CitiFXSM Beta Strategy (Emerging Market) Indices Index Methodology

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CitiFXSM Investment Strategies

29 October 2015



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Part A: Introduction



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Introduction

This document constitutes the "**Index Methodology**" in respect of the CitiFXSM Beta Strategy (Emerging Market) Index family and is made available by Citibank N.A., London Branch in its capacity as the Index Sponsor. The family of indices comprises a number of indices (each an "**Index**") which share a common set of core rules and principles.

The "Index Conditions" in respect of an individual Index comprise (i) this Index Methodology, (ii) the Strategy Methodology in respect of the relevant Index (the "Strategy Methodology"), (iii) the Miscellaneous Provisions Document as of the date specified below (as amended from time to time, the "Miscellaneous Provisions Document"), and (iv) the Master Definitions as of the date specified below (as amended from time to time, the "Master Definitions"). These documents 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.

References in this Index Methodology and the other Index Documents to "Index" or "the Index" shall be construed as references to the relevant Index in the family of CitiFX Beta Strategy (EM) Indices. The Strategy and related Strategy Methodology which is applicable in respect of each Index is specified in Part D (*Data*) of this Index Methodology.

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

Full information in respect of each Index is only available on the basis of the combination of this Index Methodology, the applicable Strategy Methodology, the Miscellaneous Provisions Document and the Master Definitions. The applicable Strategy Methodology shall be read and construed with this Index Methodology as a whole, but in particular, such Strategy Methodology shall be considered in the light of the calculations, determinations and methodologies set out in paragraphs 3 and 4 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 relevant 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. An amendment to the Index Methodology will in general only be made where it is necessary to make an administrative update or to address an error, omission or ambiguity. A further amendment to the offering document of the Index Linked Product referencing the Index Methodology may also be required pursuant to such an amendment. 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.



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Part B: Key Information



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Key Information

Name of Index:	The CitiFX SM Beta Strategy (Emerging Marker following indices:	t) Index family comprises the
	 CitiFXSM Emerging Market Carry Strategy CitiFXSM Emerging Market Trend Strategy 	
	CILIFX Emerging Market frend Strategy	Index
	(each an " Index ").	
Summary:	Each Index is constituted by a single Stra achieved by a notional portfolio of specifie contracts which includes, from time to time, contracts set out in Table 3 (<i>Forward Fixing F</i> <i>Table</i>) of Part D (<i>Data</i>).	d foreign exchange forward some (or all) of the forward
	Such notional portfolio is constructed, ma accordance with algorithmic signals generate These signals may be conceptualized as instr specified foreign exchange forward contracts with a certain Direction and Settlement Day. S a result of calculations and determinations Strategy. The method by which these algori set out in detail in the applicable Strategy Meth	d by the applicable Strategy. uctions to notionally trade the in a specific notional amount, Such signals are generated as embedded in the applicable thmic signals are obtained is
	Aggregate exposure to the Strategy consti determined by targeting a certain level of volat	
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 (approx.)	
Index Valuation Time:	4:00 p.m. London time, as of each Index Busin	less Day
Index Launch Date:	1 August 2010	
Index Start Date:	2 January 2002	
Index Start Level:	100	
Index Electronic Page:	Index	Bloomberg Page
	CitiFX SM Emerging Market Carry Strategy Index	Bloomberg Page: CAFZBET4 <index></index>
	CitiFX SM Emerging Market Trend Strategy Index	Bloomberg Page: CAFZBET2 <index></index>
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	
Applicable Miscellaneous Provisions Document:	25 March 2013	
Applicable Master Definitions:	25 March 2013	_



The Indices were launched by the Index Sponsor as of the Index Launch Date and have 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 any 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

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Calculation of the Index Level

INDEX CALCULATION PROCESS

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 applicable 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 or about the Index Publication Time (as specified in Part B (*Key Information*)) on 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 immediately preceding Index Business Day t in accordance with the formula set out below.

where:		$IndexLevel_{t} = IndexLevel_{t-1} + StrategyReturn_{t}$
Index Level _t	=	Index Level as of Index Business Day t
Index Level _{t-1}	=	Index Level as of the Index Business Day immediately preceding Index Business Day t
Strategy Returnt	=	Means the Strategy Return determined in accordance with paragraph 2.2 below as of Index Business Day t



2.2 Strategy Return

As of the Index Valuation Time on each Index Business Day t, the Index Calculation Agent determines the "**Strategy Return**" in respect of the applicable Strategy as the daily notional profit or loss of such Strategy resulting from the difference between: (i) the notional value of all Forward Contracts notionally held by the applicable Strategy in respect of each Selected Currency Pair p determined by such Strategy 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 such 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 applicable 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 all 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:

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

where:

Strategy Return _{i,t}	=	The Strategy Return of Strategy i as of Index Business Day t
NotionalValue ^O	=	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 4.3 below
Ex Rate _{i,t}	=	Means a value equal to 1.
Μ	=	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
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 4.3 below
Ex Rate _{i, r-1}	=	Means a value equal to 1.
Ρ	=	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



NotionalValue ^O	=	Means the notional value of each Outstanding Forward Contract j in respect
j,i,t−1		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 4.3 below

- Ex Rate_{i,t-1} = Means a value equal to 1.
 - 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
 - = 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: $\sum_{k=1}^{M} (i + x) = [(1 + x) + (2 + x) + (2 + x)]$

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

2.3 Exposure

Ν

 $\sum_{i=1}^{m}$

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, following 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:

