard deviation means that Constant Exposure Percentage Index Returns are observed to have a high variation around the mean. The standard deviation of the Constant Exposure Percentage Index Return in the six calendar months immediately preceding, and including, Index Business Day t is determined in accordance with the following formula:

$$\sigma_t = \sqrt{\frac{\sum_{t=1}^{N}\left(\text{CEPIR}_t - \overline{\text{CEPIR}}\right)^2}{N-1}} \times \sqrt{252}$$

where:

| | | |
|---|---|---|
| $\sigma_t$ | = | The standard deviation of the Constant Exposure Percentage Index Return over a period of N number of Index Business Days |
| N | = | Number of Index Business Days in the six calendar months immediately preceding ,and including, the date which is scheduled to fall two Index Business Days prior to Rebalancing Day r |
| CEPIR$_t$ | = | The Constant Exposure Percentage Index Return as of each Index Business Day t, determined in accordance with paragraph 2.3.1.1 above |

$\overline{CEPIR}$ = The arithmetic average of N number of Constant Exposure Percentage Index Returns as of each Index Business Day in the six calendar months immediately preceding,and including, the date which is scheduled to fall two Index Business Days prior to Rebalancing Day r

#### 2.3.1.3 Determination of Exposure

The Index Calculation Agent shall then determine the Exposure as of each Rebalancing Day r as a percentage value equal to the lower of: i) the quotient of (a) the Volatility Target (as defined in Table 2 (*Index Calculation Parameters*) of Part D (*Data*) as numerator and (b) the annualised standard deviation of the Constant Exposure Percentage Index Return determined in accordance with paragraph 2.3.1.1 above or ii) 400%, in accordance with the following formula:

$$Exposure_r = Min\left(\frac{VolatilityTarget}{\sigma_t}; 400\%\right)$$

where:

$Exposure_r$ = Exposure determined as of Rebalancing Day r

Min = The lower of the values separated by a comma within the set of brackets immediately following the "min" symbol

$\sigma_t$ = The annualised standard deviation of the Constant Exposure Percentage Index Return determined in accordance with paragraph 2.3.1.2 above

Volatility Target = The Volatility Target as defined in Table 2 (*Index Calculation Parameters*) of Part D (*Data*)

## 3. WEIGHTING OF STRATEGIES

### 3.1 Equal Volatility Contribution

The Percentage Weight of each Strategy specified in the Eligible Universe shall be determined by the Index Calculation Agent as of each Rebalancing Day r and such determination shall prevail as of each Index Business Day between (and including) Rebalancing Day r up to, but excluding, the following Rebalancing Day r +1. In order to determine the applicable Percentage Weights, the Index Calculation Agent follows a four-step process:

a) first, determining the Percentage Strategy Return as of each Index Business Day t in the six calendar months immediately preceding ,and including, the date which is scheduled to fall two Index Business Days prior to Rebalancing Day r in accordance with paragraph 3.2 below

b) second, creating a six-month variance-covariance matrix of Percentage Strategy Returns pursuant to paragraph 3.3 below;

c) third, applying an optimization model to determine the optimum Percentage Weight for each Strategy within the covariance matrix which equalizes the volatility contribution of each Strategy to the overall volatility of the Index pursuant to paragraph 3.4 below; and

d) finally, applying a cap to the Percentage Weight determined in relation to each Strategy pursuant to paragraph 3.5 below, such that the Percentage Weight determined in relation to each Strategy pursuant to paragraph 3.4 below is scaled back to the extent required to comply with the condition that no Strategy shall be assigned a Percentage Weight that is greater than the Maximum Percentage Weight. For the avoidance of doubt, any Percentage Weight of any Strategy in excess of this cap is not reallocated to the remaining Strategies.

This determination process shall determine the respective Percentage Weights for all the Strategies specified in the Eligible Universe and the details of such process, including the relevant formulae used by the Index Calculation Agent to determine the Percentage Weight of each Strategy, is set out in detail below.

### 3.2 Determining the Percentage Strategy Return

As of each Index Business Day t in the six-month period ending on, and including, the date which is scheduled to fall two Index Business Days prior to Rebalancing Day r, the "**Percentage Strategy Return**" shall be a value expressed as a percentage determined by the Index Calculation Agent with respect to each Strategy i in the Eligible Universe in accordance with the following formula:

$$\text{PercentageStrategyReturn}_{i,t} = \frac{\text{StrategyReturn}_{i,t}}{\text{StrategyNotionalAmount}_{i,r-1}}; i = 1,2,....,M$$

where:

| | | |
|---|---|---|
| Percentage Strategy Return$_{i,t}$ | = | The Percentage Strategy Return achieved by Strategy i as of Index Business Day t, expressed as a percentage |
| Strategy Return$_{i,t}$ | = | The Strategy Return as of Index Business Day t, determined with respect to Strategy i in accordance with paragraph 2.2.2 above |
| Strategy Notional Amount$_{i,r-1}$ | = | The Strategy Notional Amount as of the Rebalancing Day r-1 immediately preceding Index Business Day t, determined with respect to Strategy i in accordance with paragraph 4.4 below. |
| M | = | The number of Strategies which constitute the Eligible Universe |

### 3.3 Construction of the Variance-Covariance Matrix of Percentage Strategy Returns

The covariance matrix can be visualized as a grid in which the Percentage Strategy Returns of each Strategy is represented in rows and columns. The points of intersection in this grid indicate the covariance between each Percentage Strategy Return and the Percentage Strategy Return of every other Strategy in the Eligible Universe. There will be a diagonal line bisecting the grid where a row representing the Percentage Strategy Return of a particular Strategy which intersects with the column representing that same Percentage Strategy Return from the same Strategy, and therefore the variance of that Percentage Strategy Return (as the covariance of a Percentage Strategy Return with itself is its variance).

A covariance matrix typically assesses the degree to which two or more Percentage Strategy Returns covary, or move in tandem. A positive covariance means that the two variables move together (in the same direction), while a negative covariance means that the variables move in opposite directions. Two Percentage Strategy Returns with positive covariance means that the Strategies with those Percentage Strategy Returns have reacted to market events in a similar way; if they have negative covariance, it means that they have reacted inversely. The lower the covariance between a number of Percentage Strategy Returns delivered by the Strategies of an Eligible Universe, the more diversified the collection of Strategies within that Eligible Universe can be said to be.

The Variance-Covariance Matrix is computed as follows:

As of each Rebalancing Day r, the Index Calculation Agent determines each element (Σ(n,m)) of the Variance-Covariance Matrix as follows:

$$\sum(n,m)_r = \text{Cov}(\text{PSR}_n, \text{PSR}_m)_r$$

where:

| | | |
|---|---|---|
| n, m | = | Each possible combination of two Percentage Strategy Returns (i.e. n = 1, …, M; m = 1, …, M; including combinations where n=m) |
| M | = | The number of Strategies which constitute the Eligible Universe |
| Cov(PSR$_n$,PSR$_m$) | = | The covariance between the N daily returns "PSR$_{n,q}$" of Strategy n for the N number of Index Business Days ending on and including, the date which is scheduled to fall two Index Business Days prior to Rebalancing Day r and |

the N daily returns "$PSR_{m,\ q}$" of Strategy m for the N number of Index Business Days ending on and including, the date which is scheduled to fall two Index Business Days prior to Rebalancing Day r, calculated as follows:

$$\frac{\sum_{q=1}^{N}\left(PSR_{n,\ q}-\overline{PSR_n}\right)\times\left(PSR_{m,\ q}-\overline{PSR_m}\right)}{N-1}$$

| | | |
|---|---|---|
| N | = | Number of Index Business Days in the six-month period immediately preceding and including, the date which is scheduled to fall two Index Business Days prior to Rebalancing Day r. |
| $\sum_{i=1}^{N}$ | = | Means the sum of the series of values achieved by calculating the formula following such symbol for each i from 1 through to N (inclusive), such that, for example: $\sum_{i=1}^{N}(i+y)$ = [(1 + y) + (2 + y) + (3 + y)…… (N + y)] |
| $\overline{PSR_n}$ | = | The arithmetic average of N number of daily returns "$PSR_n$" as of each Index Business Day t in the six-month period immediately preceding and including, the date which is scheduled to fall two Index Business Days prior to Rebalancing Day r |
| $\overline{PSR_m}$ | = | The arithmetic average of N number of daily returns "$PSR_m$" as of each Index Business Day t in the six-month period immediately preceding and including, the date which is scheduled to fall two Index Business Days prior to Rebalancing Day r |
| $PSR_{n,\ t}$ | = | Means the Percentage Strategy Return (determined in accordance with paragraph 3.2 above) of Strategy n as of Index Business Day t (provided that if Index Business Day t is a Disrupted Day for any Forward Contracts referenced by Strategy n, then $PSR_{n,t}$ shall be deemed to be zero. |
| $PSR_{m,\ t}$ | = | Means the Percentage Strategy Return (determined in accordance with paragraph 3.2 above of Strategy m as of Index Business Day t (provided that if Index Business Day t is a Disrupted Day for any Forward Contracts referenced by Strategy m, then $PSR_{m,\ t}$ shall be deemed to be zero. |
| q | = | The series of N number of Index Business Days ending on, and including, the date which is scheduled to fall two Index Business Days prior to Rebalancing Day r |
| $PSR_{n,\ q}$ | = | The N number of daily returns of Strategy n "$PSR_{n,\ t}$" for the N number of Index Business Days ending on, and including, the date which is scheduled to fall two Index Business Days prior to Rebalancing Day r, expressed as a vector |
| $PSR_{m,\ q}$ | = | The N number of daily returns of Strategy m "$PSR_{m,\ t}$" for the N number of Index Business Days ending on, and including, the date which is scheduled to fall two Index Business Days prior to Rebalancing Day r, expressed as a vector |

### 3.4 Optimization routine to find Percentage Weight of each Strategy equalizing volatility contribution

Once the variance-covariance matrix is populated in accordance with the formulae in paragraph 3.3 above, a vector of Percentage Weights for the Strategies is determined, using an optimization model.

The optimization model is used to find the combination of Percentage Weights for the Strategies that results in the volatility contribution of each Strategy being equal. Within the optimization model, the volatility contribution of a Strategy is defined as the sensitivity of the volatility of the Index collectively to a change in the relative value of the Percentage Weight of the individual Strategy.

To equalize the volatility contribution of the Strategies, the model compares the change in the volatility contribution of the portfolio of Strategies to a relative change in the Percentage Weight of a Strategy (the "**Strategy Volatility Sensitivity**") with the Strategy Volatility Sensitivity of each other Strategy, on a pair by pair basis. For example, if there are three Strategies A, B and C, this means there are three pairs: A paired with B, A paired with C and B paired with C. The model finds Percentage Weights for the Strategies in which the pair by pair comparison for all of the Strategies delivers a result in which the Strategy Volatility Sensitivity of each Strategy is equal to the Strategy Volatility Sensitivity of each other Strategy.

The vector of Percentage Weights "pw" is computed by the optimization routine, which aims at solving the following non-linear optimization problem under constraints:

$$W_{opt} = \arg\min f(w)$$

$$f(w) = \sum_{n=1}^{M} \sum_{m=n+1}^{M} \left( pw_n \times \left( \sum_{i=1}^{M} \sigma_{n,i} \times pw_i \right) - pw_m \times \left( \sum_{i=1}^{M} \sigma_{m,i} \times pw_i \right) \right)^2$$

subject to:

$$\sum_{i=1}^{M} pw_i = 1 \text{ and } 0 \le pw_i \le 1; i = 1,\ldots,M$$

where $\sigma_{n,i}$ and $\sigma_{m,i}$ represent the elements **Σ**(n,m) of Strategy i in the variance-covariance matrix **Σ** and M is the number of Strategies in the Eligible Universe from time to time.

### 3.5 Determining the Percentage Weight of each Strategy

The Percentage Weight of each Strategy i determined as of each Rebalancing Day r in accordance with the optimization routine set out in paragraph 3.4 above shall not exceed the Maximum Percentage Weight and be determined and assigned as the "**Percentage Weight**" of such Strategy as of each Rebalancing Day r and shall be calculated in accordance with the following formula:

$$PercentageWeight_{i,r} = Min(pw_i; MaximumPercentageWeight); i = 1,\ldots,M$$

where:

| | | |
|---|---|---|
| $Percentage\ Weight_{i,r}$ | = | The Percentage Weight of Strategy i as of Rebalancing Day r |
| $pw_i$ | = | The uncapped percentage weight of Strategy i in vector "w" |
| Maximum Percentage Weight | | The value specified as the Maximum Percentage Weight set out in Table 2 (*Index Calculation Parameters*) of Part D (*Data*) |
| M | = | The number of Strategies which constitute the Eligible Universe |
| Min | = | Followed by a series of amounts separated by a semi-colon inside a set of brackets, means the lesser of such amounts. |

**REBALANCING DAYS AND THE INDEX REBALANCING PROCESS**

## 4. INDEX NOTIONAL AMOUNT, STRATEGY NOTIONAL AMOUNT AND CURRENCY NOTIONAL AMOUNT

### 4.1 Particular applicability of Strategy Methodologies

While each Strategy Methodology is expressed to be applicable in general to the Index Methodology and is intended to be read and construed with the Index Methodology (and other Index Documents) as a whole, each Strategy specified in the Eligible Universe and each applicable Strategy Methodology will express concepts, calculations and determinations that are, in particular, discussed and utilised in this paragraph 4 and paragraph 5 below and (without prejudice to the interpretation of other paragraphs and sections of this Index Methodology) each such Strategy Methodology shall be read and construed accordingly in light of the calculations and methodologies set out in this paragraph 4 and paragraph 5 below.

### 4.2 Total Notional Amount

The "**Total Notional Amount**" as of the Index Start Date shall be equal to such amount denominated in the Index Base Currency as specified in Part B (*Key Information*).

The "**Total Notional Amount**" prevailing: i) as of any Index Business Day t shall be the Total Notional Amount determined as of the Rebalancing Day r -1 prior to such Index Business Day t (or where Index Business Day t occurs prior to the first Rebalancing Day for the Index, such Total Notional Amount as of the Index Start Date) and ii) where such Index Business Day t is itself a Rebalancing Day, the Total Notional Amount prevailing as of such Rebalancing Day shall be a notional currency amount denominated in the Index Base Currency equal to the Index Level determined as of the date which is scheduled to fall two Index Business Days prior to such Rebalancing Day.

### 4.3 Index Notional Amount

The "**Index Notional Amount**" prevailing as of 9:00 a.m. London time on any Index Business Day t shall be determined as the product of: i) the Total Notional Amount prevailing as of such Index Business Day t and ii) the Drawdown Trigger Index Exposure determined as of that same Index Business Day t, expressed as an amount denominated in the Index Base Currency in accordance with the following formula:

$$INA_t = TNA_t \times \text{Drawdown Trigger Index Exposure}_t$$

where:

| | | |
|---|---|---|
| $INA_t$ | = | The Index Notional Amount determined in respect of Index Business Day t |
| $TNA_t$ | = | The Total Notional Amount prevailing as of Index Business Day t determined in accordance with paragraph 4.2 above **or**, as the case may be, the Total Notional Amount specified in relation to the Index Start Date in Part B (*Key Information*) where Index Business Day t occurs prior to the first Rebalancing Day for the Index |
| Drawdown Trigger Index Exposure$_t$ | = | The Drawdown Trigger Index Exposure determined as of 9:00 a.m. on Index Business Day t, in accordance with paragraph 2.3 above |

### 4.4 Strategy Notional Amount

Immediately following the determination of the Index Notional Amount pursuant to paragraph 4.3 above, the Index Calculation Agent shall determine the "**Strategy Notional Amount**" applicable to each Strategy i in the Eligible Universe as of that same Index Business Day t as the product of the i) Index Notional Amount determined in respect of Index Business Day t and ii) the Percentage Weight prevailing in relation

to each Strategy i as of Index Business Day t pursuant to paragraph 3.5 above in accordance with the following formula:

$$SNA_{i,t} = INA_t \times PercentageWeight_{i,t}$$

where:

$SNA_{i,t}$ = The Strategy Notional Amount applicable as of Index Business Day t in respect of each Strategy i in the Eligible Universe.

$INA_t$ = The Index Notional Amount determined in respect of Index Business Day t in accordance with paragraph 4.3 above.

Percentage $Weight_{i,t}$ = The Percentage Weight prevailing in relation to each Strategy i in the Eligible Universe as of Index Business Day t, determined in accordance with paragraph 3.5 above.

For the avoidance of doubt and subject to the occurrence of an Adjustment Event or Disruption Event, as of each Rebalancing Day r, the Strategy Notional Amount for each Strategy is determined using the respective Percentage Weights determined in respect of such Strategy on that same Rebalancing Day r.

The Percentage Weights so determined as of each Rebalancing Day r shall, subject to the occurrence of an Adjustment Event or Disruption Event, be the Percentage Weight prevailing in respect of each Strategy up to, but excluding, the following Rebalancing Day r+1.

### 4.5 Currency Notional Amount

Each Strategy Notional Amount determined as of each Index Business Day t pursuant to paragraph 4.4 above is then further divided into Currency Notional Amounts when the Index Calculation Agent determines, in accordance with the applicable Strategy Methodology, a Strategy Exposure in relation to each Selected Currency Pair p as of that same Index Business Day t.

As of any day where the Selected Currency Pair p determined pursuant to any applicable Strategy Methodology is constituted by a Base Currency which is not the Index Base Currency, the Index Calculation Agent shall convert the Currency Notional Amount specified in relation to such Selected Currency Pair p into a notional amount denominated in the Index Base Currency using the Citi Official Spot Rate prevailing as of 9:00 a.m. London time on the Rebalancing Day immediately preceding such day for the spot exchange of such Base Currency into the Index Base Currency as such rate may be published on Bloomberg page FXBE <GO>.

## 5. NOTIONAL PORTFOLIO OF FORWARD CONTRACTS

### 5.1 Interpreting the Strategy Exposure determined for each Selected Currency Pair pursuant to each Strategy

In accordance with the Strategy Methodology of each Strategy specified in the Eligible Universe, the Index Calculation Agent shall determine a Strategy Exposure, as of the Strategy Fixing Time on each Index Business Day t, in respect of each Selected Currency Pair p tracked by the Strategy. The individual Strategy Exposures algorithmically generated by the Strategies which constitute the Index may be conceptualized as individual instructions followed by the Index Calculation Agent to notionally enter into Forward Contracts in specified notional amounts, with a certain Direction and specified Settlement Day. By following such instructions, the Index Calculation Agent notionally constructs, maintains and rebalances a Notional Portfolio which may, from time to time, include some (if not all) of the Forward Contracts set out in Table 3 (*Forward Fixing Rate and Rebalancing Spread Table*) of Part D (*Data*). It may be possible at any time for one Strategy to generate Strategy Exposures that contradict Strategy Exposures generated by other Strategies. If this occurs it shall result, in relation to any one Strategy, the accumulation of Forward Contracts referencing Selected Currency Pairs which may net off (either partially or wholly) the market exposure implied by other Forward Contracts referencing the same Selected Currency Pairs which have been, or shall be, notionally executed in relation to other Strategies. The change in notional value of such Notional Portfolio (determined as the sum of the notional profit and loss

accruing to each Strategy in accordance with paragraph 2.2.1) is the basis upon which changes in the Index Level is calculated from time to time.

Each Strategy Exposure p determined pursuant to each Strategy Methodology is expressed in language intended to describe the: i) Direction and ii) notional amount upon which the Forward Contract referencing each Selected Currency Pair p is notionally executed as of such Index Business Day t. Whether the Strategy Exposure is numerically expressed as a positive or negative value implies the Direction of the Forward Contract to be notionally executed in accordance with the following table:

| **Interpreting the Strategy Exposure p for each Selected Currency Pair p** | |
|---|---|
| *Positive/Negative value of Strategy Exposure p* | *Direction of Strategy Exposure p* |
| Strategy Exposure p is a positive value | Long Base/Short Term |
| Strategy Exposure p is a negative value | Short Base/Long Term |

For the avoidance of doubt:

i) any reference in any Strategy Methodology to "**USDAUD**", "**USDNZD**", "**USDGBP**" or ""**USDEUR**" as a Selected Currency Pair p or a Strategy Exposure thereto shall, for the purposes of this Index Methodology be construed to refer to a Forward Contract referencing the Currency Pair "**AUDUSD**", "**NZDUSD**", "**GBPUSD**" or "**EURUSD**" respectively and all references herein to a Forward Contract referencing the relevant Selected Currency Pair p shall be interpreted accordingly for such Currency Pairs; and

ii) "**Long Base/Short Term**" and "**Short Base/Long Term**" is defined in full in the applicable Master Definitions.

### 5.2 The Notional Portfolio as of each Index Business Day which is not a Rebalancing Day

#### 5.2.1 Notional Execution of a Forward Contract - Determining the Notional Execution Amount

Subject to the occurrence of an Adjustment Event or Disruption Event and as of the relevant Strategy Fixing Time on each Index Business Day t in relation to each Strategy, the Index Calculation Agent shall determine if each Strategy Exposure determined in respect of Selected Currency Pair p in the context of that Strategy as of Index Business Day t is **equal** to the same determined as of the Index Business Day immediately preceding Index Business Day t. If so, the Index Calculation Agent **shall not** notionally execute a Forward Contract referencing Selected Currency Pair p in relation to that Strategy for that Index Business Day t. For the avoidance of doubt, this determination is made **per Strategy** such that a different result is possible in relation to the same Selected Currency Pair p across the different Strategies.

Otherwise, in relation to each Strategy, as of the relevant Notional Execution Time relating to a specific Forward Contract referencing Selected Currency Pair p on each Index Business Day t, the Index Calculation Agent shall notionally execute a Forward Contract in respect of each Selected Currency Pair p algorithmically selected pursuant to each Strategy by first determining the "**Notional Execution Amount**" in relation to such Selected Currency Pair p in accordance with the following formula:

$$NotionalExecutionAmount_{p,t} = StrategyExposure_{p,t} - StrategyExposure_{p,t-1}$$

where:

| | | |
|---|---|---|
| Notional Execution Amount$_{p,t}$ | = | The Notional Execution Amount determined in respect of Selected Currency Pair p as of Index Business Day t |
| Strategy Exposure$_{p,t}$ | = | The Strategy Exposure determined in relation to each Selected Currency Pair p of any Strategy as of Index Business Day t |
| Strategy Exposure$_{p,t-1}$ | = | The Strategy Exposure determined in relation to each Selected Currency Pair p of any Strategy as of the Index Business Day immediately preceding Index Business Day t |

### 5.2.2 Specifying the commercial details of each Forward Contract notionally executed

Immediately following the determination of the Notional Execution Amount in relation to a Forward Contract referencing Selected Currency Pair p pursuant to paragraph 5.2.1 above, each such Forward Contract to be notionally executed by the Index Calculation Agent in relation to each Strategy with respect to a Selected Currency Pair p shall be notionally executed on the following basis:

a) where the Notional Execution Amount determined is a **positive** number, a Forward Contract shall be notionally executed in a Direction which is **Long Base/Short Term**, referencing the relevant Selected Currency Pair p in such Notional Execution Amount and as at such Notional Execution Time specified in relation to such Forward Contract referencing Selected Currency Pair p as set out in Table 3 (*Forward Fixing Rate and Rebalancing Spread Table*) of Part D (*Data*); or

b) where the Notional Execution Amount determined is a **negative** number, a Forward Contract shall be notionally executed in a Direction which is **Short Base/Long Term**, referencing the relevant Selected Currency Pair p in such Notional Execution Amount and as at such Notional Execution Time specified in relation to such Forward Contract referencing Selected Currency Pair p as set out in Table 3 (*Forward Fixing Rate and Rebalancing Spread Table*) of Part D (*Data*),

and in each case, the applicable Forward Contract notionally executed shall be deemed to: i) have an inception date that is Index Business Day t and ii) settle on a date which falls on the Settlement Day immediately following such Index Business Day t.

## 5.3 The Notional Portfolio as of each Rebalancing Day

### 5.3.1 Determinations at the level of the Index

Subject to the occurrence of any Adjustment Event or Disruption Event, the Index Calculation Agent shall make the calculations and determinations set out below in the following sequence as of the relevant time on each Rebalancing Day r:

a) first, as of 9:00 a.m. London time on such Rebalancing Day r, determine the Percentage Weight of each Strategy as of such Rebalancing Day r pursuant to paragraph 3 above;

b) second, as of 9:00 a.m. London time on such Rebalancing Day r, determine the applicable Exposure as of such Rebalancing Day r pursuant to paragraph 2.3.1 above;

c) third, as of 9:00 a.m. London time on such Rebalancing Day r, determine the applicable Drawdown Trigger Index Exposure as of such Rebalancing Day r pursuant to paragraph 2.3 above;

d) fourth, as of 9:00 a.m. London time on such Rebalancing Day r, determine the Index Notional Amount as of such Rebalancing Day r pursuant to paragraph 4.3 applying the applicable Percentage Weights and Drawdown Trigger Index Exposure determined in steps a) and c) above respectively.

e) finally, as of the Index Valuation Time on such Rebalancing Day r, determine the Index Return as of such Rebalancing Day r pursuant to paragraph 2.2.1 above;

### 5.3.2 Determinations at the level of each Strategy

Subject to the occurrence of any Adjustment Event or Disruption Event, the Index Calculation Agent shall make the calculations and determinations set out below in the following sequence to effect a rebalancing of the notional portfolio of Forward Contracts held by each Strategy specified in the Eligible Universe as of each Rebalancing Day r:

a) first, as of the relevant Strategy Fixing Time specified in relation to each Strategy, the Index Calculation Agent shall apply the result of the determination set out in paragraph 5.3.1d) above to determine the Strategy Notional Amount applicable to each Strategy specified in the Eligible Universe pursuant to paragraph 4.4 above and, further, the Currency Notional Amount applicable to the determination of a Strategy Exposure in relation to each Selected Currency Pair pursuant to

each applicable Strategy Methodology (each such Strategy Exposure on such Rebalancing Day r only, a "**Target Exposure**");

b) second, in relation to each Strategy, the Index Calculation Agent shall then compare the notional portfolio of Forward Contracts held by such Strategy (each an "**Existing Forward Contract**" in relation to each Strategy) against each Target Exposure determined in respect of each Selected Currency Pair p of the same Strategy and shall notionally execute in the following manner:

i. to the extent that any Existing Forward Contract references a Selected Currency Pair which is not referenced by any Target Exposure , the Index Calculation Agent shall:

*x.* first, aggregate the notional amount of all Existing Forward Contracts referencing such Selected Currency Pair p into a single notional value which represents the net exposure in respect of Selected Currency Pair p (the "**Existing Net Exposure**"); and

*y.* second, as of the relevant Notional Execution Time for any Forward Contracts referencing Selected Currency Pair p, notionally enter into a Forward Contract referencing such Selected Currency Pair p in: i) a Direction **opposite** to and ii) such notional amount **equal to** such Existing Net Exposure, with a Settlement Day scheduled to fall two Currency Pair Business Days applicable to such Selected Currency Pair p following Rebalancing Day r (such a Forward Contract in respect of Selected Currency Pair p, an "**Offsetting Forward Contract**"). The net exposure of the Strategy to Selected Currency Pair p taking the Existing Forward Contracts into account with the Offsetting Forward Contract shall be **zero** when the Offsetting Forward Contract settles.

ii. to the extent that any Existing Forward Contract references a Selected Currency Pair p which is identical to that referenced by any Target Exposure:

*w.* first, the Index Calculation Agent shall first determine the Existing Net Exposure in respect of Selected Currency Pair p;

*x.* second, notionally enter into an Offsetting Forward Contract in respect of such Selected Currency Pair p ; and

*y.* finally, the Index Calculation Agent shall notionally enter into a Forward Contract which settles for value as of the Settlement Day immediately following the next Rebalancing Day r+1, referencing such Selected Currency Pair p in: i) the **same** Direction and ii) in such notional amount **equal to** the currency notional amount represented by such Target Exposure; or

iii. to the extent that no Existing Forward Contract references a Selected Currency Pair p which is referenced by any Target Exposure, the Index Calculation Agent shall notionally enter into a Forward Contract which settles for value as of the Settlement Day immediately following the next Rebalancing Day r+1, referencing such Selected Currency Pair p in: i) the **same** Direction and ii) in such notional amount **equal to** the currency notional amount represented by such Target Exposure.