 $Constant Exposure PercentageIndexReturn_{t} = \frac{StrategyReturn_{t}}{StrategyNotionalAmount_{t-1}}$

where:

Constant Exposure =	=	The Constant Exposure Percentage Index Return achieved by the Index as
Percentage Index		of Index Business Day t, expressed as a percentage
Return _t		

Strategy Return_t = The Strategy Return as of Index Business Day t, determined in accordance



with paragraph 2.2 above

Strategy Notional = The Strategy Notional Amount as of the Index Business Day immediately preceding Index Business Day t, determined in accordance with paragraph 3.3 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 annualised 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:

σ_t	=	The annualised standard deviation of the Constant Exposure Percentage Index Return over a period of N number of Index Business Days
Ν	=	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
CEPIRt	=	The Constant Exposure Percentage Index Return as of each Index Business Day t in the period of N Index Business Days, determined in accordance with paragraph 2.3.1.1 above
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 2.3.1.2 above or ii) 400%, in accordance with the following formula:

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

where:

- Exposure_r = Exposure determined as of Rebalancing Day r
- Min = The lower of the values separated by a semi-colon within the set of brackets immediately following the "min" symbol



- σ_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*)

REBALANCING DAYS AND THE INDEX REBALANCING PROCESS

3. STRATEGY NOTIONAL AMOUNT AND CURRENCY NOTIONAL AMOUNT

3.1 Particular applicability of Strategy Methodologies

While the Strategy Methodology of the applicable Strategy is expressed to be applicable in general to the Index Methodology and is intended to be read and construed with the Index Methodology (and the other Index Documents) as a whole, the applicable Strategy and its Strategy Methodology will express concepts, calculations and determinations that are, in particular, discussed and utilised in this paragraph 3 and paragraph 4 below and (without prejudice to the interpretation of other paragraphs and sections of this Index Methodology) such Strategy Methodology shall be read and construed accordingly in light of the calculations and methodologies set out in this paragraph 3 and paragraph 4 below.

3.2 Total Notional Amount

The **"Total Notional Amount**" as of each Index Business Day t (including the Index Start Date) shall be USD 100 (being equal to the Index Start Level, as specified in Part B (*Key Information*)). For the avoidance of doubt, the Total Notional Amount remains constant and is not adjusted to reflect notional gains or losses of the Index over any period of time. The Index therefore differs from other types of indices which may reflect a 'compounding' of prior returns.

3.3 Strategy Notional Amount

The **"Strategy Notional Amount**" prevailing as of 7:00 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 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:

$$SNA_{t} = TNA_{t} \times Exposure_{r-1}$$

where:

SNA_t The Strategy 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 3.2 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 Exposure_{r-1} Where such Index Business Day t is itself a Rebalancing Day r, the = Exposure determined as of 7:00 a.m. (London time) on such Rebalancing Day r in accordance with paragraph 2.3 above. On any other Index Business Day t, the Exposure determined as of 7:00 a.m. (London time) on the Rebalancing Day (or the Index Start Date, as the case may be) immediately preceding Index Business Day t, in accordance with paragraph 2.3 above



3.4 Currency Notional Amount

Each Strategy Notional Amount determined as of each Index Business Day t pursuant to paragraph is 3.3 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.

4. NOTIONAL PORTFOLIO OF FORWARD CONTRACTS

4.1 Interpreting the Strategy Exposure determined for each Selected Currency Pair pursuant to the applicable Strategy

In accordance with the Strategy Methodology for the applicable Strategy, the Index Calculation Agent shall determine a Strategy Exposure, in respect of each Selected Currency Pair p tracked by the Strategy, as of the Strategy Fixing Time on each Rebalancing Day. The individual Strategy Exposures algorithmically generated by the applicable Strategy 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*).

The change in notional value of such Notional Portfolio (determined as the sum of the notional profit and loss accruing to the applicable Strategy in accordance with paragraph 2.2 above) is the basis upon which changes in the Index Level are calculated from time to time.

4.2 Rebalancing the Notional Portfolio

4.2.1 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 7:00 a.m. (London time) on such Rebalancing Day r, determine the applicable Exposure as of such Rebalancing Day r pursuant to paragraph 2.3 above;
- b) second, as of 7:00 a.m. (London time) on such Rebalancing Day r, determine the Strategy Notional Amount as of such Rebalancing Day r pursuant to paragraph 3.3 above by applying the applicable Exposure determined in sub-paragraph a) above; and
- c) finally, as of the Index Valuation Time on such Rebalancing Day r, determine the Strategy Return as of such Rebalancing Day r pursuant to paragraph 2.2 above.

4.2.2 Determinations at the level of the 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 in respect of the applicable Strategy as of each Rebalancing Day r:

- a) first, as of the relevant Strategy Fixing Time on each Rebalancing Day r specified pursuant to the Strategy, the Index Calculation Agent shall apply the result of the determination set out in paragraph 4.2.1b) above to determine the Strategy Notional Amount in respect of the applicable Strategy pursuant to paragraph 3.3 above and, further, the Currency Notional Amount applicable to the determination of a Strategy Exposure in relation to each Selected Currency Pair pursuant to the applicable Strategy Methodology;
- b) second, in relation to the Strategy, the Index Calculation Agent shall have regard to the Notional Portfolio of Forward Contracts which has been held in respect of such Strategy as of the immediately preceding Rebalancing Day r-1 (each an "Existing Forward Contract"). Each Existing Forward Contract represents a particular Strategy Exposure (an "Existing Strategy



Exposure") to a specific Selected Currency Pair, each of which was determined as of the Strategy Fixing Time on the immediately preceding Rebalancing Day r-1; and

- c) finally, in relation to the Strategy, the Index Calculation Agent shall then have regard to such Existing Forward Contracts and compare each Existing Strategy Exposure against each Strategy Exposure determined in respect of each Selected Currency Pair p before determining notional execution in the following manner:
 - i. to the extent that an Existing Strategy Exposure references a Selected Currency Pair p which is not referenced by a Strategy Exposure, the Index Calculation Agent shall notionally enter into a Forward Contract referencing such Selected Currency Pair p on or around the relevant Notional Execution Time in: (i) a Direction **opposite** to, and (ii) a notional amount **equal to** such Existing Strategy 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 Contract into account with its Offsetting Forward Contract shall be **zero** when the Offsetting Forward Contract settles.