### 5.4 Notional Valuation of each Forward Contract

Each Forward Contract i notionally executed with reference to a Selected Currency Pair p in relation to each Strategy as of any Index Business Day is notionally valued in US Dollars in accordance with the following formula:

$$NotionalValue_{i,p,t} = NotionalExecutionAmount_{p,t} \times (PrevailingPrice_{i,p,t} - TradePrice_{i,t}) \times ExchangeRate_{USD,t}$$

where:

Notional $Value_{i,p,t}$ = Means the notional value of Forward Contract i referencing Selected Currency Pair p as of Index Business Day t

| | | |
|---|---|---|
| Notional Execution Amount$_{p,t}$ | = | The Notional Execution Amount determined in accordance with paragraph 5.2.1 above in respect of Forward Contract i referencing Selected Currency Pair p ,denominated in units of the Base Currency of Selected Currency Pair p |
| Prevailing Price$_{i,p,t}$ | = | Means such Prevailing Price specified in relation to Forward Contract i referencing Selected Currency Pair p as it was notionally executed pursuant to the process set out paragraphs 0 or 5.3.2 as the case may be |
| Trade Price$_{i,t}$ | = | Means the Forward Contract Trade Price then prevailing as of Index Business Day t in relation to Forward Contract i, such Forward Contract Trade Price having already been determined in accordance with paragraph 5.5 below as of the date when Forward Contract i was notionally executed |
| Exchange Rate$_{USD,t}$ | = | Means if: a) the Index Base Currency is in US Dollars, a value equal to 1 otherwise b) the Citi Official Spot Rate prevailing as of the Index Valuation Time on Index Business Day t, for the spot exchange of the Term Currency of Selected Currency Pair p referenced by Forward Contract i into US Dollars. |

### 5.5 Determination of Forward Contract Trade Price

As of the relevant Notional Execution Time on any Index Business Day t when each Forward Contract i may be notionally entered pursuant to paragraph 5.2 above or 5.3 above, the "**Forward Contract Trade Price**" is determined in relation to such Forward Contract i referencing Selected Currency Pair p and fixed up to and including the Settlement Day in relation to such Forward Contract i in accordance with the following formula:

$$\text{Forward Contract Trade Price}_{i,t} = \begin{cases} \text{Forward Fixing Rate}_{i,t} + \text{Rebalancing Spread}_i, \text{ if Notional Execution Amount is positive} \\ \text{Forward Fixing Rate}_{i,t} - \text{Rebalancing Spread}_i, \text{ if Notional Execution Amount is negative} \end{cases}$$

where:

| | | |
|---|---|---|
| Forward Contract Trade Price$_{i,t}$ | = | Means the Forward Contract Trade Price in relation to any Forward Contract i as of Index Business Day t |
| Forward Fixing Rate$_i$ | = | Means such Forward Fixing Rate observed in relation to each Forward Contract i specified in Table 3 (*Forward Fixing Rate and Rebalancing Spread Table*) of Part D (*Data*) as of the applicable Notional Execution Time on Index Business Day t |
| Rebalancing Spread$_i$ | = | The value specified as the Rebalancing Spread applicable to each Forward Contract i specified in Table 3 (*Forward Fixing Rate and Rebalancing Spread Table*) of Part D (*Data*) |

### 5.6 Determination of the Aggregate Notional Rebate

As of the relevant Notional Execution Time of the final Forward Contract i to be notionally executed as of any Index Business Day t pursuant to the process set out in paragraph 5.2 or 5.3 above, the Index Calculation Agent shall determine an "**Aggregate Notional Rebate**" that shall be taken into account in the calculation of the Index Level as the sum of rebates (if any) on any notional execution of Forward Contracts as of such Index Business Day t:

$$ANR_t = \sum_{p=1}^{P}\left[ Min\left( \sum_{i=1}^{M} \text{Notional Execution Amount}^{Long}_{i,p,t} ; \left| \sum_{i=1}^{M} \text{Notional Execution Amount}^{Short}_{i,p,t} \right| \right) \times RS_p \times 2 \times \text{Exchange Rate}_{p,t} \right]$$

where:

| | | |
|---|---|---|
| $ANR_t$ | = | Means the Aggregate Notional Rebate as of Index Business Day t |
| P | = | The number of different Selected Currency Pairs p across all Strategies which constitute the Eligible Universe, such Selected Currency Pairs p being those in respect of which Notional Execution Amounts have been determined as of Index Business Day t in accordance with paragraph 5.2.1 above |
| $NotionalExecutionAmount_{i,p,t}^{Long}$ | = | The Notional Execution Amount of each Forward Contract referencing Selected Currency Pair p notionally executed in respect of Strategy i as of Index Business Day t, where the Direction of such Forward Contract is Long Base/Short Term |
| M | = | The number of Strategies i which constitute the Eligible Universe |
| $NotionalExecutionAmount_{i,p,t}^{Short}$ | = | The Notional Execution Amount of each Forward Contract referencing Selected Currency Pair p notionally executed in respect of Strategy i as of Index Business Day t, where the Direction of such Forward Contract is Short Base/Long Term |
| Min | = | The lower of the amounts separated by a semi-colon within the set of brackets immediately following the "min" symbol |
| $RS_p$ | = | The Rebalancing Spread with respect to Selected Currency Pair p, as set out in Table 3 (*Forward Fixing Rate and Rebalancing Spread Table*) of Part D (*Data*) |
| $Exchange\ Rate_{p,t}$ | = | Means if: a) the Term Currency of Selected Currency Pair p is the Index Base Currency, a value equal to 1 otherwise b) the Citi Official Spot Rate prevailing as of the Index Valuation Time on Index Business Day t, for the spot exchange of the notional value of the Term Currency of Selected Currency Pair p into a notional value denominated in the Index Base Currency |
| $\sum_{i=1}^{M}$ | = | Means the sum of the series of values achieved by calculating the formula following such symbol for each i from 1 through to M (inclusive), such that, for example: $\sum_{i=1}^{M}(i+y)$ = [(1 + y) + (2 + y) + (3 + y)…… (M + y)] |
| $\lvert\ \rvert$ | = | The modulus, showing the magnitude of a number without regard to its sign |

# Part D: Data

# Data

**(As at the Index Start Date)**

The Index shall operate with reference to an Eligible Universe of Strategies. This Part D sets out a date which identifies each Strategy to be read and construed with this Strategy Methodology, the potential Currency Pairs notionally traded by each such Strategy. Certain elections and inputs necessary to the calculation, valuation and adjustment of the Index are set out in the applicable Miscellaneous Provisions Document referenced in Part B (*Key Information*). The rules for determining the Percentage Weights of the Strategies which underlie the Index are set out in paragraph 3.5 (*Determining the Percentage Weight of each Strategy*) of Part C (*Calculation of the Index Level*).

## 1. Eligible Universe

| i | $Strategy_i$ | Date of Strategy | Number of Selected Currency Pairs[1] |
|---|---|---|---|
| 1 | Ranked State Contingent Carry Strategy | 26 July 2012 | 3 |
| 2 | Emerging Market Long and Short Carry Strategy | 19 July 2012 | Up to 12 |
| 3 | Emerging Market CDS Carry Strategy | 17 July 2012 | 10 |
| 4 | Ranked FIRST Strategy | 30 July 2012 | 9 |
| 5 | Ranked SECOND Strategy | 01 August 2012 | 9 |

## 2. Index Calculation Parameters

| | |
|---|---|
| **Maximum Percentage Weight:** | A value equal to the division of: i) 2 by ii) M, expressed as a percentage, where M is a value equal to the number of Strategies in the Eligible Universe. |
| **Volatility Target:** | 7 per cent. |
| **Drawdown Trigger:** | 7 per cent. |
| **Exposure Reduction Multiplier** | 0.25 |
| **Rebalancing Day:** | Means such day that falls on the same day as the Index Month End. |

## 3. Forward Fixing Rate and Rebalancing Spread Table

| i | Forward $Contract_i$ (and Currency Pair referenced) | Notional Execution Time [2] | Source for Forward Fixing Rate | Rebalancing $Spread_i$ |
|---|---|---|---|---|
| 1 | **AUDUSD** | 4:00 p.m. | FXBE | 0.0001 |
| 2 | **EURUSD** | 4:00 p.m. | FXBE | 0.0001 |
| 3 | **GBPUSD** | 4:00 p.m. | FXBE | 0.0001 |
| 4 | **NZDUSD** | 4:00 p.m. | FXBE | 0.0001 |
| 5 | **USDCAD** | 4:00 p.m. | FXBE | 0.0001 |
| 6 | **USDCHF** | 4:00 p.m. | FXBE | 0.0001 |
| 7 | **USDJPY** | 4:00 p.m. | FXBE | 0.01 |
| 8 | **USDNOK** | 4:00 p.m. | FXBE | 0.0006 |
| 9 | **USDSEK** | 4:00 p.m. | FXBE | 0.0006 |
| 10 | **USDBRL** | 1:00 p.m. | CitiFX | 0.0007 |
| 11 | **USDCLP** | 2:15 p.m. | CitiFX | 0.15 |
| 12 | **USDCOP** | 2:15 p.m. | CitiFX | 0.8 |
| 13 | **USDCZK** | 4:00 p.m. | FXBE | 0.013 |
| 14 | **USDHUF** | 4:00 p.m. | FXBE | 0.15 |
| 15 | **USDIDR** | 12:30 p.m. | CitiFX | 4 |
| 16 | **USDILS** | 4:00 p.m. | FXBE | 0.0028 |
| 17 | **USDINR** | 12:30 p.m. | CitiFX | 0.015 |
| 18 | **USDKRW** | 12:30 p.m. | CitiFX | 0.5 |

[1] Refers to the number of Selected Currency Pairs in each Strategy for which a Strategy Exposure is determined from time to time in accordance with the applicable Strategy Methodology.
[2] All Notional Execution Times expressed in London time.

| i | Forward Contract$_i$ (and Currency Pair referenced) | Notional Execution Time [2] | Source for Forward Fixing Rate | Rebalancing Spread$_i$ |
|---|---|---|---|---|
| 19 | **USDMXN** | 4:00 p.m. | FXBE | 0.01 |
| 20 | **USDPHP** | 12:30 p.m. | CitiFX | 0.015 |
| 21 | **USDPLN** | 4:00 p.m. | FXBE | 0.0025 |
| 22 | **USDRON** | 4:00 p.m. | FXBE | 0.0025 |
| 23 | **USDTHB** | 4:00 p.m. | FXBE | 0.04 |
| 24 | **USDTRY** | 4:00 p.m. | FXBE | 0.0013 |
| 25 | **USDZAR** | 4:00 p.m. | FXBE | 0.006 |

**Observation Basis of Forward Fixing Rate:**

a. Where "**FXBE**" is the specified as the relevant source for determining the Forward Fixing Rate, the Index Calculation Agent shall determine the relevant Forward Fixing Rate as the mid-rate observed on Bloomberg Screen Page FXBE <GO> as of the applicable Notional Execution Time in relation to the relevant Currency Pair referenced by Forward Contract i.

b. Where "**CitiFX**" is expressed as the relevant source for determining the Forward Fixing Rate, the Index Calculation Agent shall determine the relevant Forward Fixing Rate by reference to Citi Official Trade Prices as of the applicable Notional Execution Time in relation to the relevant Currency Pair referenced by Forward Contract i.

# Part E: Specific Risks

# Specific Risks

## GENERAL RISKS RELATING TO THE INDEX

The Index Level may go down as well as up, depending on the performance of the Forward Contracts and the performance of each Strategy specified in the Eligible Universe of the Index. The future performance of the Index cannot be predicted based on any backtested or actual historical performance of the Index. The Strategies (or Strategy) that the Index has been developed to reflect may not be successful, and other strategies or methodologies using equivalent Forward Contracts may perform better than the Index.

The Index Level represents the aggregate notional value of the Forward Contracts which constitute the Notional Portfolio from time to time. The Index has been developed to be "investable", but the methodology set out in the Index Conditions is quantitative, which means that the Index Level is determined according to the rules and the processes set out in the Index Conditions on a purely notional basis, without reference to any actual investment in the Index or any of its Forward Contracts. The result of any such actual investment may be different to the performance of the Index. In particular, any notional fees or costs deducted in the calculation of the Index Level, and any proportionate amount included in the Index Level of any payment in respect of any Forward Contract, may be different from those arising in respect of any actual investment in any Forward Contract or any combination of Forward Contracts.
Even if one or more Strategies results in positive returns, these returns may be offset, in whole or in part, or more than offset by negative returns generated by other Strategies. Because the Strategies will not be weighted equally, if a Strategy that is weighted more heavily than other Strategies experiences negative returns, these negative returns will have a significant disproportionate impact on the performance of the Index as a whole.

## RISKS RELATING TO FOREIGN EXCHANGE EXPOSURE

Prospective investors in an Index Linked Product linked to the Index should be familiar with currency exchange markets generally.

Foreign exchange rates may be volatile and are influenced by many factors. Foreign exchange rates may vary considerably over the term of an instrument linked to the Index. Foreign exchange rates are influenced by supply and demand, which in turn are influenced by existing and expected rates of inflation, existing and expected interest rate levels, the balance of payments between the relevant countries and government surpluses or deficits in the relevant countries, among other factors. Foreign exchange rates may be especially volatile during times of financial turmoil, as capital can flow very quickly out of regions that are perceived to be impacted disproportionately by such turmoil. The profit or loss in Forward Contracts notionally executed by the Index from time to time will be affected not only by changes in exchange rates between the relevant currency pairings, but also by changes in applicable exchange rates where there is a need to convert from the currency denomination of the Forward Contract to another currency.

Foreign currencies represent the legal tender of one or more foreign nations and normally are not linked to any intrinsically valuable commodity (such as precious metals). Any transaction involving foreign currencies, including instruments linked to indices based on OTC foreign currency contracts, involves risks not common to investments denominated entirely in a person's domestic currency. Such enhanced risks include (but are not limited to) the risks of political or economic policy changes in a foreign nation, which may substantially and permanently alter the conditions, terms, marketability or price of a foreign currency. For example, some governments intervene in markets to affect the values of their currencies, which may have an impact on the performance of the Index.

Foreign currency markets are subject to periodic disruptions and distortions due to many factors, including new laws and regulations and the participation of speculators and governments in the markets. These circumstances could affect exchange rates and, consequently, the value of the Index. These economic and political factors are independent of other market forces of supply and demand.

**Therefore, Index Linked Products are appropriate only for persons who understand and are willing and financially able to assume the economic, legal and other risks involved in foreign currency-linked transactions (including, but not limited to, the risks noted above).**

## CONFLICTS OF INTEREST

Citi entities perform various roles in connection with the Index and Index Linked Products, and conflicts of interest may arise for any such entity as a consequence of any role it performs in connection with the Index or any Index Linked Product or as a consequence of its activities more generally. For example, Citi or its Affiliates or their respective personnel may take positions in foreign currency contracts or publish research reports that are inconsistent with the notional positions reflected in the Index or with any statements or conclusions in any Index Document.

During the normal course of their business, the Index Sponsor, the Index Calculation Agent, any of their respective Affiliates, directors, officers, employees, representatives, delegates and agents (each, for the purposes of this paragraph, a "**Relevant Person**") may enter into, promote, offer or sell securities or contracts (whether or not structured) linked to the Index and/or any Strategy. Any Relevant Person may at any time (a) have long or short principal positions or actively trade (whether or not through making markets to its clients) positions in or relating to the Index or any Strategy; (b) invest in or engage in transactions with or on behalf of other persons relating to the Index and/or any Strategy; (c) undertake hedging transactions (for the purposes of any security or contract) which may adversely affect the level, price or rate or other factor underlying the Index and/or any Strategy; or (d) publish research in respect of any Index or Strategy. Such activity may or may not affect the Index Level, but potential investors and counterparties should be aware that a conflict of interest may arise when a person acts in more than one capacity, and such conflict of interest may affect (whether in a positive manner or a negative manner) the Index Level.

## CERTAIN INPUTS TO THE INDEX ARE DETERMINED BY CITI AND NOT PUBLICLY AVAILABLE

Certain rates, levels and prices applied in the calculation of the Index are expressed to be observed with reference to the equivalent rates, levels and prices that Citi would itself use in the ordinary course of its business as a dealer to make a market in certain specified financial instruments and for the purpose of marking its own audited books and records. Some of these rates, levels and prices may only be published on sources that are not publicly available.
For example, certain rates used to determine: i) the price at which Forward Contracts are notionally executed and ii) the prevailing value of each Forward Contract in the Notional Portfolio are both determined by Citi and published only, from time to time, on Citi Velocity, a proprietary electronic platform accessible only to clients of Citi.

## NOTIONAL EXPOSURE

The Index creates a notional exposure to Forward Contracts and such notional exposure will only exist in the books and records of the Index Sponsor and the Index Calculation Agent.

(a) No rights

Investors in Index Linked Products (a) have no legal or beneficial ownership interest in any Forward Contract and therefore have no recourse to any Forward Contract; (b) have no right to take delivery of any Forward Contract; (c) have no right to receive any payments or amounts with respect to any Forward Contract.

(b) No offer

Nothing in any Index Document constitutes an offer to buy or to sell any Forward Contract or any other asset, commodity, contract or security.

## NO INVESTIGATION

Neither the Index Sponsor nor the Index Calculation Agent has made or will make any investigation or enquiry with respect to any Forward Contract, including with respect to any publicly-available information that is disclosed in the applicable Index Methodology with respect to any Forward Contract. Consequently

there can be no assurance that all events have been disclosed which would affect the performance of the Index or the value of any Index Linked Product.

**USE OF LEVERAGE**

The Index provides leveraged exposure from time to time on each Forward Contract notionally executed pursuant to the Index Conditions. The use of leverage is intended to target the volatility of returns of the Index. As a result, the overall degree of leverage employed by the Index at any time is a function of the Exposure determined from time to time pursuant to the Index Methodology. However, the leverage of the Index expressed as the quotient of the aggregate notional value of all Forward Contracts notionally executed from time to time in respect of all Strategies constituting the Index and the Total Notional Amount of such Index may exceed the degree of leverage indicated by the level of the Exposure. The use of leverage will magnify gains and/or losses attributable to the fluctuation in notional value of the Forward Contracts and as such, will have a direct and significant impact on the performance of the Index.

**WEIGHTING OF STRATEGIES EXCEEDING MAXIMUM MAY REMAIN UNALLOCATED**

The Index determines the Percentage Weight of each Strategy in the Eligible Universe on a monthly basis such that the volatility contribution of each Strategy to the overall volatility of the Index is equalized. In addition, the Index Methodology stipulates that each Percentage Weight so determined in relation to each Strategy on a monthly basis does not exceed a Maximum Percentage Weight. Any Percentage Weight of any Strategy determined in excess of this Maximum Percentage Weight is not subsequently reallocated to the remaining Strategies. Everything being equal, this will lead to less notional exposure to the Forward Contracts tracked by the Index than if the Percentage Weight determined in respect of each Strategy according to the Index Methodology remained unencumbered by such limits.

**EFFECT OF NOTIONAL COSTS**

The Index Level may include a deduction of notional costs (which may be referred to as a notional cost, charge, spread or similar term), as described in the applicable Index Methodology. Any such deduction of notional costs will result in the Index underperforming a hypothetical investment portfolio from which no such deduction is made.

**PROCESS FOLLOWING THE OCCURRENCE OF A DISRUPTION EVENT OR ADJUSTMENT EVENT**

Following the occurrence of a Disruption Event or Adjustment Event as defined in the applicable Miscellaneous Provisions Document, the Index Sponsor and/or the Index Calculation Agent (as the case may be) will attempt to adjust or modify the Index Methodology and/or the applicable Strategy Methodology in accordance with the provisions of such Miscellaneous Provisions Document to account for the economic effect on the Index of such Disruption Event or Adjustment Event.

The adjustments and/or modifications specified therein may have unforeseen adverse effects on the Index, including, without limitation, the discontinuation and cancellation of the Index. Assumptions as to the inclusion in the Index of a particular Strategy or Currency Pair will no longer be valid if that Strategy is removed from the Index or if that Currency Pair is removed from the Currency Pair Universe of each Strategy, whether temporarily or permanently.

Unless otherwise stated, the Index Sponsor has no obligation to inform any person of the result of any action taken on the occurrence of such events.

The occurrence or existence of Disrupted Days may also result in the calculation, publication and dissemination of the Index being postponed to a later time than as provided in the Index Conditions or as is customary of the Index.

The terms and conditions of any Index Linked Product may contain provisions as to the consequences of any adjustment or modification pursuant to the occurrence of a Disruption Event or Adjustment Event.

Any such adjustment, modification or discontinuation and cancellation of the Index may (depending on the terms and conditions of such Index Linked Product) result in the early termination of such Index Linked Product and the payment of an amount to reflect the valuation of such Index Linked Product at the time of such early termination. Depending on the terms and conditions of such Index Linked Product, an investor may receive back on such early termination less than the amount of the original investment.

## EXERCISE OF DISCRETION BY INDEX SPONSOR AND INDEX CALCULATION AGENT

The calculation of the Index confers on the Index Sponsor and the Index Calculation Agent a degree of discretion in making certain determinations and calculations, particularly in connection with the occurrence of Disruption Events and/or Adjustment Events as set out in the Miscellaneous Provisions Document. Although each of the Index Sponsor and the Index Calculation Agent will act in good faith and in a commercially reasonable manner, the exercise of any such discretion may have an adverse effect on the Index Level and therefore may have an adverse effect on the value of any Index Linked Product.

## PERFORMANCE RISK

The Index may underperform other indices referencing the same Forward Contracts, where those other indices employ, among other things, a different weighting scheme. The methodology does not seek to outperform the Eligible Universe or any other foreign exchange benchmark in absolute terms.

## INDEX METHODOLOGY LIMITATIONS

The performance of the Index is dependent on the pre-defined rules-based methodology set out in the Index Conditions. There is no assurance that other methodologies for obtaining economic exposure to equivalent Forward Contracts would not result in better performance than the Index.

## FIXED ALGORITHMIC MODEL PARAMETERS

The Index uses a rules-based methodology which contains fixed parameters. For example, (i) the Drawdown Trigger and the Volatility Target are both fixed at the value expressed in the Index Methodology and (ii) the methodology expressed for determining the Percentage Weight of each Strategy assesses the volatility of the Index within a six month observation period. The Index Methodology assumes that these observation periods and other fixed parameters are reasonable in the context of the Index, however, alternative parameters could have a positive effect on the performance of the Index. For instance, a higher Volatility Target may improve the upside return on the same Notional Portfolio of Forward Contracts.

## LIMITED OPERATING HISTORY

The Index was launched by the Index Sponsor as of the specified Index Launch Date and has been calculated by the Index Calculation Agent for the period from the specified Index Start Date. Any back-testing or similar performance analysis performed by any person in respect of the Index must be considered illustrative only and may be based on estimates or assumptions not used by the Index Calculation Agent when determining the Index Level.

**This list of risk factors is not intended to be exhaustive. All persons should seek such advice as they consider necessary from their professional advisors, investment, legal, tax or otherwise, without reliance on the Index Sponsor, the Index Calculation Agent, any of their respective Affiliates or any of their respective directors, officers, employees, representatives, delegates and agents.**

**Please also refer to the terms and conditions of such Index Linked Product. In the case of a prospectus or offering document which contains provisions under the heading "Risk Factors", "Investment Considerations" or the equivalent, please refer to these provisions for a discussion of these consequences.**

# Ranked State Contingent Carry Strategy

*The following Overview of the Strategy is provided for ease of reference only and does not form part of the Strategy Methodology which is set out below. Capitalised terms used in this Overview have the meanings given to them in the Strategy Methodology or the Master Definitions.*

**Overview:**

The Strategy is a rules-based proprietary trading strategy developed by the Index Sponsor which aims to achieve notional capital appreciation through dynamically adjusting notional positions in FX Forward Contracts. On a monthly basis, the Strategy notionally constructs three Currency Pairs (each a "**Selected Currency Pair**") from a set of 10 specified currencies which have the largest absolute "carry" as implied by the difference between the one month interest rate then prevailing in relation to the Base Currency and the Term Currency of such Selected Currency Pair.

The Strategy provides a notional exposure to each of the three Selected Currency Pairs from time to time, save that the exposure to any Selected Currency Pair will be reduced to zero in circumstances where the implied volatility of FX options on such Currency Pair is relatively high as compared to its recent history, all as more fully described below.

## Strategy Methodology

The following is the Strategy Methodology in relation to the Ranked State Contingent Carry Strategy (the "**Strategy**").

**1. Date**

26 July 2012

**2. Currency Pair Universe:**

USDGBP USDAUD USDEUR USDNZD USDSEK
USDCAD USDCHF USDJPY USDNOK

(each, a "**Currency Pair**" in the "**Currency Pair Universe**")

**3. Currency Pair Selection:**

3.1 The Strategy uses a two-step methodology to determine notional exposure to three Selected Currency Pairs. First, the Index Calculation Agent determines three Selected Currency Pairs pursuant to this paragraph 3 (*Currency Pair Selection*) and second, expresses such notional exposure in relation to each Selected Currency Pair as notional trading positions in Forward Contracts referencing specific Currency Pair(s) from the Currency Pair Universe pursuant to paragraph 4 (*Strategy Exposure*).

3.2 As of the Strategy Fixing Time on the Index Start Date and each Index Month End, the Index Calculation Agent shall determine the G10 Currency Yield in relation to the Term Currency of each Currency Pair, using the One Month Forward Rate in respect of such Currency Pair and the prevailing value of USD LIBOR as a reference for such calculation in accordance with the formula set out in paragraph 7.5.

3.3 Each G10 Currency Yield determined and the prevailing value of USD LIBOR observed produces a set of 10 values which are used by the Index Calculation Agent to assign a ranking yield (each a "**Ranking Yield**") to each of the 9 Term Currencies and for the US Dollar. For these purposes and the avoidance of doubt: i) each G10 Currency Yield value shall represent the Ranking Yield assigned to the Term Currency for which G10

Currency Yield is being determined and ii) the USD LIBOR value shall represent the Ranking Yield assigned to the US Dollar.

3.4 The Ranking Yields are then arranged in descending order such that the highest Ranking Yield is ranked first. If two or more Ranking Yields are equal, then those Ranking Yields will be ranked in accordance with their respective values prevailing as of the Strategy Fixing Time on the first immediately preceding Index Month End (or the Index Start Date as the case may be) when those values were unequal.

3.5 The Index Calculation Agent shall then determine 3 "**Selected Currency Pairs**" by selecting a Base Currency and Term Currency according to the following criteria:

| **Selected Currency Pairs** | | |
|---|---|---|
| | **Base Currency** | **Term Currency** |
| i) | Currency assigned **highest** Ranking Yield | Currency assigned **lowest** Ranking Yield |
| ii) | Currency assigned **second highest** Ranking Yield | Currency assigned **second lowest** Ranking Yield |
| iii) | Currency assigned **third highest** Ranking Yield | Currency assigned **third lowest** Ranking Yield |

3.6 The results of each determination pursuant to paragraph 3.5 are fixed up to, but excluding, the Strategy Fixing Time as of the following Index Month End, when the Strategy will again determine three Selected Currency Pairs following the methodology set out above.

**4. Strategy Exposure:**

4.1 Following identification of the Selected Currency Pairs, the Index Calculation Agent shall, as of the Strategy Fixing Time on each Index Business Day up to, but excluding, the Strategy Fixing Time as of the immediately following Index Month End: i) determine the Implied FX Option ATM Forward Volatility in relation to each such Selected Currency Pair and ii) compare each such determination against the relevant Critical Percentile Value as defined below.

4.2 A Selected Currency Pair is in a "**High Volatility Cut Out Mode**" when the Implied FX Option ATM Forward Volatility of such Selected Currency Pair is **higher than** the relevant Critical Percentile Value.

A Selected Currency Pair is in a "**Low Volatility Mode**" when the Implied FX Option ATM Forward Volatility of such Selected Currency Pair is **lower than or equal to** the relevant Critical Percentile Value.

4.3 Subject to any adjustments and market disruptions set out in the Miscellaneous Provisions Document, the Index Calculation Agent shall, as of each relevant Index Business Day, determine whether each Selected Currency Pair is in a High Volatility Cut Out Mode or a Low Volatility Mode.

4.4(i) Where a Selected Currency Pair p has been algorithmically identified by the Index Calculation Agent as being in a Low Volatility Mode as of any Index Business Day t, the Index Calculation Agent shall express the notional exposure to that Selected Currency Pair p as a single, or where the

Selected Currency Pair p is a Cross Pair a combination of two, Strategy Exposure(s) to Currency Pairs from the Currency Pair Universe in the following three steps.

(ii) First, the Index Calculation Agent shall determine the **number** of Strategy Exposures to be determined in relation to such Selected Currency Pair p, depending on the Pair Type of such Selected Currency Pair p, according to the following criteria:

| | **Pair Type** | **Strategy Exposure(s) to be determined** |
|---|---|---|
| a) | Cross Pair | One Strategy Exposure to be determined in relation to **the Term Leg** of such Cross Pair. |
| | | One Strategy Exposure to be determined in relation to **the Base Leg** of such Cross Pair. |
| b) | Identical Pair | One Strategy Exposure to be determined in relation to such Identical Pair. |
| c) | Inverse Pair | One Strategy Exposure to be determined in relation to such Inverse Pair. |

(iii) Second, the Index Calculation Agent shall determine the "**Trade Signal**" of each Strategy Exposure required to be determined in relation to Selected Currency Pair p, depending on the Pair Type of Selected Currency Pair p, in accordance with the following criteria:

| | **Pair Type** | **Strategy Exposure$_p$** | **Trade Signal$_p$** |
|---|---|---|---|
| a) | Cross Pair | Strategy Exposure p in relation to Base Leg | **-1** |
| | | Strategy Exposure p in relation to Term Leg | **+1** |
| b) | Identical Pair | Strategy Exposure in relation to Identical Pair | **+1** |
| c) | Inverse Pair | Strategy Exposure in relation to Inverse Pair | **-1** |

(iv) Third, the Strategy Exposure or two Strategy Exposures where Selected Currency Pair p is a Cross Pair, is determined in each case as of the Strategy Fixing Time on Index Business Day t as the product of the applicable Trade Signal p and the Currency Notional Amount as follows:

$$\text{StrategyExposure}_{p,t} = \text{TradeSignal}_{p,t} \times \text{CurrencyNotionalAmount}_t$$

where:

| | | |
|---|---|---|
| Strategy Exposure$_{p,t}$ | = | The Strategy Exposure determined in relation to Selected Currency Pair p as of each Strategy Fixing Time on each |

Index Business Day t

| | | |
|---|---|---|
| Currency Notional Amount$_t$ | = | Means the Currency Notional Amount as of Index Business Day t ("**CNA**"), determined in accordance with the following formula: $CNA_t = \frac{StrategyNotionalAmount_t}{3}$ where: Strategy Notional Amount$_t$ = Means the Strategy Notional Amount as of Index Business Day t, with the meaning given to it in the Master Definitions. |
| Trade Signal$_p$ | = | Means the Trade Signal determined in relation to Selected Currency Pair p pursuant to paragraph 4.4(iii), depending on the Pair Type of such Selected Currency Pair p. |

4.5 For the avoidance of doubt pursuant to applying the three step process set out in paragraph 4.4, the Strategy Exposure as of that Index Business Day t in relation to each Selected Currency Pair p shall be expressed to be **Long** the Base Currency and **Short** the Term Currency of:

(i) where Selected Currency Pair p is a Cross Pair, a notional Forward Contract referencing the Base Leg in the Currency Notional Amount and an additional notional Forward Contract referencing the Term Leg in the Currency Notional Amount;

(ii) where Selected Currency Pair p is an Identical Pair, a notional Forward Contract referencing such Identical Pair in the Currency Notional Amount; or

(iii) where Selected Currency Pair p is an Inverse Pair, a notional Forward Contract referencing such Inverse Pair in the Currency Notional Amount.

4.6 Where a Selected Currency Pair has been algorithmically identified by the Index Calculation Agent as being in a High Volatility Cut Out Mode as of any Index Business Day, the Strategy Exposure in relation to that Selected Currency Pair for such Index Business Day shall be **zero**.

4.7 Pursuant to the methodology set out above, a Strategy Exposure shall be determined in relation to each Currency Pair as of the Strategy Fixing Time on each Index Business Day up to, but excluding, the following Index Month End.

4.8 In relation to each Index Business Day which falls on an Index Month End, the Index Calculation Agent shall first identify the Selected Currency Pairs pursuant to paragraph 3 (*Currency Pair Selection*) before determining the Strategy Exposure in relation to the relevant Currency Pairs with reference to the Selected Currency Pairs so identified. For the avoidance of doubt, Selected Currency Pairs which were previously determined as of the

immediately preceding Index Month End shall be ignored for the purposes of calculating a Strategy Exposure as of any Index Business Day which falls on an Index Month End.

**5. Miscellaneous Provisions:**

This Strategy and the Strategy Methodology is subject to the Miscellaneous Provisions Document dated 7 September 2012 as amended or updated from time to time.

**6. Defined Terms:**

Terms used and defined in this Strategy Methodology shall have the meaning given to them in, and are unique to, this Strategy Methodology. Terms used but not defined in this Strategy Methodology shall have the meaning given to them in the Master Definitions.

"**Base Currency Yield**" means in relation to the Base Currency of a Selected Currency Pair, either: i) an amount equal to the G10 Currency Yield determined in relation to such Base Currency as of the Strategy Fixing Time on such Data Observation Day with reference to paragraph 7.5, or ii) in the case where the Base Currency of such Selected Currency Pair is the US Dollar, an amount equal to USD LIBOR as of that Data Observation Day.

"**Base Leg**" means, in relation to any Selected Currency Pair that is a Cross Pair, the Currency Pair in the Currency Pair Universe with a Term Currency that is the same currency as the Cross Base Currency of such Cross Pair.

"**Citi Official Price**" means, in respect of any financial instrument, the mid price for such instrument that Citi would use in the ordinary course of its business as a dealer to make a market in such instrument and for the purpose of marking its own audited books and records as published from time to time on Citi Velocity or any successor or alternative page. Citi Official Prices are calculated by Citi according to widely-recognised mathematical principles for pricing the relevant financial instruments, using market standard inputs including (i) prevailing interest rates for relevant currencies and periods (as published by recognised financial information providers such as Reuters and/or Bloomberg) and (ii) forward points (as determined by Citi in a commercially reasonable manner, by reference to the prices of exchange-traded and/or over-the-counter instruments)

"**Critical Percentile Value**" means, in respect of a Selected Currency Pair and as of any Index Business Day, the value which represents:

i) the $70^{th}$ percentile of the Currency Pair Volatility Distribution, if the 22 Day Selected Currency Pair Volatility determined with reference to paragraph 7.1 in relation to such Selected Currency Pair as of such Index Business Day is **higher than or equal to** its 126 Day Selected Currency Pair Volatility determined with reference to paragraph 7.2; or

ii) the $90^{th}$ percentile of the Currency Pair Volatility Distribution, if the 22 Day Selected Currency Pair Volatility in relation to such Selected Currency Pair as of such Index Business Day is **lower than** its 126 Day Selected Currency Pair Volatility.

"**Cross Base Currency**" means, in respect of a particular Cross Pair, the Base Currency of that Cross Pair.

"**Cross Pair**" means any Selected Currency Pair which does not contain US Dollar as either its Base Currency or Term Currency.

"**Cross Term Currency**" means, in respect of a particular Cross Pair, the Term Currency of that Cross Pair.

"**Currency Pair Volatility Distribution**" means, in relation to a Selected Currency Pair and as of any day, a set of 126 discrete values where each such value represents the Implied FX Option ATM Forward Volatility of such Selected Currency Pair observed as of the Strategy Fixing Time on each Data Observation Day during the period of 126 Data Observation Days prior to, and including, the date of observation.

"**Identical Pair**" means, in relation to a Selected Currency Pair, the Currency Pair in the Currency Pair Universe identical to such Selected Currency Pair.

"**Implied FX Option ATM Forward Volatility**" means, in respect of a Currency Pair, a value representing the implied volatility of an at-the-money FX option assuming put-call parity in respect of such Currency Pair, with an expiry date falling one month following the day on which the Implied FX Option ATM Forward Volatility is being determined. Such Implied FX Option ATM Forward Volatility in relation to such an at-the-money FX option in respect of such Currency Pair shall be determined with reference to the Citi Official Price.

"**Inverse Pair**" means, in relation to a Selected Currency Pair, the Currency Pair in the Currency Pair Universe which is the inverse pair of such Selected Currency Pair.

"**Master Definitions**" means the document dated 12 September 2012 as the same may be amended and/or restated from time to time.

"**Pair Type**" means, in relation to a Selected Currency Pair, whether such Selected Currency Pair is a Cross Pair, an Identical Pair or an Inverse Pair.

"**Strategy Fixing Time**" means, in relation to any comparison, ranking, calculation or determination to be made in connection with this Strategy Methodology, 12:00 p.m. London time as of the applicable date.

"**Selected Currency Pair"** means a notional currency pair which has been algorithmically selected pursuant to paragraph 3 (*Currency Pair Selection*).

"**Term Currency Yield**" means in relation to the Term Currency of a Selected Currency Pair, either: i) an amount equal to the G10 Currency Yield determined in relation to such Term Currency as of the Strategy Fixing Time on such Data Observation Day with reference to paragraph 7.5, or ii) in the case where the Term Currency of such Selected Currency Pair is the US Dollar, an amount equal to USD LIBOR as of that Data Observation Day.

"**Term Leg**" means, in relation to any Selected Currency Pair that is a Cross Pair, the Currency Pair in the Currency Pair Universe with the same Term Currency as the Cross Term Currency of such Cross Pair.

"**Trade Signal**" means a positive or negative value determined with reference to the Pair Type of a Selected Currency Pair in accordance with paragraph 4.4(iii).

"**USD LIBOR**" means the London Interbank Offered Rate observed on Reuters page USD1MFSR= or any successor page from time to time.

**7. Calculation Parameters:**

7.1 "**22 Day Selected Currency Pair Volatility**" means, in respect of any Selected Currency Pair p as of the Index Business Day t for which it is to be determined, the standard deviation of the Selected Currency Pair Spot Returns achieved as of each Strategy Fixing Time on each Data Observation Day in a prior period of 22 Data Observation Days prior to, and including, the Strategy Fixing Time on the Data Observation Day which falls on the same date as such Index Business Day t, calculated in accordance with the following formula:

$$22\,\text{Day Volatility}_{p,t} = \sqrt{\left[\frac{\sum_{t=1}^{n}\left(\text{Selected CP Spot Return}_{p,t} - \text{Average Return}_{p,t}\right)^2}{n-1}\right]}$$

where:

| | | |
|---|---|---|
| 22 Day Volatility$_{p,t}$ | = | The 22 Day Selected Currency Pair Volatility in respect of Selected Currency Pair p determined as of each Strategy Fixing Time on each Index Business Day t. |
| $\sum_{t=1}^{n}$ | = | Means the sum of the series of values achieved by calculating the formula following such symbol for each t from 1 through to, and including, n, such that, for example: $\sum_{t=1}^{n}(i+y) = [(1+y)+(2+y)+\ldots.(n+y)]$ |
| Selected CP Spot Return$_{p,t}$ | = | The Selected Currency Pair Spot Return of Selected Currency Pair p as of each Data Observation Day in a prior period of 22 Data Observation Days up to, and including, the Data Observation Day which falls on the same date as Index Business Day t determined with reference to paragraph 7.8. |
| Average Return$_{p,t}$ | = | The Average Return of Selected Currency Pair p as of each Data Observation Day in a prior period of 22 Data Observation Days up to, and including, the Data Observation Day which falls on the same date as Index Business Day t determined with reference to paragraph 7.3. |
| n | = | 22, being the number of daily observations of the Selected Currency Pair Spot Return required for the determination of the 22 Day Selected Currency Pair Volatility. |

7.2 "**126 Day Selected Currency Pair Volatility**" means, in respect of any Selected Currency Pair p as of the Index Business Day t for which it is to be determined, the standard deviation of the Selected Currency Pair Spot Returns achieved as of each Strategy Fixing Time on each Data Observation Day in a prior period of 126 Data Observation Days prior to, and including, the Strategy Fixing Time on the Data Observation Date

which falls on the same date as such Index Business Day t, calculated in accordance with the following formula:

$$126\text{ Day Volatility}_{p,t} = \sqrt{\frac{\sum_{t=1}^{n}\left(\text{Selected CP Spot Return}_{p,t} - \text{Average Return}_{p,t}\right)^2}{n-1}}$$

where:

| | | |
|---|---|---|
| 126 Day Volatility$_{p,t}$ | = | The 126 Day Selected Currency Pair Volatility in respect of Selected Currency Pair p determined as of each Strategy Fixing Time on each Index Business Day t. |
| $\sum_{t=1}^{n}$ | = | Means the sum of the series of values achieved by calculating the formula following such symbol for each t from 1 through to, and including, n, such that, for example: $\sum_{t=1}^{n}(i+y) = [(1+y) + (2+y) + \ldots (n+y)]$ |
| Selected CP Spot Return$_{p,t}$ | = | The Selected Currency Pair Spot Return of Selected Currency Pair p as of each Data Observation Day in a prior period of 126 Data Observation Days up to, and including, the Data Observation Day which falls on the same date as Index Business Day t determined with reference to paragraph 7.8. |
| Average Return$_{p,t}$ | = | The Average Return of Selected Currency Pair p as of each Data Observation Day in a prior period of 126 Data Observation Days up to, and including, the Data Observation Day which falls on the same date as Index Business Day t determined with reference to paragraph 7.3. |
| n | = | 126, being the number of daily observations of the Selected Currency Pair Spot Return required for the determination of the 126 Day Selected Currency Pair Volatility. |

7.3 "**Average Return**" means, in respect of any Selected Currency Pair p and determined as of any Index Business Day t in relation to the calculation of 22 Day Selected Currency Pair Volatility and 126 Day Selected Currency Pair Volatility, the arithmetic average of the Selected Currency Pair Spot Returns in a prior specified period of Data Observation Days up to, and including the Data Observation Day which falls on the same date as such Index Business Day t calculated in accordance with the following formula:

$$\text{Average Return}_{p,t} = \frac{\sum_{t=1}^{n} \text{Selected CP Spot Returns}_{p,t}}{n}$$

where:

| | | |
|---|---|---|
| Average Return$_{p,t}$ | = | Average Return in relation to any Selected Currency Pair p determined as of Index Business Day t. |
| $\sum_{t=1}^{n}$ | = | Means the sum of the series of values achieved by calculating the formula following such symbol for each t from 1 through to, and including, n, such that, for example: $\sum_{t=1}^{n}(i+y) = [(1+y)+(2+y)+\ldots.(n+y)]$ |
| Selected CP Spot Returns$_{p,t}$ | = | The Selected Currency Pair Spot Return in relation to Selected Currency Pair p as of each Data Observation Day in the period prior to Index Business Day t for which Average Return is being determined. |
| n | = | Either: i) 22, when Average Return is being determined in relation to 22 Day Selected Currency Pair Volatility or ii) 126, when Average Return is being determined in relation to 126 Day Selected Currency Pair Volatility. |

7.4 "**Carry Signal**" means in relation to each Selected Currency Pair p and as of the Strategy Fixing Time on each Data Observation Day t, a positive or negative value determined in accordance with the following algorithm by comparing the Base Currency Yield and the Term Currency Yield then prevailing:

$$\text{Carry Signal}_{p,t} = \begin{cases} 1, \text{if Base Currency Yield}_{p,t} > \text{Term Currency Yield}_{p,t} \\ -1, \text{otherwise} \end{cases}$$

where:

| | | |
|---|---|---|
| Carry Signal$_{p,t}$ | = | The Carry Signal in relation to Selected Currency Pair p as of the Strategy Fixing Time on each Data Observation Day t |
| Base Currency Yield$_{p,t}$ | = | Base Currency Yield in relation to Selected Currency Pair p as of the Strategy Fixing Time on Data Observation Day t |
| Term Currency Yield$_{p,t}$ | = | Term Currency Yield in relation to Selected Currency Pair p as of the Strategy Fixing Time on Data Observation Day t |

7.5 "**G10 Currency Yield**" means, as of each Data Observation Day t and in respect of the Term Currency of each Currency Pair i in relation to which G10 Currency Yield is being determined, the annualised yield (expressed as a percentage, which may be positive or negative) of such Term Currency which is calculated in accordance with the formula below:

$$\text{G10 Currency Yield}_{i,t} = 12 \times \left[ \frac{\text{1M USD Forward Rate}_{i,t}}{\text{USD Spot Rate}_{i,t}} \times \left( 1 + \frac{\text{USD LIBOR}_t}{12} \right) - 1 \right]$$

where:

| | | |
|---|---|---|
| G10 Currency $\text{Yield}_{i,t}$ | = | G10 Currency Yield in relation to the Term Currency of Currency Pair i as of Data Observation Day t |
| 1M USD Forward $\text{Rate}_{i,t}$ | = | One Month Forward Rate in relation to Currency Pair i as of the Strategy Fixing Time on Data Observation Day t determined with reference to paragraph 7.6 |
| USD Spot $\text{Rate}_{i,t}$ | = | Spot Rate in relation to Currency Pair i as of the Strategy Fixing Time on Data Observation Day t determined with reference to paragraph 7.9 |
| USD $\text{LIBOR}_t$ | = | USD LIBOR observed as of the Strategy Fixing Time on Data Observation Day t |

7.6i) "**One Month Forward Rate**" means, in relation to each Currency Pair i and as of the Strategy Fixing Time on each relevant Data Observation Day t, an amount equal to: i) the One Month Forward Points observed in respect of such Currency Pair i with reference to paragraph 7.7 plus ii) the Spot Rate observed in respect of such Currency Pair i with reference to paragraph 7.9, expressed in the number of units of the Term Currency which can be exchanged for one unit of the Base Currency calculated in accordance with the formula:

$$\text{One Month Forward Rate}_{i,t} = \text{One Month Forward Points}_{i,t} + \text{Spot Rate}_{i,t}$$

where:

| | | |
|---|---|---|
| One Month Forward $\text{Points}_{i,t}$ | = | The One Month Forward Points as of the Data Observation Day t in relation to such Currency Pair i, determined with reference to paragraph 7.7 |
| Spot $\text{Rate}_{i,t}$ | = | The Spot Rate as of the Index Business Day t in relation to such Currency Pair i, determined with reference to paragraph 7.9 |

ii) For the avoidance of doubt, where the One Month Forward Rate is being determined in relation to EURUSD, GBPUSD, AUDUSD and NZDUSD, the applicable One Month Forward Rate in relation to each of these Currency Pairs shall be determined by taking the inverse of the result obtained from applying the formula which determines the One Month Forward Rate set out above in paragraph 7.6i).

7.7i) "**One Month Forward Points**" means in relation to each Currency Pair i, the mid-rate specifying the number of units of the Term Currency which when added to the Spot Rate relating to such Currency Pair i, produces a rate at which such Term Currency can be exchanged for one unit of the Base Currency in one calendar month from the date on which such mid-rate is observed. The Index Calculation Agent shall observe the One Month Forward Points in relation to any Currency Pair i from the relevant Bloomberg screen page set out below:

| Currency Pair | Bloomberg Screen Page | Decimal Adjustment Factor |
|---|---|---|
| EURUSD | CITLEU1M <Index> | 0.0001 |
| USDJPY | CITLJY1M <Index> | 0.01 |
| GBPUSD | CITLBP1M <Index> | 0.0001 |
| USDCAD | CITLCD1M <Index> | 0.0001 |
| USDCHF | CITLSF1M <Index> | 0.0001 |
| AUDUSD | CITLAD1M <Index> | 0.0001 |
| USDNOK | CITLNK1M <Index> | 0.0001 |
| USDSEK | CITLSK1M <Index> | 0.0001 |
| NZDUSD | CITLND1M <Index> | 0.0001 |

ii) For the purposes of each relevant formula in this Strategy and the avoidance of doubt, each One Month Forward Points observed on the relevant Bloomberg Screen Page specified above shall be multiplied by the relevant Decimal Adjustment Factor specified above in relation to such One Month Forward Points before being applied to any such formula, calculation or determination.

7.8 "**Selected Currency Pair Spot Return**" means, in relation to each Selected Currency Pair p as of the Strategy Fixing Time on any Data Observation Day t, the spot returns of that Selected Currency Pair p, calculated in accordance with the formula below:

$$\text{Selected CP Spot Return}_{p,t} = \text{Carry Signal}_{p,t-1} \times \left(1 - \frac{\text{Spot Rate}_{p,t-1}}{\text{Spot Rate}_{p,t}}\right)$$

where:

| | | |
|---|---|---|
| Selected CP Spot Return$_{p,t}$ | = | The Selected Currency Pair Spot Return for Selected Currency Pair p as of the Strategy Fixing Time on a Data Observation Day t. |
| Carry Signal$_{p,t-1}$ | = | The Carry Signal as of the Strategy Fixing Time as of the Data Observation Day immediately preceding each Data Observation Day t determined with reference to paragraph 7.4. |

$\text{Spot Rate}_{p,t-1}$ = The Spot Rate as of the Data Observation Day prior to Data Observation Day t in relation to each Selected Currency Pair p, determined with reference to paragraph 7.9.

$\text{Spot Rate}_{p,t}$ = The Spot Rate as of Data Observation Day t in relation to each Selected Currency Pair p, determined with reference to paragraph 7.9.