For the avoidance of doubt, each such Offsetting Forward Contract referencing a Selected Currency Pair p (other than a NDF Currency Pair) shall be notionally entered into at a Forward Fixing Rate (as defined in paragraph 4.4 below) for such Forward Contract.

In the case of any Offsetting Forward Contract referencing a Selected Currency Pair which is any of USDBRL, USDCLP, USDCOP, USDIDR, USDINR, USDKRW, USDPHP or USDTWD (each a "**NDF Currency Pair**"), the Forward Contract Trade Price at which such Offsetting Forward Contract is notionally entered into shall not be determined in accordance with paragraph 4.4 below, but shall instead be equal to the official "NDF Fixing" for such NDF Currency Pair on Rebalancing Day r, as displayed on Bloomberg Page FIXI or such successor or alternative screen page on which the relevant official fixing rate may be displayed;

- ii. to the extent that any Existing Strategy Exposure references a Selected Currency Pair p which is identical to that referenced by any Strategy Exposure:
 - w. first, the Index Calculation Agent shall notionally enter into an Offsetting Forward Contract in respect of such Selected Currency Pair p on or around the relevant Notional Execution Time in: (i) a Direction **opposite** to, and (ii) a notional amount **equal to** such Existing Strategy Exposure, with a Settlement Day scheduled to fall two Currency Pair Business Days applicable to such Selected Currency Pair p following Rebalancing Day r. The net exposure of the Strategy to Selected Currency Pair p taking the Existing Strategy Exposure into account with its Offsetting Forward Contract shall be **zero** when the Offsetting Forward Contract settles;

For the avoidance of doubt, each such Offsetting Forward Contract referencing a Selected Currency Pair p (other than a NDF Currency Pair) shall be notionally entered into at a Forward Fixing Rate (as defined in paragraph 4.4 below) reflecting a spot rate of exchange equivalent to the spot rate of exchange reflected in the Forward Fixing Rate of each Forward Contract determined in accordance with paragraph 4.2.2 c) ii. x. below.

In the case of any Offsetting Forward Contract referencing a NDF Currency Pair, the Forward Contract Trade Price at which such Offsetting Forward Contract is notionally entered into shall not be determined in accordance with paragraph 4.4 below, but shall instead be equal to the official "NDF Fixing" for such NDF Currency Pair on Rebalancing Day r, as displayed on Bloomberg Page FIXI or such successor or alternative screen page on which the relevant official fixing rate may be displayed and

 secondly, 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) a notional amount equal to the Currency Notional Amount



represented by either such Existing Strategy Exposure (in respect of a Currency Pair other than a NDF Currency Pair) or such Strategy Exposure (in respect of a NDF Currency Pair).

For the avoidance of doubt, each such Forward Contract, referencing a Selected Currency Pair p shall be notionally entered into at a Forward Fixing Rate reflecting a spot rate of exchange for the relevant Selected Currency Pair p equivalent to the spot rate of exchange used in the determination of the Forward Contract Trade Price (as set in paragraph 4.4 below) for such Forward Contract;

- y. finally, in respect of a Selected Currency Pair p (other than a NDF Currency Pair), to the extent that the Strategy Exposure differs from the Existing Strategy Exposure as of a Rebalancing Date r:
- (A) if the Strategy Exposure is greater than the Existing Strategy Exposure on such Rebalancing Day r, 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 the Selected Currency Pair p in: (x) a Direction which is Long Base/Short Term, and (y) a notional amount equal to the Currency Notional Amount represented by the difference between the Strategy Exposure and the Existing Strategy Exposure; or
- (B) if the Strategy Exposure is less than the Existing Strategy Exposure on such Rebalancing Day r, 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 the Selected Currency Pair p in: (x) a Direction which is **Short Base/Long Term** and (y) a notional amount **equal to** the Currency Notional Amount represented by the difference between the Strategy Exposure and the Existing Strategy Exposure.
- iii. to the extent that a Strategy Exposure in respect of a Currency Pair p is not referenced by an Existing Strategy 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) a notional amount **equal to** the Currency Notional Amount represented by such Strategy Exposure.

4.2.3 Specifying the commercial details of each Forward Contract notionally executed

Each such Forward Contract to be notionally executed by the Index Calculation Agent in relation to the Strategy with respect to a Selected Currency Pair p shall be notionally executed on the following basis:

a) in respect of a Rebalancing Date r, a Forward Contract shall be notionally executed in accordance with paragraph 4.4 below in a Direction which is either **Long Base/Short Term or Short Base/Long Term** as determined in accordance with paragraph 4.2.2(c) ii. y above, referencing the relevant Selected Currency Pair p in such Strategy Exposure on or around 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*);

b) where the Strategy Exposure determined is a **positive** value, a Forward Contract shall be notionally executed at a Forward Contract Trade Price in accordance with paragraph 4.4 in a Direction which is **Long Base/Short Term**, referencing the relevant Selected Currency Pair p in such Strategy Exposure and the applicable Forward Contract notional on or around 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

c) where the Strategy Exposure 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 Strategy Exposure on or around 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 (with the exception of each Offsetting Forward Contract), 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.