7.9 "**Spot Rate**" means:

i) in relation to each Selected Currency Pair p which is a Currency Pair, the mid-rate observed by the Index Calculation Agent in relation to such Selected Currency Pair p from the relevant Bloomberg Screen Page below, specifying the number of units of the Term Currency which can be exchanged for one unit of the Base Currency:

| Currency Pair | Bloomberg Screen Page |
|---|---|
| EURUSD | CILDEUR <Index> |
| USDJPY | CILDJPY <Index> |
| GBPUSD | CILDGBP <Index> |
| USDCAD | CILDCAD <Index> |
| USDCHF | CILDCHF <Index> |
| AUDUSD | CILDAUD <Index> |
| USDNOK | CILDNOK <Index> |
| USDSEK | CILDSEK <Index> |
| NZDUSD | CILDNZD <Index> |

For the purposes of each relevant formula in this Strategy and the avoidance of doubt, the Spot Rate in relation to EURUSD, GBPUSD, AUDUSD and NZDUSD shall be expressed as the inverse of the mid-rate observed on the relevant Bloomberg Screen Page specified above.

ii) in relation to each Selected Currency Pair p which is a Cross Pair, its Spot Rate (the "**Cross Pair Spot Rate**") in each case is determined with reference to the Spot Rate observed according to paragraph 7.9i) above in relation to two different Currency Pairs as of that date and time of determination. For each Cross Pair, the Index Calculation Agent first identifies the relevant Term Leg and the Base Leg and the Cross Pair Spot Rate in relation to such Cross Pair is then calculated by dividing: i) the Spot Rate determined in relation to the Term Leg by ii) the Spot Rate determined in relation to the Base Leg in accordance with the following formula:

$$\text{CrossPair Spot Rate}_t = \frac{\text{Spot Rate}_{\text{Term Leg}}}{\text{Spot Rate}_{\text{Base Leg}}}$$

where:

| | | |
|---|---|---|
| Cross Pair Spot $Rate_{i,t}$ | = | The Cross Pair Spot Rate in relation to Selected Currency Pair p which is a Cross Pair. |
| $Spot\ Rate_{Term\ Leg}$ | = | The Spot Rate observed with reference to paragraph 7.9i) in relation to the Term Leg as of the same date and time on which the relevant Cross Pair Spot Rate is being determined. |
| $Spot\ Rate_{Base\ Leg}$ | = | The Spot Rate observed with reference to paragraph 7.9i) in relation to the Base Leg as of the same date and time on which the relevant Cross Pair Spot Rate is being determined. |

# Emerging Market Long and Short Carry Strategy

*The following Overview of the Strategy is provided for ease of reference only and does not form part of the Strategy Methodology which is set out below. Capitalised terms used in this Overview have the meanings given to them in the Strategy Methodology or the Master Definitions.*

**Overview:**

The Strategy is a rules-based proprietary trading strategy developed by the Index Sponsor which aims to achieve notional capital appreciation through dynamically adjusting notional positions in FX Forward Contracts. On a monthly basis, the Strategy identifies: i) 6 Currency Pairs from the Currency Pair Universe which have the largest "carry" and ii) 6 Currency Pairs from the Currency Pair Universe with the smallest "carry"; "carry" in each case, being implied by the difference between the one month interest rate then prevailing in relation to the US Dollar and the emerging market currency of such Currency Pair.

The Strategy provides a volatility weighted exposure to 12 Currency Pairs selected this way from time to time. Exposure to 6 Currency Pairs with the largest carry shall be long the emerging market currency of that Currency Pair and conversely, exposure to the 6 Currency Pairs with the smallest carry shall be short the emerging market currency of that Currency Pair. Exposure in relation to each Currency Pair is adjusted in each case by reference to the implied volatility of FX options on such Currency Pair in comparison with its recent volatility history, all as more fully described below.

## Strategy Methodology

The following is the Strategy Methodology in relation to the Emerging Market Long and Short Carry Strategy (the "**Strategy**").

**1. Date:** 19 July 2012

**2. Currency Pair Universe:**

| | | | | |
|---|---|---|---|---|
| USDIDR | USDINR | USDTHB | USDPHP | USDHUF |
| USDPLN | USDRON | USDCZK | USDTRY | USDZAR |
| USDILS | USDBRL | USDMXN | USDCLP | USDCOP |

(each a "**Currency Pair**" in the "**Currency Pair Universe**")

**3. Currency Pair Selection:**

3.1 As of 9:00 am London time on the Index Start Date and each Index Month End, the Index Calculation Agent shall determine the EM Currency Yield in relation to the EM Currency of each Currency Pair, using the One Month Forward Rate in respect of such Currency Pair and the prevailing value of USD LIBOR as a reference for such calculation in accordance with the formula set out in paragraph 7.2.

3.2 Such a determination provides a set of 15 values for EM Currency Yield. The Index Calculation Agent then identifies 6 Currency Pairs associated with the highest EM Currency Yield or "carry" and assigns them to the Long EM Basket. Similarly, the Strategy also identifies 6 Currency Pairs associated with the lowest EM Currency Yield and assigns them to the Short EM Basket.

3.3 The Currency Pairs assigned to either Basket are given a Basket Rank in descending order of their EM Currency Yield such that in each Basket, the Currency Pair with the highest EM Currency Yield in that Basket is assigned the highest number one rank and the Currency Pair with the lowest EM Currency Yield in that Basket is assigned the lowest number six rank.

3.4 If two or more Currency Pairs are associated with the same EM Currency Yield, then those Currency Pairs will be ranked in accordance with their respective EM Currency Yield prevailing as of the first immediately preceding Index Month End (or the Index Start Date as the case may be) when their EM Currency Yields were unequal.

3.5 These 12 Currency Pairs are deemed to be "**Selected Currency Pairs**" tracked by the Strategy and shall remain so up to, but excluding, 9:00a.m. London time following Index Month End, when the Index Calculation Agent shall again determine 12 Selected Currency Pairs before assigning 6 Selected Currency Pairs to the Long EM Basket and another 6 Selected Currency Pairs to the Short EM Basket following the methodology set out above.

**4. Strategy Exposure:**

4.1 Following identification of the Selected Currency Pairs and assignment of each Selected Currency Pair p to the Long EM Basket or the Short EM Basket with a Basket Rank, the Index Calculation Agent shall, as of the relevant Strategy Fixing Time on each Index Business Day t up to, but excluding, the relevant Strategy Fixing Time as of the immediately following Index Month End, determine a Strategy Exposure as of such Index Business Day t for each Selected Currency Pair p in the following four steps.

4.2 First, the Index Calculation Agent shall determine as of the relevant Strategy Fixing Time on such Index Business Day t and in relation to each Selected Currency Pair p: i) its Implied FX Option ATM Forward Volatility and ii) the relevant Currency Pair Volatility Distribution.

4.3 Second, the Index Calculation Agent shall then determine the Volatility Percentile Rank of each Selected Currency Pair p with reference to the formula set out in paragraph 7.9 by comparing: i) the Implied FX Option ATM Forward Volatility against ii) the Currency Pair Volatility Distribution, determined in each case in relation to such Selected Currency Pair p pursuant to paragraph 4.2.

4.4 Third, the Index Calculation Agent shall further determine the Strategy Exposure of each Selected Currency Pair p pursuant to the product of: i) its Multiplier, ii) a positive or negative value depending on the Basket to which it is assigned and iii) its Volatility Percentage Rank (or, as the case may be, a percentage value equal to 100% minus its Volatility Percentage Rank) in accordance with the following algorithm:

$$\text{Strategy Exposure}_{p,t} = \begin{cases} Mp \times (-1) \times (100\% - VPRp,t) \times CNAt, \text{if } SCPp \in \text{BasketLong} \\ Mp \times 1 \times VPRp,t \times CNAt, \text{otherwise} \end{cases}$$

where:

Strategy = The Strategy Exposure determined in relation to Selected Currency Pair p as of each relevant

$Exposure_{p,t}$ Strategy Fixing Time on each Index Business Day t.

$M_p$ = The Multiplier applicable to Selected Currency Pair p determined with reference to paragraph 7.5.

$VPR_{p,t}$ = The Volatility Percentile Rank determined with reference to paragraph 7.9 in relation to Selected Currency Pair p as of the relevant Strategy Fixing Time on Index Business Day t.

$CNA_t$ = Means the Currency Notional Amount as of Index Business Day t, determined in accordance with the following formula:

$$CNA_t = \frac{StrategyNotionalAmount_t}{12}$$

where:

Strategy Notional $Amount_t$ = Means the Strategy Notional Amount as of Index Business Day t, with the meaning given to it in the Master Definitions.

$SCP_p$ = Means Selected Currency Pair p.

$Basket_{Long}$ = Means the Long EM Basket.

The Strategy Exposure as of the Index Business Day t in relation to that Selected Currency Pair p shall be deemed to be either: a) where such Selected Currency Pair p is in the Long EM Basket, **Short** the Base Currency and **Long** the Term Currency or b) where such Selected Currency Pair p is in the Short EM Basket, **Long** the Base Currency and **Short** the Term Currency of the notional Forward Contract referencing such Selected Currency Pair p in a Currency Notional Amount equal to such amount determined by applying the formula in this paragraph 4.4.

For the avoidance of doubt, the Strategy Exposure as of the Index Business Day t may be deemed to be **zero** in circumstances when: a) the Selected Currency Pair p is in the Long EM Basket and the Volatility Percentile Rank is 100 percent or b) the Selected Currency Pair p is in the Short EM Basket and the Volatility Percentile Rank is zero.

4.5i) Lastly, the Index Calculation Agent determines the Average Strategy Exposure with reference to paragraph 7.1 as of 12:00 p.m. London time on the same Index Business Day on which the Strategy Exposure of each Selected Currency Pair is being determined.

ii) If the Average Strategy Exposure is more than or equal to the Maximum Threshold, the Index Calculation Agent shall make the following determinations in the specified sequence:

a) first, the Index Calculation Agent shall jointly determine a Strategy Exposure of **zero** in relation to: x) the Selected Currency Pair with the lowest Basket Rank in the Long EM Basket and y) the Selected

Currency Pair with the highest Basket Rank in the Short EM Basket (each such Strategy Exposure determined to be zero in this manner, a "**Discarded Strategy Exposure**") before re-determining the Average Strategy Exposure with reference to paragraph 7.1, taking into account all Strategy Exposures including, for the avoidance of doubt, any Discarded Strategy Exposures; and

b) second, if the Average Strategy Exposure remains above the Maximum Threshold upon such re-determination, the Index Calculation Agent shall then determine: x) the Selected Currency Pair with the *next lowest* Basket Rank in the Long EM Basket and y) the Selected Currency Pair with the *next highest* Basket Rank in the Short EM Basket as Discarded Strategy Exposures before re-determining the Average Strategy Exposure with reference to paragraph 7.1, taking into account all Strategy Exposures including, for the avoidance of doubt, any Discarded Strategy Exposures;

iii) The Index Calculation Agent shall continue to determine a Discarded Strategy Exposure jointly in relation to a Selected Currency Pair in the Long EM Basket and the Short EM Basket in the manner set out in paragraph 4.5ii) above until a re-determination of the Average Strategy Exposure results in a value less than the Maximum Threshold.

iv) If, further to the determinations in 4.5ii) and iii) above, the Average Strategy Exposure results in a value less than the Minimum Threshold, the Index Calculation Agent shall make the following determinations in the specified sequence:

a) first, the Index Calculation Agent shall identify the two Selected Currency Pairs which were the *last* two Selected Currency Pairs in respect of which the Index Calculation Agent had jointly determined Discarded Strategy Exposures pursuant to paragraph 4.5ii) and iii); and

b) second, the Index Calculation Agent shall re-determine a Strategy Exposure with reference to paragraph 4.4 in relation to each of the two Selected Currency Pairs so identified (each re-determined Strategy Exposure, a "**Reinstated Strategy Exposure**"). The Index Calculation Agent shall then re-determine the Average Strategy Exposure with reference to paragraph 7.1, taking into account all Strategy Exposures including, for the avoidance of doubt, any Reinstated Strategy Exposures and (if any) Discarded Strategy Exposures.

v) the Index Calculation Agent shall repeat the above determinations set out in paragraph 4.5iv) iteratively in the specified sequence, such that Reinstated Strategy Exposures are jointly determined in relation to Selected Currency Pairs in a *reversed sequence* to the sequence in which such Discarded Strategy Exposures had been jointly determined earlier in relation to those Selected Currency Pairs pursuant to 4.5ii) and 4.5iii). The Index Calculation Agent shall cease this iterative sequence of determinations at any point when the Average Strategy Exposure has been determined by the Index Calculation Agent to be more than the Minimum Threshold and less than the Maximum Threshold.

4.6 In relation to each Index Business Day which falls on an Index Month End, the Index Calculation Agent shall first identify the 12 Selected Currency Pairs pursuant to paragraph 3 (*Currency Pair Selection*) before determining the Strategy Exposure in relation to such Selected

Currency Pairs so identified. For the avoidance of doubt, Selected Currency Pairs which were previously determined as of the immediately preceding Index Month End shall be ignored for the purposes of calculating a Strategy Exposure as of any Index Business Day which falls on an Index Month End.

**5. Miscellaneous Provisions:**

This Strategy and the Strategy Methodology is subject to the Miscellaneous Provisions Document dated 7 September 2012 as amended or updated from time to time.

**6. Defined Terms:**

Defined terms used and defined in this Strategy Description shall have the meaning given to them in this section and shall not be relevant in any other section of the Index Methodology or in any other Strategy Description. Terms defined in the Index General Conditions may also be used in this Strategy Description.

"**Basket**" means either the Long EM Basket or Short EM Basket and "**Baskets**" means both the Long EM Basket and the Short EM Basket.

"**Basket Rank**" means the ranking, in descending order, assigned by the Strategy to each Selected Currency Pair in the Long EM Basket and the Short EM Basket, such that in each of the Long EM Basket and Short EM Basket, the Selected Currency Pair with the highest EM Currency Yield has the highest Basket Rank. For the avoidance of doubt, the highest Basket Rank assigned to a Selected Currency Pair shall be a number one rank and the lowest Basket Rank assigned to a Selected Currency Pair shall be a number six rank.

"**Citi Official Price**" means, in respect of any financial instrument, the mid price for such instrument that Citi would use in the ordinary course of its business as a dealer to make a market in such instrument and for the purpose of marking its own audited books and records as published from time to time on Citi Velocity or any successor or alternative page. Citi Official Prices are calculated by Citi according to widely-recognised mathematical principles for pricing the relevant financial instruments, using market standard inputs including (i) prevailing interest rates for relevant currencies and periods (as published by recognised financial information providers such as Reuters and/or Bloomberg) and (ii) forward points (as determined by Citi in a commercially reasonable manner, by reference to the prices of exchange-traded and/or over-the-counter instruments).

"**Currency Pair Volatility Distribution**" means, in relation to a Selected Currency Pair and as of any day, a set of 126 discrete values where each such value represents the Implied FX Option ATM Forward Volatility of such Selected Currency Pair observed as of the relevant Strategy Fixing Time on each Data Observation Day during the period of 126 Data Observation Days prior to, and including, the date of observation.

"**EM Currency**" means the non-US Dollar Currency of each Currency Pair.

"**Implied FX Option ATM Forward Volatility**" means, in respect of a Currency Pair, a value representing the implied volatility of an at-the-money FX option assuming put-call parity in respect of such Currency Pair, with an expiry date falling one month following the day on which the Implied FX Option ATM Forward Volatility is being determined.

Such Implied FX Option ATM Forward Volatility in relation to such an at-the-money FX option in respect of such Currency Pair shall be determined with reference to the Citi Official Price.

"**Long EM Basket**" means a notional group of 6 Selected Currency Pairs associated with the 6 EM Currencies determined with the highest EM Currency Yield of all Currency Pairs.

"**Master Definitions**" means the document dated 11 September 2012 as the same may be amended or restated from time to time.

"**Selected Currency Pairs**" means each Currency Pair which has been algorithmically selected pursuant to paragraph 3 (*Currency Pair Selection*).

"**Short EM Basket**" means a notional group of 6 Selected Currency Pairs associated with the 6 EM Currencies determined with the lowest EM Currency Yield of all Currency Pairs.

"**Strategy Fixing Time**" means, in relation to any comparison, ranking, calculation or determination to be made in connection with this Strategy Methodology in relation to:

i) Selected Currency Pair p where such Selected Currency Pair p is USDIDR, USDINR, USDTHB and USDPHP, 9:00 a.m. London time as of the applicable date; or

ii) Selected Currency Pair p where such Selected Currency Pair p is any Currency Pair in the Currency Pair Universe other than USDIDR, USDINR, USDTHB and USDPHP, 12:00 p.m. London time as of the applicable date.

"**USD LIBOR**" means the London Interbank Offered Rate observed on Reuters page USD1MFSR= or any successor page from time to time.

**7. Calculation Parameters:**

7.1 "**Average Strategy Exposure**" means the arithmetic average of the Strategy Exposure of the Selected Currency Pairs notionally traded by the Strategy from time to time determined as of any Index Business Day in accordance with the following formula and expressed as a percentage:

$$\text{Average Strategy Exposure}_t = \frac{\sum_{p=1}^{n} \left| \frac{\text{Strategy Exposure}_p}{\text{Currency Notional Amount}} \right|}{n}$$

Where:

| | | |
|---|---|---|
| Average Strategy Exposure$_t$ | = | Average Strategy Exposure as of Index Business Day t, expressed as a percentage. |
| $\sum_{i=1}^{n}$ | = | Means the sum of the series of values achieved by calculating the formula following such symbol for each i from 1 through to, and including, n, such that, for example: |

$\sum_{i=1}^{n}(i+y)$ = [(1 + y) + (2 + y) + (3 + y) + ((n + y)]

| | | |
|---|---|---|
| n | = | 12, the number of Selected Currency Pairs tracked by the Strategy from time to time. |
| IStrategy Exposure$_p$I | = | The absolute value of the Strategy Exposure in relation to each Selected Currency Pair p determined with reference to paragraph 4.4. |
| Currency Notional Amount | = | Means Currency Notional Amount with the meaning given to it in paragraph 4.4 |
| p | = | Represents an arithmetic progression where the first term is 1 and there are n number of terms with a common difference of 1 between the terms (i.e. p = 1,2,3,4…..n). |

7.2 "**EM Currency Yield**" means, as of 9:00 a.m. on the Index Start Date and each Index Month End and in respect of the EM Currency of each Currency Pair i in relation to which EM Currency Yield is being determined, the annualised yield (expressed as a percentage, which may be positive or negative) of such EM Currency which is calculated in accordance with the formula below:

$$\text{EM Currency Yield}_{i,t} = 12 \times \left[ \frac{\text{1M USD Forward Rate}_{i,t}}{\text{USD Spot Rate}_{i,t}} \times \left( 1 + \frac{\text{USD LIBOR}_t}{12} \right) - 1 \right]$$

where:

| | | |
|---|---|---|
| EM Currency Yield$_{i,t}$ | = | EM Currency Yield in relation to the EM Currency of Currency Pair i as of 9:00 a.m. on the Index Start Date and each Index Month End. |
| 1M USD Forward Rate$_{i,t}$ | = | One Month Forward Rate in relation to Currency Pair i as of 9:00 a.m. on the Index Start Date and each Index Month End determined with reference to paragraph 7.7. |
| Spot Rate$_{i,t}$ | = | Spot Rate in relation to Currency Pair i as of 9:00 a.m. on the Index Start Date and each Index Month End determined with reference to paragraph 7.8. |
| USD LIBOR$_t$ | = | USD LIBOR observed as of 9:00 a.m. on the Index Start Date and each Index Month End. |

7.3 "**Maximum Threshold**" means a percentage amount equal to 130%.

7.4 "**Minimum Threshold**" means a percentage amount equal to 120%.

7.5 "**Multiplier**" means:

i) in the case of each Selected Currency Pair except where such Selected Currency Pair is USDCLP, USDCOP or USDPHP, 2; and

ii) in the case of USDCLP, USDCOP and USDPHP only, 1

7.6i) "**One Month Forward Points**" means in relation to a Currency Pair, the mid-rate specifying the number of units of the Term Currency which when added to the Spot Rate relating to such Currency Pair, produces a rate at which such Term Currency can be exchanged for one unit of the Base Currency in one calendar month from the date on which such mid-rate is observed. The Index Calculation Agent shall observe the One Month Forward Points in relation to any Currency Pair from the relevant Reuters Screen Page as set out below:

| Currency Pair | Reuters Screen Page | Decimal Adjustment Factor |
|---|---|---|
| USDIDR | IDR1MNDF= | 1 |
| USDINR | INR1MNDF= | 0.01 |
| USDTHB | THB1M= | 0.01 |
| USDPHP | PHP1MNDF= | 1 |
| USDHUF | HUF1M= | 0.01 |
| USDPLN | PLN1M= | 0.0001 |
| USDRON | RON1M= | 0.0001 |
| USDCZK | CZK1M= | 0.001 |
| USDTRY | TRY1M= | 0.0001 |
| USDZAR | ZAR1M= | 0.0001 |
| USDILS | ILS1M= | 0.0001 |
| USDBRL | BRL1MNDF= | 1 |
| USDMXN | MXN1M= | 1 |
| USDCLP | CLP1MNDF= | 1 |
| USDCOP | COP1MNDF= | 1 |

ii) For the purposes of each relevant formula in this Strategy and the avoidance of doubt, each One Month Forward Points observed on the relevant Reuters Screen Page specified above shall be multiplied by the relevant Decimal Adjustment Factor specified above in relation to such One Month Forward Points before being applied to any such formula, calculation or determination.

7.7 "**One Month Forward Rate**" means, in relation to each Currency Pair i and as of 9:00 a.m. London time on the Index Start Date and each Index Month End, an amount equal to: i) the One Month Forward Points then observed in respect of such Currency Pair i with reference

to paragraph 7.6 plus ii) the Spot Rate then observed in respect of such Currency Pair i with reference to paragraph 7.8, expressed in the number of units of the Term Currency which can be exchanged for one unit of the Base Currency calculated in accordance with the formula:

$$\text{One Month Forward Rate}_{i,t} = \text{One Month Forward Points}_{i,t} + \text{Spot Rate}_{i,t}$$

where:

| | | |
|---|---|---|
| One Month Forward Points$_{i,t}$ | = | The One Month Forward Points as of 9:00 a.m. London time on the Index Start Date and each Index Month End in relation to such Currency Pair i, determined with reference to paragraph 7.6 |
| Spot Rate$_{i,t}$ | = | The Spot Rate as of 9:00 a.m. London time on the Index Start Date and each Index Month End in relation to such Currency Pair i, determined with reference to paragraph 7.8, expressed in the number of units of the Term Currency which can be exchanged for one unit of the Base Currency. |

7.8 "**Spot Rate**" means in relation to a Currency Pair, the mid-rate observed by the Index Calculation Agent in relation to such Selected Currency Pair from the relevant Reuters Screen Page set out below, specifying the number of units of the Term Currency which can be exchanged for one unit of the Base Currency:

| Currency Pair | Reuters Screen Page |
|---|---|
| USDIDR | IDR= |
| USDINR | INR= |
| USDTHB | THB= |
| USDPHP | PHP= |
| USDHUF | HUF= |
| USDPLN | PLN= |
| USDRON | RON= |
| USDCZK | CZK= |
| USDTRY | TRY= |
| USDZAR | ZAR= |
| USDILS | ILS= |
| USDBRL | BRL= |
| USDMXN | MXN= |
| USDCLP | CLP= |

| | |
|---|---|
| USDCOP | COP= |

7.9 "**Volatility Percentile Rank**" means, in relation to a Selected Currency Pair p as of the relevant Strategy Fixing Time on Index Business Day t, its Implied FX Option ATM Forward Volatility and Currency Pair Volatility Distribution as of the relevant Strategy Fixing Time on such Index Business Day t, the percentage of values within such Currency Pair Volatility Distribution that are less than the Implied FX Option ATM Forward Volatility then prevailing for such Selected Currency Pair p in accordance with the following formula:

$$\text{Volatility Percentile Rank}_{p,t} = \frac{x}{n-1}$$

where:

| | | |
|---|---|---|
| Volatility Percentile $\text{Rank}_{p,t}$ | = | The Volatility Percentile Rank in respect of a Selected Currency Pair p as of the relevant Strategy Fixing Time on Index Business Day t, expressed as a percentage |
| x | = | The number of discrete values within the Currency Pair Volatility Distribution in respect of Selected Currency Pair p which are less than the Implied FX Option ATM Forward Volatility determined in relation to Selected Currency Pair p as of the relevant Strategy Fixing Time on Index Business Day t |
| n | = | 126, being the number of discrete values of the Currency Pair Volatility Distribution |

The Volatility Percentile Rank so determined shall be rounded to the nearest 10%, with intermediate percentage values of 5% or more rounded up. Notwithstanding the above, if the Volatility Percentile Rank is **greater** than 90% then the Volatility Percentile Rank shall be rounded up to 100%.

# Emerging Market CDS Carry Strategy

*The following Overview of the Strategy is provided for ease of reference only and does not form part of the Strategy Methodology which is set out below. Capitalised terms used in this Overview have the meanings given to them in the Strategy Methodology or the Master Definitions.*

**Overview:** The Strategy is a rules-based proprietary trading strategy developed by the Index Sponsor which aims to achieve notional capital appreciation through dynamically adjusting notional positions in FX Forward Contracts. As of each Index Business Day, the Strategy provides conditional notional exposure to specified currency pairs subject to observations of the: i) one month forward points applicable to each currency pair and ii) 5 year CDS spread of sovereign debt denominated in the emerging currency of each currency pair. Provided certain conditions in relation to such one month forward points and 5 year CDS spread are satisfied in relation to each currency pair, the exposure in relation to such currency pair shall be determined by reference to the implied volatility of FX options on such currency pair in comparison with its recent volatility history, all as more fully described below.

## Strategy Methodology

The following is the Strategy Methodology in relation to the Emerging Market CDS Carry Strategy (the "**Strategy**").

**1. Date:** 17 July 2012

**2. Currency Pair Universe:**

| | | | | |
|---|---|---|---|---|
| USDMXN | USDBRL | USDIDR | USDKRW | USDTHB |
| USDHUF | USDRON | USDTRY | USDPLN | USDZAR |

(each, a "**Currency Pair**" in the "**Currency Pair Universe**")

**3. Currency Pair Selection:** Each Currency Pair shall be defined as a "**Selected Currency Pair**" for the purposes of this Strategy.

**4. Strategy Exposure:**

4.1 The Strategy Exposure to each Selected Currency Pair p is determined as of the Strategy Fixing Time relevant to such Selected Currency Pair p on each Index Business Day t in the following four steps.

4.2 First, the Index Calculation Agent determines the Carry Signal with reference to paragraph 7.4 in relation to a Selected Currency Pair p.

4.3 Second, the Index Calculation Agent determines a CDS Signal with reference to paragraph 7.5 in relation to the same Selected Currency Pair p.

4.4 Third, the Strategy determines an Exposure Percentage Weight for that Selected Currency Pair p with reference to paragraph 7.6.

4.5 Lastly, the Strategy Exposure as of that Index Business Day t in relation to that Selected Currency Pair p shall be deemed to be either: a) zero or b) **Short** the Base Currency and **Long** the Term Currency of the notional Forward Contract referencing such Selected Currency Pair p in the Currency Notional Amount, determined in each case as the product of: a) the Trade Signal determined with reference to paragraph 7.8 in relation to Selected

Currency Pair p as of the relevant Strategy Fixing Time on each Index Business Day t and b) the Currency Notional Amount, pursuant to the following formula:

$$StrategyExposure_{p,t} = TradeSignal_{p,t} \times CurrencyNotionalAmount_t$$

where:

| | | |
|---|---|---|
| Strategy Exposure$_{p,t}$ | = | The Strategy Exposure determined in relation to Selected Currency Pair p as of Index Business Day t |
| Trade Signal$_{p,t}$ | = | The Trade Signal determined with reference to paragraph 7.8 in relation to Selected Currency Pair p as of the relevant Strategy Fixing Time on Index Business Day t. |
| Currency Notional Amount$_t$ | = | Means the Currency Notional Amount as of Index Business Day t, determined in accordance with the following formula: |

$$CNA_t = \frac{StrategyNotionalAmount_t}{10}$$

where:

| | | |
|---|---|---|
| Strategy Notional Amount$_t$ | = | Means the Strategy Notional Amount as of Index Business Day t, with the meaning given to it in the Master Definitions. |

**5. Miscellaneous Provisions:** This Strategy and the Strategy Methodology is subject to the Miscellaneous Provisions Document dated 7 September 2012 as amended or updated from time to time.

**6. Defined Terms:** Terms used and defined in this Strategy Methodology shall have the meaning given to them in, and are unique to, this Strategy Methodology. Terms used but not defined in this Strategy Methodology shall have the meaning given to them in the Master Definitions.

"**Citi Official Price**" means, in respect of any financial instrument, the mid price for such instrument that Citi would use in the ordinary course of its business as a dealer to make a market in such instrument and for the purpose of marking its own audited books and records as published from time to time on Citi Velocity or any successor or alternative page. Citi Official Prices are calculated by Citi according to widely-recognised mathematical principles for pricing the relevant financial instruments, using market standard inputs including (i) prevailing interest rates for relevant currencies and periods (as published by recognised financial information providers such as Reuters and/or Bloomberg) and (ii) forward points (as determined by Citi in a commercially reasonable manner, by reference to the prices of exchange-traded and/or over-the-counter instruments).

"**Implied FX Option ATM Forward Volatility**" means, in respect of a Currency Pair, a value representing the implied volatility of an at-the-money FX option assuming put-call parity in respect of such Currency Pair, with an expiry date falling one month following the day on which the Implied FX Option ATM Forward Volatility is being determined. Such Implied FX Option ATM Forward Volatility in relation to such an at-the-money FX option in respect of

such Currency Pair shall be determined with reference to the Citi Official Price.

"**Master Definitions**" means the document dated 11 September 2012 as the same may be amended or restated from time to time.

"**Spread Fixing Time**" means, in relation to any observation of the 5 Year CDS Spread made with reference to the Term Currency of any Selected Currency Pair pursuant to paragraph 7.3, the 5 Year CDS Spread then prevailing in relation to such Term Currency as of 11:59:59 p.m. London time on the applicable date.

"**Strategy Fixing Time**" means, in relation to any comparison, ranking, calculation or determination to be made in connection with this Strategy Methodology in relation to:

i) Selected Currency Pair p where such Selected Currency Pair p is USDIDR, USDKRW or USDTHB, 9:00 a.m. London time as of the applicable date; or

ii) Selected Currency Pair p where such Selected Currency Pair p is any Currency Pair in the Currency Pair Universe other than USDIDR, USDKRW or USDTHB, 12:00 p.m. London time as of the applicable date.

**7. Calculation Parameters:**

7.1 "**126 Day Average CDS Spread**" means, in relation to the Term Currency of each Selected Currency Pair p and as of the relevant Strategy Fixing Time on any Index Business Day t, the arithmetic average of the 5 Year CDS Spread observed in respect of such Term Currency as of the Spread Fixing Time on each Data Observation Day in a prior period of 126 Data Observation Days up to, and including, the Data Observation Day immediately preceding Index Business Day t, calculated in accordance with the following formula:

$$126\ \text{Day Average CDS Spread}_{p,t} = \frac{\sum_{t=1}^{n} 5\ \text{Year CDS Spread}_{p,t}}{n}$$

where:

| | | |
|---|---|---|
| 126 Day Average CDS Spread$_{p,t}$ | = | 126 Day Average CDS Spread in relation to the Term Currency of each Selected Currency Pair p as of the relevant Strategy Fixing Time on Index Business Day t |
| $\sum_{t=1}^{n}$ | = | Means the sum of the series of values achieved by calculating the formula following such symbol for each t from 1 through to, and including, n, such that, for example: $\sum_{t=1}^{n}(i+y) = [(1+y)+(2+y)+.(n+y)]$ |
| 5 Year CDS Spread$_{p,t}$ | = | The 5 Year CDS Spread in relation to the Term Currency of any Selected Currency Pair p as of the Spread Fixing Time on each Data Observation Day in a prior period of 126 Data Observation Days up to, and including, the Data Observation Day immediately preceding Index |

Business Day t.

n = 126, representing the number of discrete observations made of the relevant 5 Year CDS Spread as of the Spread Fixing Time on each Data Observation Day in a prior period of 126 Data Observation Days prior to, and including, the Data Observation Day immediately preceding Index Business Day t.

7.2 "**126 Day Average Volatility**" means, in respect of any Selected Currency Pair p as of the relevant Strategy Fixing Time on any Index Business Day t for which it is to be determined, the arithmetic average of the Implied FX Option ATM Forward Volatility achieved by such Selected Currency Pair p as of the relevant Strategy Fixing Time on each Data Observation Day in a prior period of 126 Data Observation Days prior to, and including, the relevant Strategy Fixing Time on the Data Observation Day which falls on the same date as such Index Business Day t, calculated in accordance with the following formula:

$$126\,\text{Day Average Vol}_{p,t} = \frac{\sum_{t=1}^{n} \text{Implied FX Option ATM Forward Volatility}_{p,t}}{n}$$

where:

126 Day Average $\text{Vol}_{p,t}$ = 126 Day Average Volatility in respect of each Selected Currency p as of the relevant Strategy Fixing Time on Index Business Day t

Implied FX Option ATM Forward $\text{Volatility}_{p,t}$ = The Implied FX Option ATM Forward Volatility in relation to Selected Currency Pair p as of the relevant Strategy Fixing Time on each Data Observation Day in a prior period of 126 Data Observation Days prior to, and including, the relevant Strategy Fixing Time on the Data Observation Day which falls on the same date as the Index Business Day t for which 126 Day Average Volatility is being determined.

n = 126, representing the number of discrete observations made of the Implied FX Option ATM Forward Volatility as of the relevant Strategy Fixing Time on each Data Observation Day over a period of 126 Data Observation Days prior to, and including, the relevant Strategy Fixing Time on the Data Observation Day which falls on the same date as Index Business Day t.

7.3 "**5 Year CDS Spread**" means in relation to the Term Currency of each Selected Currency Pair, the 5 year credit default swap spread, observed from the relevant Reuters Screen Page set out below as the arithmetic average of the: a) bid-rate and b) the ask-rate of the cost of protection against the occurrence of any i) default, ii) acceleration, iii) failure to pay, iv) repudiation, v) restructuring or vi) declaration of a moratorium on payments of interest or principal in relation to any senior tranche of debt issued by the sovereign entity with the authority to issue the Term Currency from time to

time as legal tender:

| Term Currency | Reuters Screen Page |
|---|---|
| MXN | MXGV5YUSAC=R |
| BRL | BRGV5YUSAC=R |
| IDR | IDGV5YUSAC=R |
| KRW | KRGV5YUSAC=R" |
| THB | THGV5YUSAC=R |
| HUF | HUGV5YUSAC=R |
| RON | ROGV5YUSAC=R |
| TRY | TRGV5YUSAC=R |
| PLN | PLGV5YUSAC=R |
| ZAR | ZAGV5YUSAC=R |

7.4 ""**Carry Signal**" means in relation to each Selected Currency Pair p and as of the relevant Strategy Fixing Time on each Index Business Day t, a value determined in accordance with the following algorithm by observing the One Month Forward Points then prevailing in relation to such Selected Currency Pair p:

$$\text{Carry Signal}_{p,t} = \begin{cases} -1, \text{if One Month Forward Points}_{p,t} > 0 \\ 0, \text{otherwise} \end{cases}$$

where:

| | | |
|---|---|---|
| $\text{Carry Signal}_{p,t}$ | = | The Carry Signal in relation to Selected Currency Pair p as of the relevant Strategy Fixing Time on each Index Business Day t. |
| $\text{One Month Forward Points}_{p,t}$ | = | The One Month Forward Points observed with reference to paragraph 7.7 in relation to Selected Currency Pair p as of the relevant Strategy Fixing Time on the Data Observation Day which falls on the same date as Index Business Day t. |

7.5 "**CDS Signal**" means in relation to each Selected Currency Pair p and as of the relevant Strategy Fixing Time on each Index Business Day t, a value determined in accordance with the following algorithm by comparing the 5 Year CDS Spread and 126 Day Average CDS Spread then prevailing in relation to such Selected Currency Pair p:

$$\text{CDS Signal}_{p,t} = \begin{cases} -1, \text{if 5 Year CDS Spread}_{p,t} < \text{126 Day Average CDS Spread}_{p,t} \\ 0, \text{otherwise} \end{cases}$$

where:

| | | |
|---|---|---|
| CDS Signal$_{p,t}$ | = | The CDS Signal in relation to Selected Currency Pair p as of the relevant Strategy Fixing Time on each Index Business Day t. |
| 5 Year CDS Spread$_{p,t}$ | = | The 5 Year CDS Spread observed with reference to paragraph 7.3 in relation to Selected Currency Pair p as of the Spread Fixing Time on the Data Observation Day immediately preceding Index Business Day t. |
| 126 Day Average CDS Spread$_{p,t}$ | = | The 126 Day Average CDS Spread determined with reference to paragraph 7.1 in relation to Selected Currency Pair p as of the relevant Strategy Fixing Time on Index Business Day t. |

7.6 "**Exposure Percentage Weight**" means, in relation to a specific Selected Currency Pair p as of the relevant Strategy Fixing Time on each Index Business Day t, a value determined as a percentage in accordance with the formula below:

$$EPW_{p,t} = \frac{1}{1 + e^{-0.5\left(vol_{p,t} - MAvol_{p,t}\right)}}$$

where:

| | | |
|---|---|---|
| EPW$_{p,t}$ | = | The Exposure Percentage Weight in relation to Selected Currency Pair p as of the relevant Strategy Fixing Time on Index Business Day t. |
| vol$_{p,t}$ | = | The Implied FX Option ATM Forward Volatility in relation to Selected Currency Pair p as of the relevant Strategy Fixing Time on Index Business Day t. |
| MAvol$_{p,t}$ | = | The 126 Day Average Volatility in relation to Selected Currency Pair p as of the relevant Strategy Fixing Time on Index Business Day t, determined with reference to paragraph 7.2. |
| e | = | The mathematical constant which is the base of the natural logarithm. |

7.7 "**One Month Forward Points**" means, in relation to each Selected Currency Pair p, the mid-rate specifying the number of units of the Term Currency which when added to a spot rate relating to such Selected Currency Pair p, produces a rate at which such Term Currency can be exchanged for one unit of the Base Currency in one calendar month from the date on which such mid-rate is observed. The Index Calculation Agent shall observe the One Month Forward Points in relation to any Selected Currency Pair p from the relevant Reuters Screen Page set out below:

| Selected Currency Pair | Reuters Screen Page |
|---|---|
| USDMXN | MXN1M= |

| | |
|---|---|
| USDBRL | BRL1MNDF= |
| USDIDR | IDR1MNDF= |
| USDKRW | KRW1MNDF= |
| USDTHB | THB1M= |
| USDHUF | HUF1M= |
| USDRON | RON1M= |
| USDTRY | TRY1M= |
| USDPLN | PLN1M= |
| USDZAR | ZAR1M= |

7.8 "**Trade Signal**" means, in relation to Selected Currency Pair p, a value determined as of the relevant Strategy Fixing Time on each Index Business Day t rounded to the nearest decimal place as the aggregate of:

i) the CDS Signal in respect of Selected Currency Pair p in proportion to the Exposure Percentage Weight; and

ii) the Carry Signal in respect of the same Selected Currency Pair p in proportion to a percentage value which is 100% minus such Exposure Percentage Weight, determined in accordance with the following formula:

$$\text{Trade Signal}_{p,t} = \left(\text{EPW}_{p,t} \times \text{CDS Signal}_{p,t} + \left(100\% - \text{EPW}_{p,t}\right) \times \text{Carry Signal}_{p,t}\right)$$

where:

$\text{Trade Signal}_{p,t}$ = The Trade Signal determined in relation to Selected Currency Pair p as of the relevant Strategy Fixing Time on each Index Business Day t, rounded to the nearest decimal place.

$\text{CDS Signal}_{p,t}$ = The CDS Signal determined by the Index Calculation Agent with reference to paragraph 7.5 in relation to Selected Currency Pair p as of the relevant Strategy Fixing Time on Index Business Day t.

$\text{Carry Signal}_{p,t}$ = The Carry Signal determined by the Index Calculation Agent with reference to paragraph 7.4 in relation to Selected Currency Pair p as of the relevant Strategy Fixing Time on Index Business Day t.

$\text{EPW}_{p,t}$ = Exposure Percentage Weight determined with reference to paragraph 7.6 in relation to Selected Currency Pair p as of the relevant Strategy Fixing Time on Index Business Day t.

# Ranked FIRST Strategy

*The following Overview of the Strategy is provided for ease of reference only and does not form part of the Strategy Methodology which is set out below. Capitalised terms used in this Overview have the meanings given to them in the Strategy Methodology, the related Sub-Strategy or the Master Definitions.*

**Overview:** The Strategy is a rules-based proprietary trading strategy developed by the Index Sponsor to work in conjunction with the Ranked FIRST Sub-Strategy. The Strategy expresses the notional exposure to 30 currency pairs determined by the Sub-Strategy as notional positions in FX Forward Contracts referencing certain specified US cross pairs. The intention behind the Strategy is to achieve notional capital appreciation through dynamically adjusting notional positions in such FX Forward Contracts referencing such US cross pairs.

## Strategy Methodology

The following is the Strategy Methodology in relation to the Ranked FIRST Strategy (the "**Strategy**") and the Ranked FIRST Sub-Strategy (the "**Sub-Strategy**") shall be the only applicable Sub-Strategy to the Strategy.

**1. Date** 30 July 2012

**2. Currency Pair Universe:** USDGBP USDAUD USDEUR USDNZD USDSEK
USDCAD USDCHF USDJPY USDNOK

**3. Currency Pair Selection:** Each Currency Pair in the Currency Pair Universe shall be a "**Selected Currency Pair**" for the purposes of this Strategy. The Strategy references the notional exposure to each Sub-Strategy Currency Pair determined pursuant to the Sub-Strategy and expresses such notional exposure in each case as notional trading positions in Forward Contracts which, in turn, references such Selected Currency Pairs pursuant to paragraph 4 (*Strategy Exposure*).

**4. Strategy Exposure:**

4.1 The Index Calculation Agent shall, as of the Strategy Fixing Time on each Index Business Day, determine a notional "**Strategy Matrix**" by: i) the addition of the 3 Sub-Strategy Matrices determined pursuant to the Sub-Strategy Methodology and ii) the division of each element of such Strategy Matrix by 3. Such a determination shall result in a notional 9 by 5 matrix of 45 elements where each such element shall be a "**Strategy Signal**". Each Strategy Signal is a numerical value representing a notional exposure to a specific Sub-Strategy Currency Pair q identifiable from its position within the Strategy Matrix which corresponds exactly to the arrangement of such Sub-Strategy Currency Pairs as set out in paragraph 2 (*Currency Pair Universe*) of the Sub-Strategy Methodology.

4.2(i) The Index Calculation Agent shall then express the notional exposure represented by each Strategy Signal in respect of a Sub-Strategy Currency Pair q as a Strategy Exposure to a Selected Currency Pair, or where the Strategy Signal is in respect of a Sub-Strategy Currency Pair q which is a Cross Pair, a combination of two Strategy Exposures to Selected Currency Pairs in the Currency Pair Universe, following the

two steps set out below:

(ii) First, the Index Calculation Agent shall determine the **number** of Strategy Exposures to be determined in relation to each Sub-Strategy Currency Pair q, depending on the Pair Type of such Sub-Strategy Currency Pair q, according to the following criteria:

| | **Pair Type** | **Strategy Exposure(s) to be determined** |
|---|---|---|
| a) | Cross Pair | One Strategy Exposure to be determined in relation to **the Term Leg** of such Cross Pair. |
| | | One Strategy Exposure to be determined in relation to **the Base Leg** of such Cross Pair. |
| b) | Identical Pair | One Strategy Exposure to be determined in relation to such Identical Pair. |

(iii) Second, the Index Calculation Agent shall determine the "**Trade Signal**" of each Strategy Exposure required to be determined in relation to Sub-Strategy Currency Pair q, depending on the Pair Type of Sub-Strategy Currency Pair q, in accordance with the following criteria:

| | **Pair Type** | **Strategy Exposure$_q$** | **Trade Signal$_q$** |
|---|---|---|---|
| a) | Cross Pair | Strategy Exposure q in relation to Base Leg | **- Strategy Signal$_q$** |
| | | Strategy Exposure q in relation to Term Leg | **+ Strategy Signal$_q$** |
| b) | Identical Pair | Strategy Exposure in relation to Identical Pair | **+ Strategy Signal$_q$** |

4.3 Following the identification of the Trade Signal(s) relevant to each Strategy Exposure to a Selected Currency Pair, the Index Calculation Agent shall then aggregate all Trade Signals (each an "**Aggregate Trade Signal**") which have been expressed in relation to the same Selected Currency Pair p. Because there are 9 Selected Currency Pairs in the Currency Pair Universe, the Index Calculation Agent shall, in total, determine 9 Aggregate Trade Signals such that there is one Aggregate Trade Signal in relation to each Selected Currency Pair.

4.4 Lastly, the Index Calculation Agent shall determine as of the Strategy Fixing Time on each Index Business Day t a Strategy Exposure in relation to each Selected Currency Pair p as the product of the Aggregate Trade Signal p and the Currency Notional Amount as follows:

$$\text{Strategy Exposure}_{p,t} = \text{Aggregate Trade Signal}_{p,t} \times \text{Currency Notional Amount}_t$$

where:

| | | |
|---|---|---|
| Strategy Exposure$_{p,t}$ | = | The Strategy Exposure determined in relation to Selected Currency Pair p as of the Strategy Fixing Time on each Index Business Day t |
| Currency Notional Amount$_t$ | = | Means the Currency Notional Amount ("**CNA**"), as of Index Business Day t determined in accordance with the following formula: |

$$CNA_t = \frac{StrategyNotionalAmount_t}{30}$$

where:

| | | |
|---|---|---|
| Strategy Notional Amount$_t$ | = | Means the Strategy Notional Amount as of Index Business Day t, with the meaning given to it in the Master Definitions. |

| | | |
|---|---|---|
| Aggregate Trade Signal$_p$ | = | Means the Aggregate Trade Signal determined in relation to Selected Currency Pair p pursuant to paragraph 4.3. |

4.5 For the avoidance of doubt and pursuant to applying the process set out from paragraph 4.1 to paragraph 4.4, the Strategy Exposure as of each Index Business Day t in relation to each Selected Currency Pair p shall be expressed to be **Long** the Base Currency and **Short** the Term Currency of a notional Forward Contract referencing such Selected Currency Pair p in the Currency Notional Amount.

**5. Miscellaneous Provisions:**

This Strategy and the Strategy Methodology is subject to the Miscellaneous Provisions Document dated 7 September 2012 as amended or updated from time to time.

**6. Defined Terms:**

Terms used and defined in this Strategy Methodology shall have the meaning given to them in, and are unique to, this Strategy Methodology. Terms used but not defined in this Strategy Methodology shall have the meaning given to them in the Master Definitions or applicable Sub-Strategy Methodology.

"**Aggregate Trade Signal**" means a positive or negative value, or as the case may be, zero, as determined by aggregating all Trade Signals which have been determined in relation to the same Selected Currency Pair.

"**Base Leg**" means, in relation to any Sub-Strategy Currency Pair that is a Cross Pair, the Selected Currency Pair in the Currency Pair Universe with a Term Currency that is the same currency as the Cross Base Currency of such Cross Pair.

"**Cross Base Currency**" means, in respect of a particular Cross Pair, the Base Currency of that Cross Pair.

"**Cross Pair**" means any Sub-Strategy Currency Pair which does not

contain US Dollar as either its Base Currency or Term Currency.

"**Cross Term Currency**" means, in respect of a particular Cross Pair, the Term Currency of that Cross Pair.

"**Identical Pair**" means, in relation to a Sub-Strategy Currency Pair, the Selected Currency Pair in the Currency Pair Universe identical to such Sub-Strategy Currency Pair.

"**Master Definitions**" means the document dated 11 September 2012 as the same may be amended and/or restated from time to time.

"**Pair Type**" means, in relation to a Sub-Strategy Currency Pair, whether such Sub-Strategy Currency Pair is a Cross Pair or an Identical Pair.

"**Strategy Fixing Time**" means, in relation to any comparison, ranking, calculation or determination to be made in connection with this Strategy Methodology, 12:00 p.m. London time as of the applicable date.

"**Strategy Signal**" means a positive or negative value, or as the case may be, zero, as determined with reference to each Sub-Strategy Currency Pair in accordance with paragraph 4.1

"**Sub-Strategy Currency Pair**" means the Currency Pairs in the Currency Pair Universe as specified in the Sub-Strategy Methodology.

"**Sub-Strategy Methodology**" means the document dated 30 July 2012 which sets out certain comparisons, rankings, calculations and determinations to be made in connection with the Sub-Strategy.

"**Term Leg**" means, in relation to any Sub-Strategy Currency Pair that is a Cross Pair, the Selected Currency Pair in the Currency Pair Universe with the same Term Currency as the Cross Term Currency of such Cross Pair.

"**Trade Signal**" means a positive or negative value, or as the case may be, zero, as determined with reference to the Pair Type of a Sub-Strategy Currency Pair in accordance with paragraph 4.2(iii).

**7. Calculation Parameters:** Not Applicable.

# Ranked FIRST Sub-Strategy

*The following Overview of the Sub-Strategy is provided for ease of reference only and does not form part of the Sub-Strategy Methodology which is set out below. Capitalised terms used in this Overview have the meanings given to them in the Sub-Strategy Methodology, the related Strategy or the Master Definitions.*

**Overview:** The Sub-Strategy is a rules-based proprietary trading sub-strategy developed by the Index Sponsor intended to work in conjunction with a strategy to achieve notional capital appreciation through dynamically adjusting notional positions in FX Forward Contracts. As of each Index Business Day, the Index Calculation Agent determines 3 separate and distinct sets of notional trading signals. The notional trading signals of each such set have themselves, in turn, been determined in relation to 45 separate and distinct currency pairs.

## Sub-Strategy Methodology

The following is the Sub-Strategy Methodology in relation to the Ranked FIRST Sub-Strategy (the "**Sub-Strategy**").

**1. Date:** 30 July 2012

**2. Currency Pair Universe:**

| | | | | |
|---|---|---|---|---|
| AUDCAD | AUDCHF | AUDJPY | AUDNOK | AUDNZD |
| AUDSEK | USDAUD | CADCHF | CADJPY | CADNOK |
| CADSEK | CHFJPY | CHFNOK | CHFSEK | EURAUD |
| EURCAD | EURCHF | EURGBP | EURJPY | EURNOK |
| EURNZD | EURSEK | USDEUR | GBPAUD | GBPCAD |
| GBPCHF | GBPJPY | GBPNOK | GBPNZD | GBPSEK |
| USDGBP | NOKJPY | NOKSEK | NZDCAD | NZDCHF |
| NZDJPY | NZDNOK | NZDSEK | USDNZD | SEKJPY |
| USDCAD | USDCHF | USDJPY | USDNOK | USDSEK |

(each, a "**Currency Pair**" in the "**Currency Pair Universe**")

**3. Currency Pair Selection:** Each Currency Pair shall be defined as a "**Selected Currency Pair**" for the purposes of this Sub-Strategy.

**4. Sub-Strategy Signal:**

4.1 As of the Sub-Strategy Fixing Time on each Index Business Day t, the Index Calculation Agent shall determine 3 separate and distinct sets of Sub-Strategy Signals (each a "**Sub-Strategy Signal**"). Each such set, in turn, consists of 45 separate and distinct Sub-Strategy Signals, each of which is determined in relation to a Selected Currency Pair p.

4.2(i) As of the Sub-Strategy Fixing Time on such Index Business Day t, the first set of Sub-Strategy Signals shall be determined in relation to all Selected Currency Pairs p, each of which are then assigned their respective Ranking Scores with reference to paragraph 7.4 (assuming for the purposes of paragraph 7.4 that j=k=1) using their: i) 2 Year OIS Rate Spread then

determined with reference to paragraph 7.1 and ii) the Short Term Average in relation to such 2 Year OIS Rate Spread then determined with reference to paragraph 7.5 (assuming for the purposes of paragraph 7.5 that j=k=1).

(ii) The Ranking Scores are then arranged in descending order such that the highest Ranking Score is ranked first. If two or more Ranking Scores are equal, then those Ranking Scores will be ranked in accordance with their respective values prevailing as of the Sub-Strategy Fixing Time on the first immediately preceding Index Business Day when those values were unequal.

(iii) A Sub-Strategy Signal shall then be determined in relation to each Selected Currency Pair p by applying the algorithm set out in paragraph 7.6 (assuming that j=k=1 for the purposes of such algorithm).

4.3(i) As of the Sub-Strategy Fixing Time on such Index Business Day t, the second set of Sub-Strategy Signals shall be determined in relation to all Selected Currency Pairs p, each of which are then assigned their respective Ranking Scores with reference to paragraph 7.4 (assuming for the purposes of paragraph 7.4 that j=k=2) using their: i) 5 Year Swap Spread then determined with reference to paragraph 7.2 and ii) Short Term Average in relation to such 5 Year Swap Spread then determined with reference to paragraph 7.5 (assuming for the purposes of paragraph 7.5 that j=k=2).

(ii) The Ranking Scores are then arranged in descending order such that the highest Ranking Score is ranked first. If two or more Ranking Scores are equal, then those Ranking Scores will be ranked in accordance with their respective values prevailing as of the Sub-Strategy Fixing Time on the first immediately preceding Index Business Day when those values were unequal.

(iii) A Sub-Strategy Signal shall then be determined in relation to each Selected Currency Pair p by applying the algorithm set out in paragraph 7.6 (assuming that j=k=2 for the purposes of such algorithm).