For the avoidance of doubt:

i) "Long Base/Short Term" and "Short Base/Long Term" are the two types of "Direction" a notional execution of a Forward Contract could take and each term is defined in full in the applicable Master Definitions. Further, each Direction is understood to be opposite to the other; and

ii) each Offsetting Forward Contract notionally executed shall instead be deemed to: (i) have an inception date that is Rebalancing Day r and (ii) settle on a date which falls two Currency Pair Business Days applicable to such Selected Currency Pair p following such Rebalancing Day r.

4.3 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:

Notional Value_{i,p,t} = Strategy Exposure_{p,t} x (Prevailing $Price_{i,p,t} - Trade Price_{i,t})$ x Exchange $Rate_{USD,t}$

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
Strategy Exposure _{p,t}	=	The Strategy Exposure determined pursuant to the Strategy 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 4.2.2 above.
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 4.4 below as of the date when Forward Contract i was notionally executed
Evolution Data	_	Means a value agual to 1

Exchange $Rate_{USD,t}$ = Means a value equal to 1.

4.4 Determination of Forward Contract Trade Price

As of the relevant Notional Execution Time on any Index Business Day t (including a Rebalancing Day r) when each Forward Contract i may be notionally executed pursuant to paragraph 4.2 above, the **"Forward Contract Trade Price**" is determined in relation to such Forward Contract i in accordance with the following formula:

<i>Forward Contract Trade</i> Price i, t = <		<i>ide</i> Price $i, t = c$	ForwardFixingRatei, t + Re <i>balancing</i> Spread _i , if DirectionLB/ST ForwardFixingRatei, t – Re <i>balancing</i> Spread _i , if DirectionSB/LT
where:			
Forward Contract Trade Price _{i,t}	=		brward Contract Trade Price in relation to any Forward Contract Business Day t



Direction LB/ST	=	Means the Direction determined in respect of a Forward Contract i is Long Base / Short Term.
Direction SB/LT	=	Means the Direction determined in respect of a Forward Contract i is Short Base / Long Term.
Forward Fixing Rate _{i,t}	=	Means such Forward Fixing Rate observed in relation to each Forward Contract i specified in Table 3 (<i>Forward Fixing Rate and Rebalancing Spread Table</i>) of Part D (<i>Data</i>) as of the applicable Notional Execution Time on Index Business Day t
Rebalancing Spread _i	=	Means, in respect of each Forward Contract i and an Index Business Day t, the value calculated with reference to each Forward Contract i as specified in Table 3 (<i>Forward Fixing Rate and Rebalancing Spread Table</i>) of Part D (<i>Data</i>)



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Part D: Data



Data

(As at the Index Start Date)

Each Index shall operate with reference to an Eligible Universe comprised of a single Strategy as specified in respect of each Index below. In respect of each Strategy, this Part D sets out (i) the date of the relevant Strategy Methodology which is to be read and construed with this Index Methodology, and (ii) 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).

1. **Eligible Universe**

i	Index	Strategy _i	Date of Strategy Methodology	Number of Selected Currency Pairs ¹
1	CitiFX SM Emerging Market Carry Strategy Index	Emerging Market Carry Strategy	15 April 2013	5
2	CitiFX SM Emerging Market Trend Strategy Index	Emerging Market Trend Strategy	15 April 2013	5

2. **Index Calculation Parameters**

Volatility Target:	7 per cent.
Rebalancing Day:	Means such day that falls on the 15th calendar day of each month provided such day is also an Index Business Day. If such day is not an Index Business Day, then the first Index Business Day immediately following such 15th calendar day of the month shall be the " Rebalancing Day ".

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	USDBRL	4:00 p.m.	WM Reuters	zero
2	USDCLP	4:00 p.m.	WM Reuters	zero
3	USDCOP	4:00 p.m.	WM Reuters	zero
4	USDCZK	4:00 p.m.	WM Reuters	zero
5	USDHUF	4:00 p.m.	WM Reuters	zero
6	USDIDR	9:00 a.m.	WM Reuters	zero
7	USDILS	4:00 p.m.	WM Reuters	zero
8	USDINR	9:00 a.m.	WM Reuters	zero
9	USDKRW	9:00 a.m.	WM Reuters	zero
10	USDMXN	4:00 p.m.	WM Reuters	zero
11	USDPHP	9:00 a.m.	WM Reuters	zero
12	USDPLN	4:00 p.m.	WM Reuters	zero
13	USDRON	4:00 p.m.	WM Reuters	zero
14	USDTHB	10:00 a.m.	WM Reuters	zero
15	USDTRY	4:00 p.m.	WM Reuters	zero
16	USDZAR	4:00 p.m.	WM Reuters	zero
17	USDRUB	4:00 p.m.	WM Reuters	zero

¹ Refers to the number of Selected Currency Pairs in the 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
18	USDSGD	4:00 p.m.	WM Reuters	zero
19	USDTWD	9:00 a.m.	WM Reuters	zero

Observation Basis of Forward Fixing Rate:

Where "**WM Reuters**" is specified as the relevant source for determining the Forward Fixing Rate, the Index Calculation Agent shall determine the relevant Forward Fixing Rate as:

- a) the **bid** rate observed on Reuters page 0#WMREUTERS as of the applicable Notional Execution Time in relation to the relevant Currency Pair referenced by any Forward Contract i, where the Direction determined in relation to such Forward Contract i is **Short Base/Long Term**.
- b) the **offer** rate observed on Reuters page 0#WMREUTERS as of the applicable Notional Execution Time in relation to the relevant Currency Pair referenced by any Forward Contract i, where the Direction determined in relation to such Forward Contract i is **Long Base/Short Term.**



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Part E: Specific Risks



Specific Risks

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.