4.4(i) As of the Sub-Strategy Fixing Time on such Index Business Day t, the third set of Sub-Strategy Signals shall be determined in relation to all Selected Currency Pairs p, each of which are then assigned their respective Ranking Scores with reference to paragraph 7.4 (assuming for the purposes of paragraph 7.4 that j=k=3) using their: i) 10 Year Swap Spread then determined with reference to paragraph 7.3 and ii) Short Term Average in relation to such 10 Year Swap Spread then determined with reference to paragraph 7.5 (assuming for the purposes of paragraph 7.5 that j=k=3).

(ii) The Ranking Scores are then arranged in descending order such that the highest Ranking Score is ranked first. If two or more Ranking Scores are equal, then those Ranking Scores will be ranked in accordance with their respective values prevailing as of the Sub-Strategy Fixing Time on the first immediately preceding Index Business Day when those values were unequal.

(iii) A Sub-Strategy Signal shall then be determined in relation to each Selected Currency Pair p by applying the algorithm set out in paragraph 7.6 (assuming that j=k=3 for the purposes of such algorithm).

4.5 Each set of Sub-Strategy Signals determined by the Index Calculation Agent applying the calculations set out in paragraphs 4.2, 4.3 and 4.4 shall be notionally arranged in a 9 by 5 matrix (each such matrix, a "**Sub-Strategy Matrix**") where the Sub-Strategy Signals in relation to each Selected Currency Pair p is arranged in a manner which corresponds to the arrangement of Currency Pairs as set out in paragraph 2 (*Currency Pair*

*Universe*).

**5. Miscellaneous Provisions:** This Sub-Strategy, the Sub-Strategy Methodology and the related Strategy is subject to the Miscellaneous Provisions Document dated 7 September 2012 as amended or updated from time to time.

**6. Defined Terms:** Terms used and defined in this Sub-Strategy Methodology shall have the meaning given to them in, and are unique to, this Sub-Strategy Methodology. Terms used but not defined in this Sub-Strategy Methodology shall have the meaning given to them in the Master Definitions or in the related Strategy.

"**Sub-Strategy Fixing Time**" means, in relation to any comparison, ranking, calculation or determination to be made in connection with this Sub-Strategy Methodology, 12:00 p.m. London time as of the applicable date.

"**Interest Rate**" means, in relation to a currency, the: i) 2 Year OIS Rate, ii) 5 Year Swap Rate or iii) 10 Year Swap Rate as the case may be, observed by the Index Calculation Agent on the relevant Bloomberg Screen Page specified in relation to such currency and as of the Sub-Strategy Fixing Time on the date of such observation:

| Currency | Bloomberg Screen Page | | |
|---|---|---|---|
| | 2 Year OIS Rate | 5 Year Swap Rate | 10 Year Swap Rate |
| **AUD** | ADSO2 CMPN <Curncy> | ADSW5 CMPN <Curncy> | ADSW10 CMPN <Curncy> |
| **CAD** | CDSO2 CMPN <Curncy> | CDSW5 CMPN <Curncy> | CDSW10 CMPN <Curncy> |
| **CHF** | SFSWT2 CMPN <Curncy> | SFSW5 CMPN <Curncy> | SFSW10 CMPN <Curncy> |
| **EUR** | EUSWE2 CMPN <Curncy> | EUSA5 CMPN <Curncy> | EUSA10 CMPN <Curncy> |
| **GBP** | BPSWS2 CMPN <Curncy> | BPSW5 CMPN <Curncy> | BPSW10 CMPN <Curncy> |
| **JPY** | JYSO2 CMPN <Curncy> | JYSW5 CMPN <Curncy> | JYSW10 CMPN <Curncy> |
| **NOK** | NKSW2 CMPN <Curncy> | NKSW5 CMPN <Curncy> | NKSW10 CMPN <Curncy> |
| **NZD** | NDSO2 CMPN <Curncy> | NDSW5 CMPN <Curncy> | NDSW10 CMPN <Curncy> |
| **SEK** | SKSWTN2 CMPN <Curncy> | SKSW5 CMPN <Curncy> | SKSW10 CMPN <Curncy> |
| **USD** | USSO2 CMPN <Curncy> | USSW5 CMPN <Curncy> | USSW10 CMPN <Curncy> |

"**Interest Rate Spread**" means, in relation to any Selected Currency Pair, the specified Interest Rate, namely: i) 2 Year OIS Rate Spread, ii) 5 Year Rate Spread or iii) 10 Year Rate Spread as the case may be.

**7. Calculation Parameters:**

7.1 "**2 Year OIS Rate Spread**" means, in relation to each Selected Currency Pair p and the Interest Rate in relation to the Base Currency and Term Currency of such Selected Currency Pair p where such Interest Rate is the 2 Year OIS Rate, the difference between the (i): 2 Year OIS Rate of such Base Currency and (ii) the 2 Year OIS Rate of such Term Currency determined in accordance with the following formula:

$$\text{2 Year OIS Rate Spread}_p = \text{2 Year OIS Rate}_{Base} - \text{2 Year OIS Rate}_{Term}$$

where:

| | | |
|---|---|---|
| 2 Year OIS Rate $\text{Spread}_p$ | = | The 2 Year OIS Rate Spread in relation to Selected Currency Pair p |
| 2 Year OIS $\text{Rate}_{Base}$ | = | The 2 Year OIS Rate then prevailing in relation to the Base Currency of Selected Currency Pair p |
| 2 Year OIS $\text{Rate}_{Rate}$ | = | The 2 Year OIS Rate then prevailing in relation to the Term Currency of Selected Currency Pair p |

7.2 "**5 Year Swap Spread**" means, in relation to each Selected Currency Pair p and the Interest Rate in relation to the Base Currency and Term Currency of such Selected Currency Pair p where such Interest Rate is the 5 Year Swap Rate, the difference between the (i): 5 Year Swap Spread of such Base Currency and (ii) the 5 Year Rate of such Term Currency determined in accordance with the following formula:

$$\text{5 Year Rate Spread}_p = \text{5 Year Swap Rate}_{Base} - \text{5 Year Swap Rate}_{Term}$$

where:

| | | |
|---|---|---|
| 5 Year Rate $\text{Spread}_p$ | = | The 5 Year Rate Spread in relation to Selected Currency Pair p |
| 5 Year Swap $\text{Rate}_{Base}$ | = | The 5 Year Swap Rate then prevailing in relation to the Base Currency of Selected Currency Pair p |
| 5 Year Swap $\text{Rate}_{Rate}$ | = | The 5 Year Swap Rate then prevailing in relation to the Term Currency of Selected Currency Pair p |

7.3 "**10 Year Swap Spread**" means, in relation to each Selected Currency Pair p and the Interest Rate in relation to the Base Currency and Term Currency of such Selected Currency Pair p where such Interest Rate is the 10 Year Swap Rate, the difference between the (i): 10 Year Swap Rate of such Base Currency and (ii) the 10 Year Swap Rate of such Term Currency determined in accordance with the following formula:

$$\text{10 Year Swap Rate Spread}_p = \text{10 Year Swap Rate}_{Base} - \text{10 Year Swap Rate}_{Term}$$

where:

| | | |
|---|---|---|
| 10 Year Rate $\text{Spread}_p$ | = | The 10 Year Rate Spread in relation to Selected Currency Pair p |
| 10 Year Swap $\text{Rate}_{Base}$ | = | The 10 Year Swap Rate then prevailing in relation to the Base Currency of Selected Currency Pair p |
| 10 Year Swap $\text{Rate}_{Rate}$ | = | The 10 Year Swap Rate then prevailing in relation to the Term Currency of Selected |

Currency Pair p

7.4 "**Ranking Score**" means, in relation to each Selected Currency Pair p, the absolute value of the difference between a specified Interest Rate Spread and the relevant Short Term Average determined in accordance with the following formula:

$$\text{Ranking Score}_p = \left|\text{Interest Rate Spread}_j - \text{Short Term Average}_{k,p}\right|$$

where:

| | | |
|---|---|---|
| Ranking Score$_p$ | = | The absolute value of the Ranking Score in relation to each Selected Currency Pair p, determined in connection with: i) the 2 Year OIS Rate Spread, ii) the 5 Year Swap Spread or iii) the 10 Year Swap Spread as the case may be. |
| Interest Rate Spread$_j$ | = | Either: i) where j=1, the 2 Year OIS Rate Spread, ii) where j=2, the 5 Year Swap Spread or iii) where j=3, the 10 Year Swap Spread as the case may be. |
| Short Term Average$_{k,p}$ | = | The Short Term Average in relation to each Selected Currency Pair p, determined in connection with: i) where k=1, the 2 Year OIS Rate Spread, ii) where k=2, the 5 Year Swap Spread or iii) where k=3, the 10 Year Swap Spread as the case may be. |
| $\left\| \right\|$ | = | The modulus, showing the magnitude of a number without regard to its sign. |

7.5 "**Short Term Average**" means, in relation to each Selected Currency Pair p, the arithmetic average of 15 discrete values of the specified Interest Rate Spread achieved by such Selected Currency Pair p over a period of 15 Data Observation Days immediately preceding, and including the date on which such Short Term Average is determined in accordance with the following formula:

$$\text{Short Term Average}_{k,p} = \frac{\sum_{m=1}^{N} \text{Interest Rate Spread}_{j,m}}{N}$$

where:

| | | |
|---|---|---|
| Short Term Average$_{k,p}$ | = | The Short Term Average in relation to each Selected Currency Pair p, determined in relation to: i) where k=1, the 2 Year OIS Rate Spread, ii) where k=2, the 5 Year Swap Spread or iii) where k=3, the 10 Year Swap Spread as the case may be. |
| Interest Rate | = | Either: i) where j=1, the 2 Year OIS Rate Spread, ii) where j=2, the 5 Year Swap |

| | | |
|---|---|---|
| $Spread_{j,m}$ | | Spread or iii) where j=3, the 10 Year Swap Spread as the case may be. |
| N | = | 15, representing the number of discrete observations made of the specified Interest Rate Spread as of the relevant Sub-Strategy Fixing Time on each Data Observation Day over a period of 15 Data Observation Days prior to, and including, the relevant Sub-Strategy Fixing Time on the Data Observation Day on which Short Term Average is determined. |

7.6 "**Sub-Strategy Signal**" means a positive or negative value of 1 determined with reference to the: i) Ranking Score and ii) a comparison of the Interest Rate Spread in relation to a Selected Currency Pair against the applicable Short Term Average in accordance with the following algorithm:

$$\text{Sub - Strategy Signal}_{p,j,k} = \begin{cases} \text{Each } SCP_p \text{ with Ranking Score lower than 30th Ranking Score}, 0 \\ \text{Interest Rate Spread}_j > \text{Short Term Average}_k, +1 \\ \text{Interest Rate Spread}_j < \text{Short Term Average}_k, -1 \\ \text{otherwise}, 0 \end{cases}$$

where:

| | | |
|---|---|---|
| $\text{Ranking Score}_p$ | = | The absolute value of the Ranking Score in relation to each Selected Currency Pair p, determined in connection with: i) the 2 Year OIS Rate Spread, ii) the 5 Year Swap Spread or iii) the 10 Year Swap Spread as the case may be. |
| $\text{Interest Rate Spread}_j$ | = | Either: i) where j=1, the 2 Year OIS Rate Spread, when Short Term Average is being determined in connection with the 2 Year OIS Rate Spread, ii) where j=2, the 5 Year Swap Spread when Short Term Average is being determined in connection with the 5 Year Swap Spread or iii) where j=3, the 10 Year Swap Spread when Short Term Average is being determined in connection with the 10 Year Swap Spread. |
| $\text{Short Term Average}_k$ | = | The Short Term Average in relation to each Selected Currency Pair p, determined in connection with: i) where k=1, the 2 Year OIS Rate Spread, ii) where k=2, the 5 Year Swap Spread or iii) where k=3, the 10 Year Swap Spread as the case may be. |

# Ranked SECOND Strategy

*The following Overview of the Strategy is provided for ease of reference only and does not form part of the Strategy Methodology which is set out below. Capitalised terms used in this Overview have the meanings given to them in the Strategy Methodology, the related Sub-Strategy or the Master Definitions.*

**Overview:** The Strategy is a rules-based proprietary trading strategy developed by the Index Sponsor to work in conjunction with the Ranked SECOND Sub-Strategy. The Strategy expresses the notional exposure to 30 currency pairs determined by the Sub-Strategy as notional positions in FX Forward Contracts referencing certain specified US cross pairs. The intention behind the Strategy is to achieve notional capital appreciation through dynamically adjusting notional positions in such FX Forward Contracts referencing such US cross pairs.

## Strategy Methodology

The following is the Strategy Methodology in relation to the Ranked SECOND Strategy (the "**Strategy**") and the Ranked SECOND Sub-Strategy (the "**Sub-Strategy**") shall be the only applicable Sub-Strategy to the Strategy.

**1. Date** 1 August 2012

**2. Currency Pair Universe:** USDGBP USDAUD USDEUR USDNZD USDSEK
USDCAD USDCHF USDJPY USDNOK

**3. Currency Pair Selection:** Each Currency Pair in the Currency Pair Universe shall be a "**Selected Currency Pair**" for the purposes of this Strategy. The Strategy references the notional exposure to each Sub-Strategy Currency Pair determined pursuant to the Sub-Strategy and expresses such notional exposure in each case as notional trading positions in Forward Contracts which, in turn, references such Selected Currency Pairs pursuant to paragraph 4 (*Strategy Exposure*).

**4. Strategy Exposure:**

4.1 The Index Calculation Agent shall, as of the Strategy Fixing Time on each Index Business Day, determine a notional "**Strategy Matrix**" by: i) the addition of the 3 Sub-Strategy Matrices determined pursuant to the Sub-Strategy Methodology and ii) the division of each element of such Strategy Matrix by 3. Such a determination shall result in a notional 9 by 5 matrix of 45 elements where each such element shall be a "**Strategy Signal**". Each Strategy Signal is a numerical value representing a notional exposure to a specific Sub-Strategy Currency Pair q identifiable from its position within the Strategy Matrix which corresponds exactly to the arrangement of such Sub-Strategy Currency Pairs as set out in paragraph 2 (*Currency Pair Universe*) of the Sub-Strategy Methodology.

4.2(i) The Index Calculation Agent shall then express the notional exposure represented by each Strategy Signal in respect of a Sub-Strategy Currency Pair q as a Strategy Exposure to a Selected Currency Pair, or where the Strategy Signal is in respect of a Sub-Strategy Currency Pair q which is a Cross Pair, a combination of two Strategy Exposures to Selected Currency Pairs in the Currency Pair Universe, following the

two steps set out below:

(ii) First, the Index Calculation Agent shall determine the **number** of Strategy Exposures to be determined in relation to each Sub-Strategy Currency Pair q, depending on the Pair Type of such Sub-Strategy Currency Pair q, according to the following criteria:

| | **Pair Type** | **Strategy Exposure(s) to be determined** |
|---|---|---|
| a) | Cross Pair | One Strategy Exposure to be determined in relation to **the Term Leg** of such Cross Pair. |
| | | One Strategy Exposure to be determined in relation to **the Base Leg** of such Cross Pair. |
| b) | Identical Pair | One Strategy Exposure to be determined in relation to such Identical Pair. |

(iii) Second, the Index Calculation Agent shall determine the "**Trade Signal**" of each Strategy Exposure required to be determined in relation to Sub-Strategy Currency Pair q, depending on the Pair Type of Sub-Strategy Currency Pair q, in accordance with the following criteria:

| | **Pair Type** | **Strategy Exposure$_q$** | **Trade Signal$_q$** |
|---|---|---|---|
| a) | Cross Pair | Strategy Exposure q in relation to Base Leg | **- Strategy Signal$_q$** |
| | | Strategy Exposure q in relation to Term Leg | **+ Strategy Signal$_q$** |
| b) | Identical Pair | Strategy Exposure in relation to Identical Pair | **+ Strategy Signal$_q$** |

4.3 Following the identification of the Trade Signal(s) relevant to each Strategy Exposure to a Selected Currency Pair, the Index Calculation Agent shall then aggregate all Trade Signals (each an "**Aggregate Trade Signal**") which have been expressed in relation to the same Selected Currency Pair p. Because there are 9 Selected Currency Pairs in the Currency Pair Universe, the Index Calculation Agent shall, in total, determine 9 Aggregate Trade Signals such that there is one Aggregate Trade Signal in relation to each Selected Currency Pair.

4.4 Lastly, the Index Calculation Agent shall determine as of the Strategy Fixing Time on each Index Business Day t a Strategy Exposure in relation to each Selected Currency Pair p as the product of the Aggregate Trade Signal p and the Currency Notional Amount as follows:

$$\text{Strategy Exposure}_{p,t} = \text{Aggregate Trade Signal}_{p,t} \times \text{Currency Notional Amount}_t$$

where:

| | | |
|---|---|---|
| Strategy Exposure$_{p,t}$ | = | The Strategy Exposure determined in relation to Selected Currency Pair p as of the Strategy Fixing Time on each Index Business Day t. |
| Currency Notional Amount$_t$ | = | Means the Currency Notional Amount ("**CNA**"), as of Index Business Day t determined in accordance with the following formula: $CNA_t = \frac{StrategyNotionalAmount_t}{30}$ where: Strategy Notional Amount$_t$ = Means the Strategy Notional Amount as of Index Business Day t, with the meaning given to it in the Master Definitions. |
| Aggregate Trade Signal$_p$ | = | Means the Aggregate Trade Signal determined in relation to Selected Currency Pair p pursuant to paragraph 4.3. |

4.5 For the avoidance of doubt and pursuant to applying the process set out from paragraph 4.1 to paragraph 4.4, the Strategy Exposure as of each Index Business Day t in relation to each Selected Currency Pair p shall be expressed to be **Long** the Base Currency and **Short** the Term Currency of a notional Forward Contract referencing such Selected Currency Pair p in the Currency Notional Amount.

**5. Miscellaneous Provisions:** This Strategy and the Strategy Methodology is subject to the Miscellaneous Provisions Document dated 7 September 2012 as amended or updated from time to time.

**6. Defined Terms:** Terms used and defined in this Strategy Methodology shall have the meaning given to them in, and are unique to, this Strategy Methodology. Terms used but not defined in this Strategy Methodology shall have the meaning given to them in the Master Definitions or applicable Sub-Strategy Methodology.

"**Aggregate Trade Signal**" means a positive or negative value, or as the case may be, zero, as determined by aggregating all Trade Signals which have been determined in relation to the same Selected Currency Pair.

"**Base Leg**" means, in relation to any Sub-Strategy Currency Pair that is a Cross Pair, the Selected Currency Pair in the Currency Pair Universe with a Term Currency that is the same currency as the Cross Base Currency of such Cross Pair.

"**Cross Base Currency**" means, in respect of a particular Cross Pair, the Base Currency of that Cross Pair.

"**Cross Pair**" means any Sub-Strategy Currency Pair which does not

contain US Dollar as either its Base Currency or Term Currency.

"**Cross Term Currency**" means, in respect of a particular Cross Pair, the Term Currency of that Cross Pair.

"**Identical Pair**" means, in relation to a Sub-Strategy Currency Pair, the Selected Currency Pair in the Currency Pair Universe identical to such Sub-Strategy Currency Pair.

"**Master Definitions**" means the document dated 12 September 2012 as the same may be amended and/or restated from time to time.

"**Pair Type**" means, in relation to a Sub-Strategy Currency Pair, whether such Sub-Strategy Currency Pair is a Cross Pair or an Identical Pair.

"**Strategy Fixing Time**" means, in relation to any comparison, ranking, calculation or determination to be made in connection with this Strategy Methodology, 12:00 p.m. London time as of the applicable date.

"**Strategy Signal**" means a positive or negative value, or as the case may be, zero, as determined with reference to each Sub-Strategy Currency Pair in accordance with paragraph 4.1

"**Sub-Strategy Currency Pair**" means the Currency Pairs in the Currency Pair Universe as specified in the Sub-Strategy Methodology.

"**Sub-Strategy Methodology**" means the document dated 1 August 2012 which sets out certain comparisons, rankings, calculations and determinations to be made in connection with the Sub-Strategy.

"**Term Leg**" means, in relation to any Sub-Strategy Currency Pair that is a Cross Pair, the Selected Currency Pair in the Currency Pair Universe with the same Term Currency as the Cross Term Currency of such Cross Pair.

"**Trade Signal**" means a positive or negative value, or as the case may be, zero, as determined with reference to the Pair Type of a Sub-Strategy Currency Pair in accordance with paragraph 4.2(iii).

**7. Calculation Parameters:** Not Applicable.

# Ranked SECOND Sub-Strategy

*The following Overview of the Sub-Strategy is provided for ease of reference only and does not form part of the Sub-Strategy Methodology which is set out below. Capitalised terms used in this Overview have the meanings given to them in the Sub-Strategy Methodology, the related Strategy or the Master Definitions.*

**Overview:** The Sub-Strategy is a rules-based proprietary trading sub-strategy developed by the Index Sponsor intended to work in conjunction with a strategy to achieve notional capital appreciation through dynamically adjusting notional positions in FX Forward Contracts. As of each Index Business Day, the Index Calculation Agent determines 3 separate and distinct sets of notional trading signals. The notional trading signals of each such set have themselves, in turn, been determined in relation to 45 separate and distinct currency pairs, such determination in each case based on certain interest rate differentials relating to the component currencies of each currency pair and a comparison of the performance of such differentials against their short and medium term averages.

## Sub-Strategy Methodology

The following is the Sub-Strategy Methodology in relation to the Ranked SECOND Sub-Strategy (the "**Sub-Strategy**").

**1. Date:** 1 August 2012

**2. Currency Pair Universe:**

| | | | | |
|---|---|---|---|---|
| AUDCAD | AUDCHF | AUDJPY | AUDNOK | AUDNZD |
| AUDSEK | USDAUD | CADCHF | CADJPY | CADNOK |
| CADSEK | CHFJPY | CHFNOK | CHFSEK | EURAUD |
| EURCAD | EURCHF | EURGBP | EURJPY | EURNOK |
| EURNZD | EURSEK | USDEUR | GBPAUD | GBPCAD |
| GBPCHF | GBPJPY | GBPNOK | GBPNZD | GBPSEK |
| USDGBP | NOKJPY | NOKSEK | NZDCAD | NZDCHF |
| NZDJPY | NZDNOK | NZDSEK | USDNZD | SEKJPY |
| USDCAD | USDCHF | USDJPY | USDNOK | USDSEK |

(each, a "**Currency Pair**" in the "**Currency Pair Universe**")

**3. Currency Pair Selection:** Each Currency Pair shall be defined as a "**Selected Currency Pair**" for the purposes of this Sub-Strategy.

**4. Sub-Strategy Signal:**

4.1 As of the Sub-Strategy Fixing Time on each Index Business Day t, the Index Calculation Agent shall determine 3 separate and distinct sets of Sub-Strategy Signals (each a "**Sub-Strategy Signal**"). Each such set, in turn, consists of 45 separate and distinct Sub-Strategy Signals, each of which is determined in relation to a Selected Currency Pair p.

4.2(i) As of the Sub-Strategy Fixing Time on such Index Business Day t, the first set of Sub-Strategy Signals shall be determined in relation to all Selected Currency Pairs p, each of which are then assigned their respective Ranking Scores with reference to paragraph 7.5 (assuming for the purposes of paragraph 7.5 that j=k=1) using the: i) Spread Average Differential determined with reference to the 2 Year OIS Rate Spread and the applicable Short Term Average in accordance with paragraph 7.7 (assuming for the purposes of paragraph 7.7 that j=k=1) and ii) the Medium Term Average in relation to such Spread Average Differential then determined with reference to paragraph 7.4 (assuming for the purposes of paragraph 7.4 that j=k=1).

(ii) The Ranking Scores are then arranged in descending order such that the highest Ranking Score is ranked first. If two or more Ranking Scores are equal, then those Ranking Scores will be ranked in accordance with their respective values prevailing as of the Sub-Strategy Fixing Time on the first immediately preceding Index Business Day when those values were unequal.

(iii) A Sub-Strategy Signal shall then be determined in relation to each Selected Currency Pair p by applying the algorithm set out in paragraph 7.8 (assuming that j=k=1 for the purposes of such algorithm).

4.3(i) As of the Sub-Strategy Fixing Time on such Index Business Day t, the second set of Sub-Strategy Signals shall be determined in relation to all Selected Currency Pairs p, each of which are then assigned their respective Ranking Scores with reference to paragraph 7.5 (assuming for the purposes of paragraph 7.5 that j=k=2) using the: i) Spread Average Differential determined with reference to the 5 Year Swap Spread and the applicable Short Term Average in accordance with paragraph 7.7 (assuming for the purposes of paragraph 7.7 that j=k=2) and ii) the Medium Term Average in relation to such Spread Average Differential then determined with reference to paragraph 7.4 (assuming for the purposes of paragraph 7.4 that j=k=2).

(ii) The Ranking Scores are then arranged in descending order such that the highest Ranking Score is ranked first. If two or more Ranking Scores are equal, then those Ranking Scores will be ranked in accordance with their respective values prevailing as of the Sub-Strategy Fixing Time on the first immediately preceding Index Business Day when those values were unequal.

(iii) A Sub-Strategy Signal shall then be determined in relation to each Selected Currency Pair p by applying the algorithm set out in paragraph 7.8 (assuming that j=k=2 for the purposes of such algorithm).

4.4(i) As of the Sub-Strategy Fixing Time on such Index Business Day t, the third set of Sub-Strategy Signals shall be determined in relation to all Selected Currency Pairs p, each of which are then assigned their respective Ranking Scores with reference to paragraph 7.5 (assuming for the purposes of paragraph 7.5 that j=k=3) using the: i) Spread Average Differential determined with reference to the 10 Year Swap Spread and the applicable Short Term Average in accordance with paragraph 7.7 (assuming for the purposes of paragraph 7.7 that j=k=3) and ii) the Medium Term Average in relation to such Spread Average Differential then determined with reference to paragraph 7.4 (assuming for the purposes of paragraph 7.4 that j=k=3).

(ii) The Ranking Scores are then arranged in descending order such that the highest Ranking Score is ranked first. If two or more Ranking Scores are equal, then those Ranking Scores will be ranked in accordance with their respective values prevailing as of the Sub-Strategy Fixing Time on the first immediately preceding Index Business Day when those values were unequal.

(iii) A Sub-Strategy Signal shall then be determined in relation to each Selected Currency Pair p by applying the algorithm set out in paragraph 7.8 (assuming that j=k=3 for the purposes of such algorithm).

4.5 Each set of Sub-Strategy Signals determined by the Index Calculation Agent applying the calculations set out in paragraphs 4.2, 4.3 and 4.4 shall be notionally arranged in a 9 by 5 matrix (each such matrix, a "**Sub-Strategy Matrix**") where the Sub-Strategy Signals in relation to each Selected Currency Pair p is arranged in a manner which corresponds to the arrangement of Currency Pairs as set out in paragraph 2 (*Currency Pair Universe*).

**5. Miscellaneous Provisions:** This Sub-Strategy, the Sub-Strategy Methodology and the related Strategy is subject to the Miscellaneous Provisions Document dated 7 September 2012 as amended or updated from time to time.

**6. Defined Terms:** Terms used and defined in this Sub-Strategy Methodology shall have the meaning given to them in, and are unique to, this Sub-Strategy Methodology. Terms used but not defined in this Sub-Strategy Methodology shall have the meaning given to them in the Master Definitions or in the related Strategy.

"**Sub-Strategy Fixing Time**" means, in relation to any comparison, ranking, calculation or determination to be made in connection with this Sub-Strategy Methodology, 12:00 p.m. London time as of the applicable date.

"**Interest Rate**" means, in relation to a currency, the: i) 2 Year OIS Rate, ii) 5 Year Swap Rate or iii) 10 Year Swap Rate as the case may be, observed by the Index Calculation Agent on the relevant Bloomberg Screen Page specified in relation to such currency and as of the Sub-Strategy Fixing Time on the date of such observation:

| Currency | Bloomberg Screen Page | | |
|---|---|---|---|
| | 2 Year OIS Rate | 5 Year Swap Rate | 10 Year Swap Rate |
| **AUD** | ADSO2 CMPN <Curncy> | ADSW5 CMPN <Curncy> | ADSW10 CMPN <Curncy> |
| **CAD** | CDSO2 CMPN <Curncy> | CDSW5 CMPN <Curncy> | CDSW10 CMPN <Curncy> |
| **CHF** | SFSWT2 CMPN <Curncy> | SFSW5 CMPN <Curncy> | SFSW10 CMPN <Curncy> |
| **EUR** | EUSWE2 CMPN <Curncy> | EUSA5 CMPN <Curncy> | EUSA10 CMPN <Curncy> |
| **GBP** | BPSWS2 CMPN <Curncy> | BPSW5 CMPN <Curncy> | BPSW10 CMPN <Curncy> |
| **JPY** | JYSO2 CMPN <Curncy> | JYSW5 CMPN <Curncy> | JYSW10 CMPN <Curncy> |
| **NOK** | NKSW2 CMPN <Curncy> | NKSW5 CMPN <Curncy> | NKSW10 CMPN <Curncy> |
| **NZD** | NDSO2 CMPN <Curncy> | NDSW5 CMPN <Curncy> | NDSW10 CMPN <Curncy> |
| **SEK** | SKSWTN2 CMPN <Curncy> | SKSW5 CMPN <Curncy> | SKSW10 CMPN <Curncy> |
| **USD** | USSO2 CMPN <Curncy> | USSW5 CMPN <Curncy> | USSW10 CMPN <Curncy> |

"**Interest Rate Spread**" means, in relation to any Selected Currency Pair, the specified Interest Rate, namely: i) 2 Year OIS Rate Spread, ii) 5 Year Rate Spread or iii) 10 Year Rate Spread as the case may be.

**7. Calculation Parameters:**

7.1 "**2 Year OIS Rate Spread**" means, in relation to each Selected Currency Pair p and the Interest Rate in relation to the Base Currency and Term Currency of such Selected Currency Pair p where such Interest Rate is the 2 Year OIS Rate, the difference between the (i): 2 Year OIS Rate of such Base Currency and (ii) the 2 Year OIS Rate of such Term Currency determined in accordance with the following formula:

$$2\ Year\ OIS\ Rate\ Spread_p = 2\ Year\ OIS\ Rate_{Base} - 2\ Year\ OIS\ Rate_{Term}$$

where:

| | | |
|---|---|---|
| 2 Year OIS Rate $Spread_p$ | = | The 2 Year OIS Rate Spread in relation to Selected Currency Pair p |
| 2 Year OIS $Rate_{Base}$ | = | The 2 Year OIS Rate then prevailing in relation to the Base Currency of Selected Currency Pair p |
| 2 Year OIS $Rate_{Rate}$ | = | The 2 Year OIS Rate then prevailing in relation to the Term Currency of Selected Currency Pair p |

7.2 "**5 Year Swap Spread**" means, in relation to each Selected Currency Pair p and the Interest Rate in relation to the Base Currency and Term Currency of such Selected Currency Pair p where such Interest Rate is the 5 Year Swap Rate, the difference between the (i): 5 Year Swap Spread of such Base Currency and (ii) the 5 Year Rate of such Term Currency determined in accordance with the following formula:

$$5\ Year\ Rate\ Spread_p = 5\ Year\ Swap\ Rate_{Base} - 5\ Year\ Swap\ Rate_{Term}$$

where:

| | | |
|---|---|---|
| 5 Year Rate $Spread_p$ | = | The 5 Year Rate Spread in relation to Selected Currency Pair p |
| 5 Year Swap $Rate_{Base}$ | = | The 5 Year Swap Rate then prevailing in relation to the Base Currency of Selected Currency Pair p |
| 5 Year Swap $Rate_{Rate}$ | = | The 5 Year Swap Rate then prevailing in relation to the Term Currency of Selected Currency Pair p |

7.3 "**10 Year Swap Spread**" means, in relation to each Selected Currency Pair p and the Interest Rate in relation to the Base Currency and Term Currency of such Selected Currency Pair p where such Interest Rate is the 10 Year Swap Rate, the difference between the (i): 10 Year Swap Rate of such Base Currency and (ii) the 10 Year Swap Rate of such Term Currency determined in accordance with the following formula:

$$10\ Year\ Swap\ Rate\ Spread_p = 10\ Year\ Swap\ Rate_{Base} - 10\ Year\ Swap\ Rate_{Term}$$

where:

| | | |
|---|---|---|
| 10 Year Rate $Spread_p$ | = | The 10 Year Rate Spread in relation to Selected Currency Pair p |
| 10 Year Swap $Rate_{Base}$ | = | The 10 Year Swap Rate then prevailing in relation to the Base Currency of Selected Currency Pair p |
| 10 Year Swap $Rate_{Rate}$ | = | The 10 Year Swap Rate then prevailing in relation to the Term Currency of Selected Currency Pair p |

7.4 "**Medium Term Average**" means, in relation to each Selected Currency Pair p, the arithmetic average of 25 discrete values of the specified Spread Average Differential achieved by such Selected Currency Pair p over a period of 25 Data Observation Days immediately preceding, and including, the date on which such Medium Term Average is determined in accordance with the following formula:

$$\text{Medium Term Average}_{k,p} = \frac{\sum_{m=1}^{N} \text{Spread Average Differential}_{j,m}}{N}$$

where:

| | | |
|---|---|---|
| Medium Term $Average_{k,p}$ | = | The Medium Term Average in relation to each Selected Currency Pair p, determined in relation to: i) where k=1, the 2 Year OIS Rate Spread, ii) where k=2, the 5 Year Swap Spread or iii) where k=3, the 10 Year Swap Spread as the case may be. |
| Spread Average $Differential_{j,m}$ | = | Either: i) where j=1, the difference between the 2 Year OIS Rate Spread and the Short Term Average where k=1, ii) where j=2, the difference between the 5 Year Swap Spread and the Short Term Average where k=2 or iii) where j=3, the difference between the 10 Year Swap Spread and the Short Term Average where k=3, as the case may be. |
| N | = | 25, representing the number of discrete observations made of the specified Spread Average Differential as of the relevant Sub-Strategy Fixing Time on each Data Observation Day over a period of 25 Data Observation Days prior to, and including, the relevant Sub-Strategy Fixing Time on the Data Observation Day on which Short Term Average is determined. |

7.5 "**Ranking Score**" means, in relation to each Selected Currency Pair p, the absolute value of the difference between a specified Spread Average Differential and the relevant Medium Term Average determined in accordance

with the following formula:

$$\text{Ranking Score}_p = \left|\text{Spread Average Differential}_{j,p} - \text{Medium Term Average}_{k,p}\right|$$

where:

| | | |
|---|---|---|
| Ranking Score$_p$ | = | The absolute value of the Ranking Score in relation to each Selected Currency Pair p, determined in connection with: i) the 2 Year OIS Rate Spread, ii) the 5 Year Swap Spread or iii) the 10 Year Swap Spread as the case may be. |
| Spread Average Differential$_{j,p}$ | = | Either: i) where j=1, the difference between the 2 Year OIS Rate Spread and the Short Term Average where k=1, ii) where j=2, the difference between the 5 Year Swap Spread and the Short Term Average where k=2 or iii) where j=3, the difference between the 10 Year Swap Spread and the Short Term Average where k=3, as the case may be. |
| Medium Term Average$_{k,p}$ | = | The Medium Term Average in relation to each Selected Currency Pair p, determined in connection with: i) where k=1, the 2 Year OIS Rate Spread, ii) where k=2, the 5 Year Swap Spread or iii) where k=3, the 10 Year Swap Spread, as the case may be. |
| $\left\| \right\|$ | = | The modulus, showing the magnitude of a number without regard to its sign. |

7.6 "**Short Term Average**" means, in relation to each Selected Currency Pair p, the arithmetic average of 15 discrete values of the specified Interest Rate Spread achieved by such Selected Currency Pair p over a period of 15 Data Observation Days immediately preceding, and including the date on which such Short Term Average is determined in accordance with the following formula:

$$\text{Short Term Average}_{k,p} = \frac{\sum_{m=1}^{N} \text{Interest Rate Spread}_{j,m}}{N}$$

where:

| | | |
|---|---|---|
| Short Term Average$_{k,p}$ | = | The Short Term Average in relation to each Selected Currency Pair p, determined in relation to: i) where k=1, the 2 Year OIS Rate Spread, ii) where k=2, the 5 Year Swap Spread or iii) where k=3, the 10 Year Swap Spread as the case may be. |
| Interest Rate | = | Either: i) where j=1, the 2 Year OIS Rate Spread, ii) where j=2, the 5 Year Swap |

| | | |
|---|---|---|
| $Spread_{j,m}$ | | Spread or iii) where j=3, the 10 Year Swap Spread as the case may be. |
| N | = | 15, representing the number of discrete observations made of the specified Interest Rate Spread as of the relevant Sub-Strategy Fixing Time on each Data Observation Day over a period of 15 Data Observation Days prior to, and including, the relevant Sub-Strategy Fixing Time on the Data Observation Day on which Short Term Average is determined. |

7.7 "**Spread Average Differential**" means, in relation to each Selected Currency Pair p and the applicable Interest Rate Spread j, the difference between the relevant Interest Rate Spread (i) where j=1, the 2 Year OIS Spread and the Short Term Average where k=1, (ii) where j=2, the 5 Year Swap Spread and Short Term Average where k=2, (iii) where j=3, the 10 Year Swap Spread and Short Term Average where k=3, determined in each case, in accordance with the following formula:

$$\text{Spread Average Differential}_{j,p} = \text{Interest Rate Spread}_{j} - \text{Short Term Average}_{k,p}$$

where:

| | | |
|---|---|---|
| Spread Average $\text{Differential}_{j,p}$ | = | Either: i) where j=1, the difference between the 2 Year OIS Rate Spread and the Short Term Average where k=1, ii) where j=2, the difference between the 5 Year Swap Spread and the Short Term Average where k=2 or iii) where j=3, the difference between the 10 Year Swap Spread and the Short Term Average where k=3, as the case may be. |
| Interest Rate $\text{Spread}_{j,}$ | = | Either: i) where j=1, the 2 Year OIS Rate Spread, ii) where j=2, the 5 Year Swap Spread or iii) where j=3, the 10 Year Swap Spread as the case may be. |
| Short Term $\text{Average}_{k,p}$ | = | The Short Term Average in relation to each Selected Currency Pair p, determined in relation to: i) where k=1, the 2 Year OIS Rate Spread, ii) where k=2, the 5 Year Swap Spread or iii) where k=3, the 10 Year Swap Spread as the case may be. |

7.8 "**Sub-Strategy Signal**" means a positive or negative value of 1 determined with reference to the: i) Ranking Score and ii) a comparison of the Interest Rate Spread in relation to a Selected Currency Pair p against the applicable MediumTerm Average in accordance with the following algorithm:

$$\text{Sub - Strategy Signal}_{p,j,k} = \begin{cases} \text{Each SCP}_p \text{ with Ranking Score lower than 30th Ranking Score}, 0 \\ \text{Spread Average Differential}_j > \text{Medium Term Average}_k, +1 \\ \text{Spread Average Differential}_j < \text{Medium Term Average}_k, -1 \\ \text{otherwise}, 0 \end{cases}$$

where:

| | | |
|---|---|---|
| Ranking Score$_p$ | = | The absolute value of the Ranking Score in relation to each Selected Currency Pair p, determined in connection with: i) the 2 Year OIS Rate Spread, ii) the 5 Year Swap Spread or iii) the 10 Year Swap Spread as the case may be. |
| Spread Average Differential$_j$ | = | Either: i) where j=1, the difference between the 2 Year OIS Rate Spread and the Short Term Average where k=1, ii) where j=2, the difference between the 5 Year Swap Spread and the Short Term Average where k=2 or iii) where j=3, the difference between the 10 Year Swap Spread and the Short Term Average where k=3, as the case may be. |
| Medium Term Average$_k$ | = | The Medium Term Average in relation to each Selected Currency Pair p, determined in connection with: i) where k=1, the 2 Year OIS Rate Spread, ii) where k=2, the 5 Year Swap Spread or iii) where k=3, the 10 Year Swap Spread as the case may be. |

# Miscellaneous Provisions Document

*The following Overview of the Miscellaneous Provisions Document is provided for ease of reference only and does not form part of the Miscellaneous Provisions Document which is set out below. Capitalised terms used in this Overview have the meanings given to them in the Master Definitions unless otherwise specified.*

| | |
|---|---|
| **Date:** | 7 September 2012 |
| **Scope and Purpose:** | The Miscellaneous Provisions Document is intended for use in conjunction with other Index Documents and to be read and construed with an Index Methodology, the Master Definitions and a Strategy or group of Strategies. This document describes certain Adjustment Events, Disrupted Days and Disruption Events (each as defined below), the occurrence of which, in each case, is intended to trigger specified adjustments to, substitution of or outright cancellation of certain calculations and determinations to be made in any Strategy Methodology or Index Methodology in accordance with the terms set out herein. |

Terms used and defined in this Miscellaneous Provisions Document have the meaning given to them in this Miscellaneous Provisions Document. Terms used but not defined in this Miscellaneous Provisions Document shall have the meaning given to them in the Master Definitions.

References herein to the "**applicable Index Methodology**" are references to the Index Methodology relating to the relevant Index which shall be read and construed with the relevant Master Definitions and applicable Strategy Methodology of any Strategy which constitutes such Index. References herein to the "**applicable Strategy Methodology**" are references to such Strategy Methodology (or Strategy Methodologies as the case may be) relating to the relevant Strategy (or Strategies) which constitutes such Index.

The provisions of this Miscellaneous Provisions Document shall prevail over any calculations and determinations specified in any Strategy Methodology or Index Methodology upon the occurrence of a Disrupted Day or Adjustment Event.

## 1. Consequences upon the occurrence of a Disrupted Day

Upon the occurrence of a Disrupted Day on any given day, the following adjustments are applicable in relation to: (a) each observation and/or Strategy Exposure (if any) to be determined in relation to each Currency Pair and (b) each Forward Contract notionally held by each Strategy which may need to be notionally valued, executed or settled as of such day:

### *(a) Currency Pairs and Affected Currency Pairs upon the occurrence of a Disrupted Day*

*(i) Occurrence of a Disrupted Day on observations expressed to be made as of a Data Observation Day*

1) in relation to each Currency Pair specified in the Currency Pair Universe of any applicable Strategy Methodology which **is not** an Affected Currency Pair, any observations expressed to be made in relation to such Currency Pair (or, as the case may be, any Currency constituting such Currency Pair) as of a Data Observation Day which coincides with the occurrence of a Disrupted Day shall continue to be observed as if such day was the Data Observation Day for observations in relation to such Currency Pair (or Currency), notwithstanding the occurrence of a Disrupted Day; and

2) in relation to each Currency Pair specified in the Currency Pair Universe of any applicable Strategy Methodology which is an Affected Currency Pair, any

observations expressed to be made in relation to such Affected Currency Pair (or, as the case may be, any Currency constituting such Affected Currency Pair) as of a Data Observation Day which coincides with the occurrence of a Disrupted Day shall instead be deemed to be the equivalent observation made in relation to such Affected Currency Pair (or Currency) as of the **first** Data Observation Day **immediately preceding** such Disrupted Day which is not itself a Disrupted Day in relation to such Affected Currency Pair,

*(ii)* *Determination of Strategy Exposure(s) on a Disrupted Day*

1) in relation to each Selected Currency Pair determined from time to time pursuant to any applicable Strategy Methodology which **is not** an Affected Currency Pair, any Strategy Exposure to be determined in relation to such Selected Currency Pair as of an Index Business Day which coincides with the occurrence of a Disrupted Day shall continue to be determined as if such day was the Index Business Day for such determination, notwithstanding the occurrence of a Disrupted Day; and

2) in relation to each Selected Currency Pair determined from time to time pursuant to any applicable Strategy Methodology which is an Affected Currency Pair, any Strategy Exposure to be determined in relation to such Affected Currency Pair as of an Index Business Day shall be deemed as the Strategy Exposure determined in respect of such Affected Currency Pair as of the **first** Index Business Day **immediately preceding** such Disrupted Day which is not itself a Disrupted Day in relation to such Affected Currency Pair,

***(b)*** ***Forward Contracts and Affected Forward Contracts upon the occurrence of a Disrupted Day***

*(i)* *Notional Valuation of Forward Contracts as of each Index Business Day*

1) in relation to each Forward Contract expressed to be notionally valued pursuant to the applicable Index Methodology which **is not** itself an Affected Forward Contract, any notional valuation expressed to take place as of an Index Business Day which coincides with the occurrence of a Disrupted Day shall remain such Index Business Day for such notional valuation notwithstanding the occurrence of a Disrupted Day; and

2) in relation to each Forward Contract expressed to be notionally valued pursuant to the applicable Index Methodology which is an Affected Forward Contract, any notional valuation expressed to take place as of an Index Business Day which coincides with the occurrence of a Disrupted Day shall be deemed as the notional valuation of such Forward Contract as of the **first** Index Business Day **immediately preceding** such Disrupted Day which is not itself a Disrupted Day in relation to such Affected Forward Contract,

*(ii)* *Notional execution of Forward Contracts as of each Index Business Day*

1) in relation to each Forward Contract expressed to be notionally executed pursuant to the applicable Index Methodology which **is not** itself an Affected Forward Contract, any notional execution expressed to take place as of an Index Business Day which coincides with the occurrence of a Disrupted Day shall remain such Index Business Day for such notional execution notwithstanding the occurrence of a Disrupted Day; and

2) in relation to each Forward Contract expressed to be notionally executed pursuant to the applicable Index Methodology which is an Affected Forward Contract, any notional execution expressed to take place as of an Index Business Day which coincides with the occurrence of a Disrupted Day shall be postponed to the **first**

Index Business Day **immediately following** such Disrupted Day which is not itself a Disrupted Day in relation to such Affected Forward Contract,

*(iii) Notional settlement of Forward Contracts as of each Currency Pair Business Day*

1) in relation to each Forward Contract notionally held by each Affected Strategy which **is not** an Affected Forward Contract, any notional settlement expressed to take place as of a Currency Pair Business Day which coincides with the occurrence of a Disrupted Day shall remain such Currency Pair Business Day for such notional settlement notwithstanding the occurrence of a Disrupted Day; and

2) in relation to each Forward Contract notionally held by each Affected Strategy which is an Affected Forward Contract, any notional settlement expressed to take place as of a Currency Pair Business Day which coincides with the occurrence of a Disrupted Day shall be postponed to the **first** Currency Pair Business Day **immediately following** such Disrupted Day which is not itself a Disrupted Day in relation to such Affected Forward Contract,

unless each of the five Index Business Days, Data Observation Days or Currency Pair Business Days (as applicable and each such sequence of five consecutive days, a "**Disrupted Period**") immediately following the occurrence of a Disrupted Day is itself a Disrupted Day, in which case the Index Calculation Agent (or the Index Sponsor where specified) may, but shall be not be obliged to:

1) deem the Index Business Day, Data Observation Days or Currency Pair Business Day (as applicable) scheduled to immediately follow such Disrupted Period to be the applicable Index Business Day, Data Observation Day or Currency Pair Business Day (as the case may be) instead, notwithstanding that the fact that such day may itself be a Disrupted Day. In such a case, the Index Calculation Agent shall determine all information relating to the Affected Currency Pair, the Affected Forward Contract, the Affected Strategy or the Index that it deems necessary for the determination of the Index Level as of such time. The Index Calculation Agent may, in making such determination, take into consideration the latest available quotation, market practice and any other information that it deems relevant;

2) remove an Affected Currency Pair and any related Affected Forward Contracts from any Affected Strategy and, in such circumstances, the Index Sponsor may make such amendments, modifications and incorporate such notional transaction costs (if any) to the Index including, without limitation, the effective date of such amendments, modifications and incorporation as it considers necessary for the Index Calculation Agent's continued determination of the Index Level from time to time to reflect the removal of such Affected Currency Pair(s);

3) suspend the calculation, publication and dissemination of the Index and the Index Level until the first succeeding Index Business Day which is not a Disrupted Day for any Affected Currency Pair or Affected Forward Contract; and/or

4) permanently discontinue and cancel the publication and calculation of the Index at any time and accordingly the Index Calculation Agent shall be under no obligation to continue, or procure the continuation of, the calculation, publication and dissemination of the Index Level.

Where the occurrence of a Disrupted Day triggers more than one adjustment set out in this paragraph 1, the Disrupted Period shall be deemed to be a consecutive sequence of either: i) five Index Business Days, five Data Observation Days or five Currency Pair Business Days, whichever sequence will end nearest in time to the occurrence of the Disrupted Day.

## 2. Consequences upon the occurrence of an Adjustment Event

Save as may be otherwise provided in the applicable Index Methodology, if an Adjustment Event occurs in respect of any Currency in an Affected Currency Pair referenced by an Affected Strategy from time to time, the Index Calculation Agent may, but shall be under no obligation to revise, as soon as reasonably practicable in order to account for the economic effect of such Adjustment Event:

(a) the Percentage Weight attributed to: i) any Affected Strategy within the applicable Index or ii) (where applicable) any Affected Currency Pair within an Affected Strategy. For the avoidance of doubt in each case, the revised Percentage Weight of such Affected Strategy or Affected Currency Pair may be determined by the Index Calculation Agent as zero, notwithstanding any weighting methodology which may be specified in any applicable Index Methodology;

(b) the Currency Pair Universe specified in the applicable Strategy Methodology of each Affected Strategy by removing the Affected Currency Pair from such Currency Pair Universe and replacing it with another Currency Pair(s);

(c) the Eligible Universe specified in the applicable Index Methodology by replacing the Affected Strategy with another Strategy or removing such Affected Strategy from the Eligible Universe altogether;

(d) any published price source or reference rate specified in any applicable Strategy Methodology or Index Methodology in relation to such Affected Currency Pair, including, for the avoidance of doubt, any revisions to the timing at which such published price source or reference rate is observed for the purposes of the applicable Strategy Methodology or Index Methodology; or

(e) any notional costs specified in the applicable Index Methodology for the notional execution of any Affected Forward Contract,

provided that if the Index Calculation Agent determines that none of the revisions specified above will produce a commercially reasonable result, then the Index Sponsor may, but shall be no obligation to, permanently discontinue and cancel the publication and calculation of the Index.

## 3. Adjustment Events And Disruption Events

"**Adjustment Event**" means the occurrence of any of the following:

(a) where a country, on any given day has eliminated, converted, redenominated, or exchanged its Currency then in effect on such date for any successor Currency; or

(b) where any report, survey or statistical release (however described) published by any third party and referenced in any applicable Strategy Methodology of any Strategy which constitutes the Index from time to time: (i) has its underlying calculation methodology or criteria either partly or wholly modified in a material way, (ii) is subsumed into or replaced entirely by another successor publication, or (iii) ceases publication entirely either on a temporary or permanent basis.

**"Disrupted Day**" shall mean any day on which a Disruption Event occurs and is continuing.

"**Disruption Event**" means the occurrence of any event which constitutes a Governmental Authority Default, Illegality, Illiquidity, Inconvertibility/Non-Transferability, Nationalisation or Price Source Disruption, each defined as follows:

(a) "**Governmental Authority Default**" means, with respect to any security or indebtedness for borrowed money denominated in a specified Currency of, or

guaranteed by, any Governmental Authority relevant to such Currency, the occurrence of a default, event of default or other similar condition or event (however described) including, but not limited to, (i) the failure of timely payment in full of any principal, interest or other amounts due (without giving effect to any applicable grace periods) in respect of any such security, indebtedness for borrowed money or guarantee, (ii) a declared moratorium, standstill, waiver, deferral, Repudiation or rescheduling of any principal, interest or other amounts due in respect of any such security, indebtedness for borrowed money or guarantee or (iii) the amendment or modification of the terms and conditions of payment of any principal, interest or other amounts due in respect of any such security, indebtedness for borrowed money or guarantee without the consent of all holders of such obligation. The determination of the existence or occurrence of any default, event of default or other similar condition or event shall be made without regard to any lack or alleged lack of authority or capacity of such Governmental Authority to issue or enter into such security, indebtedness for borrowed money or guarantee.

Where "**Repudiation**" means, in respect of a Governmental Authority Default, the relevant Governmental Authority disaffirms, disclaims, repudiates, or rejects, in whole or in part, or challenge the validity of any security, indebtedness for borrowed money, or guarantee of such Governmental Authority in any material respect.

(b) "**Illegality**" means, in relation to any Forward Contract specified pursuant to any applicable Strategy Methodology of any Strategy which constitutes any Index from time to time, it becomes or shall become unlawful under any applicable law (including without limitation the laws of any country in which payment, deliver or compliance is notionally required by either notional party to any Forward Contract) for any notional party to the Forward Contract to: i) make a notional payment or delivery; ii) to perform any absolute or contingent obligation to make a payment or delivery; iii) to receive a payment or delivery; or iv) to comply with any material provision relating to such notional Forward Contract.