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 the 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 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.

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 currencylinked 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.

STRATEGY RISK

The algorithmic strategies embedded in the Index Methodology are rules-based proprietary trading strategies developed by the Index Sponsor, which aim to track the performance of notional positions in certain emerging market FX Forward Contracts. The Strategies provide a notional exposure to five Selected Currency Pairs, depending on (a) in respect of the Emerging Market Carry Strategy, 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, and (b) in respect of the Emerging Market Trend Strategy, an associated spot rate that has displayed the most momentum in respect of a three calendar month prior period.

There are various market factors and circumstances which may occur at any time and over any period, which could cause the Strategies to generate negative returns including, among other things, global economic, financial and political developments and currency hedging behaviour of international market participants. Further, emerging market currencies can be significantly more volatile and illiquid than other currencies of more developed markets. Emerging market currencies are highly exposed to the risk of a currency crisis occurring in the future and to political, economic, social and religious instability and adverse changes in government regulations and laws in such emerging markets. For example, governments in emerging markets have imposed from time to time, and may in the future impose,



exchange controls that could also affect the availability of the relevant currency, which could lead to a Disruption Event or an Adjustment Event occurring in respect of an Index. Even where there are no actual exchange controls, it is possible that a relevant currency would not be available, which could similarly lead to a Disruption Event or an Adjustment Event occurring in respect of an Index.

The strategy that the Index has been developed to reflect may not be successful, and other strategies using other constituents may perform better than the Index. The failure of the relevant Strategy to generate positive returns will have an adverse impact on the performance of the Index.

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 the Strategy 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.

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.

NO COMPOUNDING OF PRIOR RETURNS

The Total Notional Amount in respect of the Index (which reflects the notional amount available for exposure to the relevant Strategy prior to the application of leverage through the Exposure calculation) remains constant on each Index Business Day. This means that the Total Notional Amount remains constant and is not adjusted to reflect notional gains or losses of the Index over any period of time.

While Index Linked Products may incorporate payment obligations calculated by reference to notional gains or losses, the Index will continue to provide a market exposure determined according to the Index



Conditions without regard to notional gains or losses in prior periods. The Index therefore differs from many other types of indices which may reflect a 'compounding' of prior returns and automatically adjust their market exposure accordingly.

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 the 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, the Volatility Target is fixed at the value expressed in the Index Methodology. 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.



Emerging Market 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 track the performance of notional positions in FX Forward Contracts taken in accordance with the rules-based methodology of the Strategy. On a monthly basis and from a set of 19 specified currencies, the Strategy algorithmically identifies and provides a Short Base/Long Term notional exposure to five Currency Pairs (each a "**Selected Currency Pair**") with 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.

Strategy Methodology

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

- **1. Date:** 15 April 2013
- 2. **Currency Pair** a) USDBRL b) USDMXN c) USDKRW d) USDRUB e) USDSGD Universe: f) USDTRY g) **USDZAR** h) **USDINR** i) USDPLN i) USDTWD k) USDCLP I) USDILS m) **USDTHB** n) **USDHUF** o) USDRON p) **USDIDR** q) USDCOP r) USDCZK s) USDPHP (each, a "Currency Pair" in the "Currency Pair Universe")
- 3. Currency Pair 3.1 As of the Data Fixing Time on the Data Observation Day immediately preceding each Rebalancing Day, the Index Calculation Agent shall determine the EM Currency Yield in relation to the Term Currency of each Currency Pair. Such determination of the EM Currency Yield shall be made using the then prevailing: i) One Month Forward Rate in respect of such Currency Pair and ii) value of USD LIBOR, in accordance with the formula set out in paragraph 7.1.
 - 3.2 Each EM Currency Yield so determined produces a set of 19 values which are used by the Index Calculation Agent to assign a ranking yield (each a "**Ranking Yield**") to each Term Currency of each Currency Pair.
 - 3.4 The Ranking Yields are then arranged in descending order such that the Term Currency assigned the highest Ranking Yield is ranked first. If two or more Term Currencies are assigned equal Ranking Yields, then such Term Currency associated with a Currency Pair which occurs earlier in the alphabetical order set out above in paragraph 2 (*Currency Pair Universe*) shall be deemed to have a higher Ranking Yield than the other Term Currency (or, as the case may be, Term Currencies).

3.5 The Index Calculation Agent shall then select the Term Currencies with the top 5 Ranking Yields and determine 5 "**Selected Currency Pairs**" according to the following criteria:

	Selected Currency Pairs				
р	Base Currency	Term Currency			
1	US Dollar	Term Currency assigned highest Ranking Yield			
2	US Dollar	Term Currency assigned second highest Ranking Yield			
3	US Dollar	Term Currency assigned third highest Ranking Yield			
4	US Dollar	Term Currency assigned fourth highest Ranking Yield			
5	US Dollar	Term Currency assigned fifth highest Ranking Yield			

3.6 The determination of Selected Currency Pairs made pursuant to paragraph 3.5 above as of the Data Fixing Time on the Data Observation Day t immediately preceding each Rebalancing Day r is fixed up to, but excluding, the Data Fixing Time as of the Data Observation Day t+1 immediately preceding the next Rebalancing Day r+1, when the Strategy will again determine five Selected Currency Pairs following the methodology set out above.

Strategy4.1As of the Strategy Fixing Time on each Rebalancing Day and subject to any
adjustments and market disruptions set out in the Miscellaneous Provisions
Document, the Strategy Exposure in relation to each Selected Currency
Pair p shall be expressed to be 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 as the product of the
applicable Trade Signal p and the Currency Notional Amount as follows:

StrategyExposurep, r = TradeSignab x Currency NotionalAmount

where:

Strategy Exposure _{p,r}	=	The Strategy Exposure p determined in relation to Selected Currency Pair p as of the Strategy Fixing Time on Rebalancing Day r
Currency Notional Amount _r	=	Means the Currency Notional Amount as of Rebalancing Day r (" CNA "), determined in accordance with the following formula:
		$CNA_r = \frac{StrategyNotionalAmount}{r}$

where:

Strategy = Means the Strategy Notional Notional Amount as of

5

4.

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Amount,

Rebalancing Day r, with the meaning given to it in the Master Definitions.

Trade = Means a value equal to -1. Signal_p

4.2 Each Strategy Exposure p determined pursuant to paragraph 4.1 above is expressed in language intended to describe the: i) Direction and ii) notional amount upon which each Forward Contract referencing each Selected Currency Pair p is notionally executed pursuant to this Strategy from time to time. 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:

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

- 4.3 Pursuant to the methodology set out above and subject to any adjustments and market disruptions set out in the Miscellaneous Provisions Document, each Strategy Exposure determined in relation to each Selected Currency Pair as of the Strategy Fixing Time on each Rebalancing Day shall **remain unchanged** in respect of each Index Business Day up to, but excluding, the Strategy Fixing Time on the immediately following Rebalancing Day.
- 4.4 For the avoidance of doubt on each Rebalancing Day r, any Strategy Exposures determined in respect of Selected Currency Pairs as of the immediately preceding Rebalancing Day r-1 (or Index Start Date as the case may be) shall be ignored for the purposes of determining the Strategy Exposures applicable as of such Rebalancing Day r.
- 5. Miscellaneous Provisions: This Strategy and the Strategy Methodology is subject to the Miscellaneous Provisions Document dated 25 March 2013 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.

"**Data Fixing Time**" means, in relation to the observation of any data, market input or any calculation or determination to be made in connection with such data or input, 3:00 p.m. London time as of the applicable date.

"**Master Definitions**" means the document dated 25 March 2013 as the same may be amended and/or restated from time to time.

"**Strategy Fixing Time**" means, in relation to any comparison, ranking, calculation or determination to be made in connection with this Strategy Methodology, 8:00 a.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*).

"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 "EM 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 EM 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:

EM Currency Yield, t = 12 x
$$\left[\frac{1 \text{MUSD Forward Ratei, t}}{\text{USD SpotRatei, t}} x \left(1 + \frac{\text{USD LIBORt}}{12}\right) - 1\right]$$

where:

EM Currency Yield _{i,t}	=	EM Currency Yield in relation to the Term Currency of Currency Pair i as of Data Observation Day t
1M USD Forward Rate _{i,t}	=	One Month Forward Rate in relation to Currency Pair i as of the Data Fixing Time on Data Observation Day t determined with reference to paragraph 7.2
USD Spot Rate _{i,t}	=	Spot Rate in relation to Currency Pair i as of the Data Fixing Time on Data Observation Day t determined with reference to paragraph 7.4
USD LIBOR _t	=	USD LIBOR observed as of the Data Fixing Time on Data Observation Day t

7.2i) **"One Month Forward Rate**" means, in relation to each Currency Pair i specified in the table below, the mid-rate observed in relation to such Currency Pair from the relevant Reuters Screen Page, expressed in 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	USDIDR1MNDFMP=WM
USDINR	USDINR1MNDFMP =WM
USDPHP	USDPHP1MNDFMP =WM
USDKRW	USDKRW1MNDFMP=WM
USDTWD	USDTWD1MNDFMP=WM

ii) Otherwise, "**One Month Forward Rate**" means, in relation to each Currency Pair i, an amount equal to: i) the One Month Forward Points observed in respect of such Currency Pair i with reference to paragraph 7.3 plus ii) the Spot Rate observed in respect of such Currency Pair i with reference to paragraph 7.4, 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:

 $One MonthForward Rate_{i,t} = One MonthForward Points, t + Spot Rate_{i,t}$

where:

One Month Forward 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 7.3
Spot 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 7.4

7.3i) **"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 Reuters Screen Page set out below:

Currency Pair	Reuters Screen Page
USDTHB	USDTHB1MFIXMP=WM
USDHUF	USDHUF1MFIXMP=WM
USDPLN	USDPLN1MFIXMP=WM
USDRON	USDRON1MFIXMP=WM
USDCZK	USDCZK1MFIXMP=WM
USDTRY	USDTRY1MFIXMP=WM
USDZAR	USDZAR1MFIXMP=WM
USDILS	USDILS1MFIXMP=WM
USDBRL	USDBRL1MFIXMP=WM
USDMXN	USDMXN1MFIXMP=WM
USDCLP	USDCLP1MFIXMP=WM
USDCOP	USDCOP1MFIXMP=WM
USDRUB	USDRUB1MFIXMP=WM
USDSGD	USDSGD1MFIXMP=WM