(c) **"Illiquidity**" means, on any given day, it becomes impossible to either determine, or notionally execute at, a Forward Contract Trade Price in relation to any Forward Contract with a notional amount in the Currency Notional Amount (either in one transaction or a commercially reasonable number of transactions that, when taken together, total the Currency Notional Amount) required to achieve any Strategy Exposure determined in accordance with the applicable Strategy Methodology of any Strategy which constitutes the Index.

(d) "**Inconvertibility/Non-Transferability**" means the occurrence of any event in relation to a Currency Pair (an "**Event Currency Pair**") referenced in the Currency Pair Universe of any applicable Strategy that:

1) makes it impossible for any notional party to a Forward Contract to convert the Currency Notional Amount of the Event Currency into the Non-Event Currency in the Event Currency Jurisdiction, without regard to the reasons giving rise to such impossibility; or

2) makes it impossible for any notional party to a Forward Contract to deliver (A) the Non-Event Currency from accounts inside the Event Currency Jurisdiction] or (B) the Event Currency between accounts inside the Event Currency Jurisdiction or to a party that is a nonresident of the Event Currency Jurisdiction, without regard to the reasons giving rise to such impossibility.

Where:

1) "**Event Currency**" means in relation to any Event Currency Pair, the Term Currency of such Currency Pair.

2) "**Event Currency Jurisdiction**" means, in respect of an Event Currency, the country for which such Event Currency is the lawful Currency.

3) "**Non-Event Currency**" means, in relation to any Event Currency Pair, the Currency which is not the Event Currency.

(e) "**Nationalisation**" means any expropriation, confiscation, requisition, nationalisation or other action by a Governmental Authority which deprives any notional party to any Forward Contract specified pursuant to any applicable Strategy Methodology of any Strategy which constitutes the Index of all or substantially all of its assets in any Event Currency Jurisdiction.

(f) "**Price Source Disruption**" means it becomes impossible on any given day to obtain : i) any Prevailing Price, ii) any Forward Contract Trade Price or iii) to make observations of any published price or rate in relation to any Currency referenced in any Affected Currency Pair (including, without limitation, any observations of USD LIBOR) necessary to perform the calculations or determinations required to determine any Strategy Exposure in relation to any Forward Contract specified pursuant to any applicable Strategy Methodology of any Strategy which constitutes any Index from time to time.

## 4. Calculations And Determinations

*(a) General*

The Index Calculation Agent will perform all calculations, determinations, rebalancings and adjustments (together, "**Calculations**") in respect of the Index. Neither the Index Calculation Agent nor the Index Sponsor will have any responsibility for errors made in good faith or omissions in Calculations or other actions as provided in any Index Document.

The Calculations of the Index Calculation Agent shall be performed by it in accordance with the relevant Index Document, acting in its sole, absolute and unfettered discretion, but in good faith and in a commercially reasonable manner (having regard in each case to the criteria stipulated in such Index Document and, where relevant, on the basis of information provided to or obtained by employees or officers of the Index Calculation Agent responsible for making relevant Calculations). All Calculations shall, in the absence of manifest error, be final, conclusive and binding on any user of the Index, including any holder of, or counterparty to, an Index Linked Product.

Although the Index Documents read and construed together are intended to be comprehensive, it is possible that ambiguities, errors and omissions may arise in certain circumstances. The Index Sponsor will resolve, acting in good faith and in a commercially reasonable manner, any such ambiguity, error or omission, and may amend any Index Document to reflect the resolution of such ambiguity, error or omission in a manner which is consistent with the commercial objective of the Index.

*(b) Rounding*

Subject as provided in the applicable Index Methodology, any amount, currency amount, level, percentage, price, rate or value ("**Amount**") calculated by the Index Calculation Agent shall be rounded to such number of decimal points and in such manner as the Index Calculation Agent determines is appropriate, acting in a commercially reasonable manner.

*(c) Use of estimates*

The Index Calculation Agent will perform the Calculations described in the Index Conditions using the information, data sources or factors specified in these Index Conditions and any Amount (together, "**Information**") and may perform any Calculation and any action required in respect of any Index Document in any sequence. However, in the event that the Index Calculation Agent is not able to obtain or use any necessary Information, then (after using reasonable endeavors and after applying any fallback provision specified in any Index Document in respect of the relevant Calculation) the Index Calculation Agent may, but shall not be obliged to, use its estimate (made in good faith and in a commercially reasonable manner) of the relevant Information in performing such Calculation, should the Index Calculation Agent determine that such estimate is reasonably necessary in order to give effect to any provision or to perform any Calculation necessary under any Index Document.

*(d) No verification of Information*

Although the Index Calculation Agent will obtain Information for inclusion in the Index or for use in performing any Calculation under any Index Document from sources that the Index Calculation Agent considers reliable (including databases maintained by the Index Calculation Agent or its Affiliates, and public sources such as Bloomberg and Reuters), the Index Calculation Agent will not publish or independently verify such Information.

*(e) Corrections*

If the Index Calculation Agent becomes aware that any Information used by it in connection with any Calculation under any Index Document has subsequently been corrected or adjusted, then the Index Calculation Agent may, but shall not be obliged to, use such corrected or adjusted Information and as a consequence make any further Calculation (each such Calculation, a "**Correction**") that it determines necessary or desirable in order to give effect to or to reflect such corrected or adjusted Information, including without limitation any redenomination, exchange or conversion of any currency into a successor currency.

*(f) Reliance*

In performing any Calculation under any Index Document, the Index Calculation Agent may rely upon the opinion of any person who appears to it as being competent to value any asset or instrument of any class, or to perform any other calculation or determination, by reason of any appropriate relevant professional qualification or experience.

*(g) Not acting as fiduciary or agent*

In performing any Calculation or other action in connection with any Index Document, each of the Index Calculation Agent and the Index Sponsor will act as principal and not as agent of any other person. Neither the Index Calculation Agent nor the Index Sponsor owes any duty of care or any fiduciary duty to any investor in any Index Linked Product or to any other person. Each Calculation and other action performed in connection with any Index Document by the Index Calculation Agent or the Index Sponsor is performed in reliance on this provision and is subject to this provision.

If through performing any such Calculation or other action the Index Calculation Agent or the Index Sponsor is rendered an agent or fiduciary of another person under applicable law, then (at the option of the Index Calculation Agent or the Index Sponsor, as relevant) the rights and obligations of the Index Calculation Agent or the Index Sponsor to perform such Calculation or other action may be suspended (or, if already performed, the application of such Calculation or other action may be

suspended) until such time when such Calculation or other action can be performed either by the Index Calculation Agent or the Index Sponsor as principal and not as an agent or fiduciary or by an appropriate third party who is both willing and able to perform such Calculation or other action.

*(h) Dates and times of calculations*

Notwithstanding that certain Calculations under any Index Document may be expressed to be "on", "as at" or "as of" a certain date or time, the Index Calculation Agent may in its discretion perform such Calculation in respect of such date or time after such date or time.

## 5. Conflicts Of Interest

Citi entities perform various roles in connection with the Index and Index Linked Products, and conflicts of interest may arise for any such entity as a consequence of any role it performs in connection with the Index or any Index Linked Product or as a consequence of its activities more generally.

During the normal course of their business, the Index Sponsor, the Index Calculation Agent, any of their respective Affiliates, directors, officers, employees, representatives, delegates and agents (each, for the purposes of this paragraph, a "**Relevant Person**") may enter into, promote, offer or sell securities or contracts (whether or not structured) linked to the Index and/or any Strategy. Any Relevant Person may at any time (a) have long or short principal positions or actively trade (whether or not through making markets to its clients) positions in or relating to the Index or any Strategy; (b) invest in or engage in transactions with or on behalf of other persons relating to the Index and/or any Strategy; (c) undertake hedging transactions (for the purposes of any security or contract) which may adversely affect the level, price or rate or other factor underlying the Index and/or any Strategy; or (d) publish research in respect of any Strategy. Such activity may or may not affect the Index Level, but potential investors and counterparties should be aware that a conflict of interest may arise when a person acts in more than one capacity, and such conflict of interest may affect (whether in a positive manner or a negative manner) the Index Level.

## 6. Disclaimer

No Relevant Person makes any express or implied representation or warranty as to (a) the advisability of purchasing or entering into any Index Linked Product; (b) the levels of the Index at any particular date or time; (c) the results to be obtained from the use of the Index or any datum included in any Index Document for any purpose; or (d) any other matter. Each Relevant Person hereby expressly disclaims, to the fullest extent permitted by applicable law, all warranties of accuracy, completeness, merchantability or fitness for a particular purpose with respect to the Index and any information contained in any Index Document. No Relevant Person will have any liability (direct or indirect, special, punitive, consequential or otherwise) to any person even if notified of the possibility of damages.

The Index Documents have been prepared solely for the purposes of information and nothing in the Index Documents constitutes (a) an offer to buy or to sell any security or contract, to participate in any transaction or to adopt any investment strategy; or (b) legal, tax, regulatory, financial or accounting advice. Any decision to purchase any Index Linked Product should be based on the information contained in the associated prospectus or offering document (however described). In the case of a prospectus or offering document which contains provisions under the heading "Risk Factors", "Investment Considerations" or the equivalent, please refer to these provisions for a discussion of the factors that must be considered in connection with an investment in the security or contract described therein.

**Neither the Index Calculation Agent nor the Index Sponsor shall, at any time, be under any obligation to continue to calculate, publish or disseminate the Index or the Index Level.**

## 7. Intellectual Property

The Index and the Index Documents are the Index Sponsor's proprietary and confidential material. No person may reproduce or disseminate the information contained in the Index Documents, the Index or the Index Level without the prior written consent of the Index Sponsor. The Index Documents are not intended for distribution to or use by any person in a jurisdiction where such distribution is prohibited by applicable law or regulation.

# Master Definitions

| | |
|---|---|
| **Date:** | 11 September 2012 |
| **Scope and Interpretation:** | Any or all of the following definitions may be incorporated with any other Index Document by wording in such Index Document indicating that, or the extent to which, such Index Document shall be read and construed with these Master Definitions as published by the Index Sponsor from time to time. These Master Definitions may be amended and or supplemented from time to time by the Index Sponsor without notice but all such amendments and/or supplements thereto shall be available from the Index Sponsor. Every subsequent iteration of these Master Definitions shall be specified to be as of a particular date and each Index Document, in referencing a particular version of the Master Definitions, shall specify a version of the Master Definitions with reference to such particular date. All defined terms in such Index Document shall then acquire the meaning set forth in such Master Definitions but only to the extent that it may, for the avoidance of doubt, be specifically excluded in such Index Document. |

References herein to the "**applicable Index Methodology**" are references to the Index Methodology relating to the relevant Index which shall be read and construed with the relevant Miscellaneous Provisions Document and Strategy Methodology applicable to any Strategy which constitutes such Index. References herein to the "**applicable Strategy Methodology**" are references to the Strategy Methodology (or Strategy Methodologies as the case may be) relating to the relevant Strategy or Strategies which constitutes such Index.

"**Adjustment Event**" has the meaning given to it in the Miscellaneous Provisions Document.

"**Affected Currency Pair**" means, in the applicable Miscellaneous Provisions Document, such Currency Pair where either or both of the Currencies referenced by such Currency Pair is affected by the occurrence of a Disruption Event or Adjustment Event as the case may be.

"**Affected Forward Contract**" means, in the applicable Miscellaneous Provisions Document, each Forward Contract notionally held in relation to the applicable Strategy which is affected by the occurrence of a Disruption Event or Adjustment Event as the case may be.

"**Affected Strategy**" means, in the applicable Miscellaneous Provisions Document, such Strategy which either references an Affected Currency Pair: i) as a Selected Currency Pair or ii) within its Currency Pair Universe.

"**Affiliate**" shall mean, in respect of a person, any entity controlled (directly or indirectly) by such person, any entity which controls (directly or indirectly) such person or any entity (directly or indirectly) under common control with such person. For this purpose, "control" of any person or entity shall mean the ownership or a majority of the voting power of such person or entity.

**"Base Currency**" means in respect of any Currency Pair, the first Currency of such Currency Pair against which the second Currency of such Currency Pair is quoted.

"**Citi**" shall mean Citigroup Inc. and its Affiliates.

"**Citi Official Price**" means, in respect of any financial instrument, the mid price for such instrument that Citi would use in the ordinary course of its business as a dealer to make a market in such instrument and for the purpose of marking its own audited books and records as published from time to time on Citi Velocity or any successor or alternative page. Citi Official Prices are calculated by Citi according to widely-recognised mathematical principles for pricing the relevant financial instruments, using market standard inputs including (i) prevailing interest rates for relevant currencies and periods

(as published by recognised financial information providers such as Reuters and/or Bloomberg) and (ii) forward points (as determined by Citi in a commercially reasonable manner, by reference to the prices of exchange-traded and/or over-the-counter instruments).

"**Citi Official Spot Rate**" means the Citi Official Price for the spot exchange of one Currency into another.

"**Citi Official Trade Price**" means, in respect of any Forward Contract, either: i) the applicable bid rate observed in relation to each Forward Contract to be notionally executed such that it is Short Base/Long Term, or ii) the applicable ask rate observed in relation to each Forward Contract to be notionally executed such that it is Long Base/Short Term, being in each case such rate that Citi would use in the ordinary course of its business as a dealer to make a market in such Forward Contract and for the purpose of marking its own audited books and records as published from time to time on Citi Velocity or any successor or alternative page. Citi Official Trade Prices are calculated by Citi according to widely-recognised mathematical principles for pricing currency forwards, using market standard inputs including (i) prevailing interest rates for relevant currencies and periods (as published by recognised financial information providers such as Reuters and/or Bloomberg) and (ii) forward points (as determined by Citi in a commercially reasonable manner, by reference to the prices of exchange-traded and/or over-the-counter instruments).

"**Cross Base Currency"** means, in respect of any Cross Pair, the Base Currency of such Cross Pair.

"**Cross Pair**" means any Currency Pair which does not contain US Dollar as either its Base Currency or its Term Currency.

"**Cross Term Currency**" means, in respect of any Cross Pair, the Term Currency of such Cross Pair.

"**Currency**" means, in each case, a reference to the proper name describing denominations of a specific medium of exchange, in physical form or otherwise, issued by the relevant Governmental Authority with legal authority to control the levels of its supply and represented, for the purposes of the Index Documents, by certain codes established by way of a standard (ISO 4217) published by the International Standards Organisation (ISO 4217) as such standard may be amended and supplemented from time to time.

Each Currency, its related code, the Principal Financial Centre specified in relation to it and specific definition has been set out for the avoidance of doubt in Schedule 1 (*Currency* List) hereto.

"**Currency Notional Amount**" has the meaning given to it in the applicable Strategy Methodology.

"**Currency Pair**" means each combination of two Currencies set out in each Currency Pair Universe defined in the applicable Strategy Methodology.

"**Currency Pair Business Day**" means, in respect of a specified Currency Pair, a day on which commercial banks in London and the Principal Financial Centre for each Currency of such Currency Pair are scheduled to be open and available for business including, without limitation, available for dealings in foreign exchange in accordance with market practice within the foreign exchange market.

"**Currency Pair Universe**" shall, in respect of each Strategy, have the meaning given to it in the applicable Strategy Methodology.

"**Data Observation Day**" means each calendar day other than: i) a Saturday; ii) a Sunday; iii) 25 December and iv) 1 January.

"**Direction**" is a reference to the trade direction implied by the notional execution of a Forward Contract, whether such execution is on a Long Base/Short Term or on a Short Base/Long Term.

"**Disrupted Day**" shall have the meaning given to it in the Miscellaneous Provisions Document.

"**Disruption Event**" shall, in respect of any Currency, have the meaning given to it in the Miscellaneous Provisions Document.

"**Eligible Universe**" refers to the group of Strategies (or, as the case may be, a single Strategy) which constitutes the Index.

"**Forward Contract**" means a notional cash-settled forward transaction traded with reference to a specific Currency Pair in such Direction and notional amount as may be determined by certain algorithms and calculations set out in the Index Methodology and/or relevant Strategy Methodology.

"**Forward Contract Trade Price**" means the notional price at which a Forward Contract is notionally entered into (described in the applicable Index Methodology or Strategy Methodology as "**notional execution**"), such price being determined as of the date of notional execution of the Forward Contract and calculated on the basis of such observations and notional costs as may be specified from time to time in the applicable Index Methodology.

"**Governmental Authority**" means any de facto or de jure government (or any agency or instrumentality thereof), court, tribunal, administrative or other governmental authority or any other entity (private or public) charged with, inter alia, the regulation of the financial markets (including the central bank) within the country for which a Currency is specified as the lawful currency.

"**Implied FX Option ATM Forward Volatility**" means, in respect of a Currency Pair, a value representing the implied volatility of an at-the-money FX option assuming put-call parity in respect of such Currency Pair, with an expiry date falling one month following the day on which the Implied FX Option ATM Forward Volatility is being determined. Such Implied FX Option ATM Forward Volatility in relation to such an at-the-money FX option in respect of such Currency Pair shall be determined with reference to the Citi Official Price.

"**Index**" means such rules-based proprietary index developed by the Index Sponsor as specified in the applicable Index Methodology and the "**Index Level**" means the level of such Index calculated by the Index Calculation Agent as of the Index Valuation Time on each Index Business Day, subject to any disruptions and adjustments specified in the Miscellaneous Provisions Document.

"**Index Business Day**" means any day on which commercial banks and foreign exchange markets are open and settle payments (including dealing in foreign exchange and foreign currency deposits) in London other than any calendar day which falls on the 24th December and 31st December each year.

"**Index Base Currency**" shall mean the currency specified as such in the applicable Index Methodology.

"**Index Conditions**" means any specific combination of Index Documents, namely: i) an Index Methodology, ii) a Strategy Methodology (or Strategy Methodologies, as the case may be), iii) a Miscellaneous Provisions Document and iv) these Master Definitions which, when read together, comprise of all applicable provisions to the calculations and determinations of the Index.

"**Index Calculation Agent**" shall mean the person specified as such in the applicable Index Methodology and appointed by the Index Sponsor, any successor to such person, or any alternative calculation agent appointed by the Index Sponsor.

"**Index Document**" means any one of: i) an Index Methodology, ii) a Strategy Methodology, iii) a Miscellaneous Provisions Document or iv) these Master Definitions and "**Index Documents**" shall mean all of them.

"**Index Electronic Page**" shall mean (1) the electronic page or source specified as such in the applicable Index Methodology, or (2) any successor electronic page or source that has been designated by either (a) the sponsor of the original electronic page or source; or (b) the relevant information vendor or provider of the original electronic page or source; or (3) any alternative electronic page or source designated by the Index Sponsor.

"**Index Fee**" shall have the meaning given to it in the applicable Index Methodology.

"**Index Launch Date**" shall mean the date specified as such in the applicable Index Methodology.

"**Index Level**" refers to the level of the Index from time to time, as determined in accordance with the formulas, algorithms and calculations set out in the applicable Index Methodology.

"**Index Linked Product**" shall mean any security, contract or other financial product the return on which is linked to the performance of any Index.

"**Index Methodology**" refers to such document as may be amended and restated from time to time which, when read and construed in conjunction with a specified Strategy or a group of, sets out a series of algorithms and calculations applied by the Index Calculation Agent in the determination of the Index Level.

"**Index Month End**" means, subject to any Adjustment Event or Disruption Event, such Index Business Day scheduled to be the last Index Business Day of each calendar month except in the case of December, when the Index Month End shall be scheduled to fall on the 20th December. For the avoidance of doubt, if 20th December is not itself scheduled to be an Index Business Day, the Index Month End in respect of December shall instead be scheduled as the first Index Business Day prior to 20th December.

"**Index Notional Amount**" shall have the meaning given to it in the applicable Index Methodology.

"**Index Publication Time**" shall have the meaning given to it in the applicable Index Methodology.

"**Index Sponsor**" shall mean the person specified as such in the applicable Index Methodology or any successor to or assignee of such person.

"**Index Start Date**" shall mean the date specified as such in the applicable Index Methodology.

"**Index Start Level**" shall mean the Index Level on the Index Start Date, as specified in the applicable Index Methodology.

"**Index Valuation Time**" has the meaning given to it in the applicable Index Methodology.

"**Long**" means, in relation to any Currency Pair, a notional purchase of one Currency from the Currency Pair in the expectation that it will increase in value relative to the other Currency named in such Currency Pair.

"**Long Base/Short Term**" refers to the basis on which a Forward Contract referencing a Currency Pair is notionally entered into, whereby any notional investor entering into such Forward Contract is deemed to be Long the Base Currency and Short the Term Currency of the Currency Pair referenced.

"**Miscellaneous Provisions Document**" refers to such document as may be amended or restated from time to time containing provisions which sets out the consequences to the Index upon the occurrence of certain events and circumstances, including certain events and circumstances which may lead to the adjustment to and/or any cancellation of, the Index.

"**Notional Portfolio**" means the notional portfolio of Forward Contracts notionally constructed and maintained pursuant to the Index Methodology and each applicable Strategy Methodology from time to time.

"**Percentage Weight**" shall have the meaning given to it in the applicable Index Methodology.

"**Prevailing Price**" means, in the applicable Index Methodology, the Citi Official Price prevailing as of the specified Index Valuation Time in respect of any Forward Contract referencing a particular Selected Currency Pair, with such Settlement Day and in such notional amount specified in relation to it when such Forward Contract was notionally executed in accordance with the process described in such Index Methodology.

"**Principal Financial Centre**" means, in relation to each Currency, the financial centre or centres specified as such in Schedule 1 (*Currency List*) below

"**Rebalancing Day**" shall mean each date specified as such in, or determined in accordance with, the applicable Index Methodology.

"**Selected Currency Pair**" has the meaning given to it in the applicable Strategy Methodology.

"**Settlement Day**" means in relation to each Forward Contract, such Currency Pair Business Day that is scheduled to fall two Currency Pair Business Days immediately following the Index Month End on which such Forward Contract is deemed to be notionally settled.

"**Short**" means, in relation to any Currency Pair, a notional sale of one Currency from the Currency Pair in the expectation that it will decrease in value relative to the other Currency named in such Currency Pair.

"**Short Base/Long Term**" refers to the basis on which a Forward Contract referencing a Currency Pair is notionally entered into, whereby any notional investor entering into such Forward Contract is deemed to be Short the Base Currency and Long the Term Currency of the Currency Pair referenced.

"**Strategy**" means, in each case, a rules-based notional trading strategy developed by the Index Sponsor which aims to achieve notional capital appreciation through dynamically adjusting notional positions in Forward Contracts with reference to the Strategy Exposure determined in accordance with such trading strategy.

"**Strategy Exposure**" means, in each case, a notional market exposure generated algorithmically by the sequence of comparisons, rankings, calculations or determinations set out in each Strategy Methodology. Each Strategy Exposure is expressed as a currency amount which represents the notional exposure to be obtained in relation to a specified Currency Pair. Such notional exposure shall be achieved by way of establishing notional positions in Forward Contracts referencing that Currency Pair, using the Strategy Exposure to determine the notional amount and Direction of such notional position.

"**Strategy Fixing Time**" means such time or times specified in an applicable Strategy Methodology in relation to any comparison, ranking, calculation or determination to be made in connection with such Strategy Methodology.

"**Strategy Methodology**" refers to such document as may be amended and restated from time to time which sets out all comparisons, rankings, calculations or determinations in connection with the notional execution of a Strategy.

"**Strategy Notional Amount**" shall have the meaning given to it in the applicable Index Methodology.

"**TARGET2**" means the Trans-European Automated Real-Time Gross Settlement Express Transfer (TARGE2) System and any reference to TARGET2 as the Principal Financial Centre in relation to any Currency shall be construed, in the context of the definition of Currency Pair Business Day, to mean that any day on which: i) TARGET2 and ii) commercial banks in London are open shall be a Currency Pair Business Day for the Euro.

"**Total Notional Amount**" shall have the meaning given to it in the applicable Index Methodology.

"**Term Currency**" means in respect of any Currency Pair, the second Currency of such Currency Pair.

"**USD LIBOR**" means the London Interbank Offered Rate observed on Reuters page USD1MFSR= or any successor page from time to time.

## Schedule 1
## Currency List

| Code | Definition of Currency | Principal Financial Centre |
|---|---|---|
| **AUD** | Means the lawful currency of Australia. | Sydney and Melbourne |
| **BRL** | Means the lawful currency of the Federative Republic of Brazil. | Brasilia, Rio de Janeiro or Sao Paulo |
| **CAD** | Means the lawful currency of Canada. | Toronto |
| **CHF** | Means the lawful currency of Switzerland. | Zurich |
| **CLP** | Means the lawful currency of the Republic of Chile. | Santiago |
| **COP** | Means the lawful currency of Republic of Colombia. | Bogota |
| **CZK** | Means the lawful currency of the Czech Republic. | Prague |
| **EUR** | Means the lawful currency of the participating member states of the European Union adopted in accordance with the Treaty establishing the European Communities, as amended by the Treaty on European Union. | TARGET2 |
| **GBP** | Means the lawful currency of the United Kingdom. | London |
| **HUF** | Means the lawful currency of the Republic of Hungary. | Budapest |
| **IDR** | Means the lawful currency of the Republic of Indonesia. | Jakarta |
| **ILS** | Means the lawful currency of the State of Israel. | Tel Aviv |
| **INR** | Means the lawful currency of India. | Mumbai |
| **JPY** | Means the lawful currency of Japan. | Tokyo |
| **KRW** | Means the lawful currency of the Republic of Korea. | Seoul |
| **MXN** | Means the lawful currency of the United Mexican States. | Mexico City |
| **NOK** | Means the lawful currency of the Kingdom of Norway. | Oslo |
| **NZD** | Means the lawful currency of New Zealand. | Wellington and Auckland |
| **PHP** | Means the lawful currency of Republic of Philippines. | Manila |
| **PLN** | Means the lawful currency of the Republic of Poland. | Warsaw |
| **RON** | Means the lawful currency of the Romania. | Bucharest |
| **SEK** | Means the lawful currency of the Kingdom of Sweden. | Stockholm |
| **THB** | Means the lawful currency of the Kingdom of Thailand. | Bangkok |
| **TRY** | Means the lawful currency of the Republic of Turkey. | Ankara |

| Code | Definition of Currency | Principal Financial Centre |
|---|---|---|
| **USD** | Means the lawful currency of the United States of America. | New York |
| **ZAR** | Means the lawful currency of the Republic of South Africa. | Johannesburg |