7.4 **"Spot Rate**" means, 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 Reuters 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	Reuters Screen Page
USDIDR	USDIDRFIXMP=WM
USDINR	USDINRFIXMP=WM
USDPHP	USDPHPFIXMP=WM
USDKRW	USDKRWFIXMP=WM
USDTWD	USDTWDFIXMP=WM
USDTHB	USDTHBFIXMP=WM
USDHUF	USDHUFFIXMP=WM
USDPLN	USDPLNFIXMP=WM
USDRON	USDRONFIXMP=WM
USDCZK	USDCZKFIXMP=WM
USDTRY	USDTRYFIXMP=WM
USDZAR	USDZARFIXMP=WM
USDILS	USDILSFIXMP=WM
USDBRL	USDBRLFIXMP=WM
USDMXN	USDMXNFIXMP=WM
USDCLP	USDCLPFIXMP=WM
USDCOP	USDCOPFIXMP=WM
USDRUB	USDRUBFIXMP=WM
USDSGD	USDSGDFIXMP=WM

Emerging Market Trend 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 track the performance of notional positions in FX Forward Contracts taken in accordance with the rules-based methodology of the Strategy. On a monthly basis and from a set of 19 specified currencies, the Strategy algorithmically identifies and determines the notional exposure to each of 5 Currency Pairs (each a "Selected Currency Pair") associated with a Spot Rate that has displayed the most momentum in the past three calendar months.

Strategy Methodology

The following is the Strategy Methodology in relation to the Emerging Market Trend Strategy (the "Strategy").

- **1. Date:** 15 April 2013
- 2. Currency Pair
Universe:a) USDBRLb) USDMXNc) USDKRWd) USDRUBe) USDSGDf) USDTRYg) USDZARh) USDINRi) USDPLNj) USDTWD
 - k) USDCLP I) USDILS m) USDTHB n) USDHUF o) USDRON
 - p) USDIDR q) USDCOP r) USDCZK s) USDPHP

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

- 3. Currency Pair 3.1 As of the Data Fixing Time on the Data Observation Day t immediately preceding each Rebalancing Day, the Index Calculation Agent shall determine the EM Spot Rate Score of each Currency Pair, such EM Spot Rate Score relating to the change in the Spot Rate between the Base Currency and Term Currency of such Currency Pair. Such determination of the EM Spot Rate Score shall be made using the then prevailing: i) Spot Rate and ii) Historic Spot Rate in respect of such Currency Pair i, in accordance with the formula set out in paragraph 7.1.
 - 3.2 The EM Spot Rate Scores are then arranged in descending order such that the Currency Pair assigned the highest EM Spot Rate Score is ranked first. If two or more Currencies are assigned equal EM Spot Rate Scores, then such Currency Pair which occurs earlier in the alphabetical order set out above in paragraph 2 (*Currency Pair Universe*) shall be deemed to have a higher EM Rate Spot Score than the other Currency Pair (or, as the case may be, Currency Pairs). The Index Calculation Agent shall then determine the Currency Pairs that are ranked in the top 5 of such descending order as "Selected Currency Pairs".
 - 3.3 The determination of Selected Currency Pairs made pursuant to paragraph 3.2 above as of the Data Fixing Time on the Data Observation Day t immediately preceding each Rebalancing Day r is fixed up to, but excluding, the Data Fixing Time as of the Data Observation Day t+1 immediately

preceding the next Rebalancing Day r+1, when the Strategy will again determine the applicable Selected Currency Pairs following the methodology set out above.

4. Strategy Exposure: 4.1 As of the Strategy Fixing Time on each Rebalancing Day and subject to any adjustments and market disruptions set out in the Miscellaneous Provisions Document, the Strategy Exposure in relation to each Selected Currency Pair p shall be determined as the product of the applicable Trade Signal p and the Currency Notional Amount as follows:

StrategyExposurep, r = TradeSignab x Currency NotionalAmount

where:

Strategy Exposure _{p,r}	=	The Strategy Exposure p determined in relation to Selected Currency Pair p as	
		of the Strategy Fixing Time on Rebalancing Day r	

Currency = Means the Currency Notional Amount as Notional amount_r of Rebalancing Day r ("**CNA**"), determined in accordance with the following formula:

$$CNA_r = \frac{StrategyNotionalAmount}{5}$$

where:

- Strategy=MeanstheStrategyNotionalNotional Amount as ofAmounttRebalancingDayr,with the meaning giventoitintheMasterDefinitions.
- Trade Signal_p = Means the Trade Signal determined in relation to Selected Currency Pair p pursuant to paragraph 4.2 below.
- 4.2 **"Trade Signal**" means, in relation to each Selected Currency Pair p and as of the Strategy Fixing Time on each Rebalancing Day r, a positive or negative value determined in accordance with the following algorithm by comparing the Spot Rate and Historic Spot Rate used to determine the EM Spot Rate Score relating to such Selected Currency Pair p as of the Data Observation Day t immediately preceding Rebalancing Day r pursuant to paragraph 3.1 above:

where:

Trade Signal_{p,r} = The Trade Signal in relation to Selected Currency Pair p as of the Strategy Fixing Time on each Rebalancing Day r Spot Rate_{i,t} = The Spot Rate prevailing in relation to Selected Currency Pair p as of the Data Fixing Time on the Data Observation Day t immediately prior to Rebalancing Day r, determined with reference to paragraph 7.2
 Historic Spot Rate prevailing in relation to Selected Currency Pair p as of the Data

Fixing Time on such Data Observation Day t immediately prior to Rebalancing Day r

4.3 Each Strategy Exposure p determined pursuant to paragraph 4.1 above is expressed in language intended to describe the: i) Direction and ii) notional amount upon which each Forward Contract referencing each Selected Currency Pair p is notionally executed pursuant to this Strategy from time to time. 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:

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

- 4.3 Pursuant to the methodology set out above and subject to any adjustments and market disruptions set out in the Miscellaneous Provisions Document, each Strategy Exposure determined in relation to each Selected Currency Pair as of the Strategy Fixing Time on each Rebalancing Day shall **remain unchanged** in respect of each Index Business Day up to, but excluding, the Strategy Fixing Time on the immediately following Rebalancing Day.
- 4.4 For the avoidance of doubt on each Rebalancing Day r, any Strategy Exposures determined in respect of Selected Currency Pairs as of the immediately preceding Rebalancing Day r-1 (or Index Start Date as the case may be) shall be ignored for the purposes of determining the Strategy Exposures applicable as of such Rebalancing Day r.
- 5. Miscellaneous Provisions: This Strategy and the Strategy Methodology is subject to the Miscellaneous Provisions Document dated 25 March 2013 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.

"Data Fixing Time" means, in relation to the observation of any data, market input or any calculation or determination to be made in connection with such data or input, 3:00 p.m. London time as of the applicable date.

"Historic Spot Rate" means, in relation to any Currency Pair or Selected Currency Pair, the Spot Rate prevailing in relation to such Currency Pair (or Selected Currency Pair as the case may be) as of the Data Fixing Time on such Data Observation Day falling 3 calendar months prior to the Data Observation Day in relation to which Historic Spot Rate falls to be observed, determined in each case with reference to paragraph 7.2.

"**Master Definitions**" means the document dated 25 March 2013 as the same may be amended and/or restated from time to time.

"**Strategy Fixing Time**" means, in relation to any comparison, ranking, calculation or determination to be made in connection with this Strategy Methodology, 8:00 a.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*).

"Spot Rate" has the meaning given to it in paragraph 7.2 below.

7. Calculation Parameters: 7.1 "EM Spot Rate Score" means, as of each Data Observation Day t and in respect of each Currency Pair i for which EM Spot Rate Score is being determined, the difference between: a) the Spot Rate and b) the Historic Spot Rate, expressed as a percentage of such Historic Spot Rate prevailing as of the Data Fixing Time on such Data Observation Day t in respect of such Currency Pair i, in accordance with the following formula:

 $\label{eq:EMSpotRateScore} \mathsf{EMSpotRateScorei}, \mathsf{t} = \frac{\left|\mathsf{SpotRatei}, \mathsf{t} - \mathsf{HistoricSpotRatei}, \mathsf{t}\right|}{\mathsf{HistoricSpotRatei}, \mathsf{t}}$

where:

EM Spot Rate Score _{i,t}	=	EM Spot Rate Score in relation to Currency Pair i as of Data Observation Day t
Spot Rate _{i,t}	=	The Spot Rate prevailing in relation to Currency Pair i as of the Data Fixing Time on Data Observation Day t, determined with reference to paragraph 7.2
Historic Spot Rate _{i,t}	=	The Historic Spot Rate prevailing in relation to Currency Pair i as of the Data Fixing Time on such Data Observation Day t
	=	The modulus, showing the magnitude of a number without regard to its sign

7.2 **"Spot Rate**" means, in relation to each Currency Pair, the mid-rate observed by the Index Calculation Agent in relation to such Currency Pair from the relevant Reuters 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	Reuters Screen Page
USDIDR	USDIDRFIXMP=WM
USDINR	USDINRFIXMP=WM
USDPHP	USDPHPFIXMP=WM
USDKRW	USDKRWFIXMP=WM
USDTWD	USDTWDFIXMP=WM

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USDTHB	USDTHBFIXMP=WM
USDHUF	USDHUFFIXMP=WM
USDPLN	USDPLNFIXMP=WM
USDRON	USDRONFIXMP=WM
USDCZK	USDCZKFIXMP=WM
USDTRY	USDTRYFIXMP=WM
USDZAR	USDZARFIXMP=WM
USDILS	USDILSFIXMP=WM
USDBRL	USDBRLFIXMP=WM
USDMXN	USDMXNFIXMP=WM
USDCLP	USDCLPFIXMP=WM
USDCOP	USDCOPFIXMP=WM
USDRUB	USDRUBFIXMP=WM
USDSGD	USDSGDFIXMP=WM

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:Amended and restated on 25 March 2013 (from prior version dated 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 of the terms and conditions of payment of any principal, interest or other amounts due in respect 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:
 - 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, rate, index or statistical release (as the case may be) in relation to: a) any Currency referenced in any Affected Currency Pair (including, without limitation, any observations of USD LIBOR) or b) which may otherwise be 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 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:	Amended and restated on 25 March 2013 (from prior version dated 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, Citi FX - Master Definitions V7 Final 250312 27/03/2013 13:21

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.

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"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 Methodoloav.

"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. Citi FX - Master Definitions V7 Final 250312 27/03/2013 13:21

"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 (TARGET2) 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
RUB	Means the lawful currency of the Russian Federation.	Moscow
SEK	Means the lawful currency of the Kingdom of Sweden.	Stockholm
SGD	Means the lawful currency of the Republic of Singapore.	Singapore

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Code	Definition of Currency	Principal Financial Centre
THB	Means the lawful currency of the Kingdom of Thailand.	Bangkok
TRY	Means the lawful currency of the Republic of Turkey.	Ankara
TWD	Means the lawful currency of the Republic of China.	Taipei
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