



UBS Multi Asset Portfolio T5 Excess Return USD Index Manual

Publication Date: 17 July 2014

Last Updated: 19 October 2015

THIS DOCUMENT IS CONFIDENTIAL AND PROPRIETARY TO UBS AG, AND MAY NOT IN WHOLE OR IN PART BE FORWARDED, CIRCULATED OR OTHERWISE PROVIDED TO ANY OTHER PARTY WITHOUT THE PRIOR WRITTEN CONSENT OF UBS AG.

YOU ARE REFERRED TO THE IMPORTANT DISCLAIMERS AND RISK FACTORS IN THIS DOCUMENT. THIS DOCUMENT SHALL NOT CONSTITUTE AN OFFER TO SELL, OR A SOLICITATION OF AN OFFER TO BUY, ANY SECURITIES.

Table of Contents

	<u>Page</u>
Section 1. Introduction.....	3
Section 2. Overview of the Index	5
Section 3. Risk Factors	10
Section 4. Calculation of the Index and Rebalancing.....	19
Section 5. Adjustments, Extraordinary Events, Index Market Disruption Events and Force Majeure Events	28
Section 6. Change in Methodology of the Index and Termination.....	31
Section 7. Index Governance.....	33
Section 8. Disclaimer, Licensing and Trademark.....	36
Section 9. Definitions.....	40
Section 10. Description of Index Constituents	44
Section 11. Calculation of Index Constituents.....	46

Section 1. Introduction

This Index Manual sets out the rules and risk factors applicable to the UBS Multi Asset Portfolio T5 Excess Return USD Index (the “**Index**”), including the basis on which the Index Level will be calculated.

The Index is the intellectual property of UBS AG, acting through its London Branch (or any successor thereto) (in such capacity, the “**Index Owner**”). The Index Owner owns the copyright and all other intellectual property rights in the Index and this Index Manual. Any use of these intellectual property rights must be with the prior written consent of the Index Owner.

The Index will be governed by UBS AG, acting through its London Branch (or its successor) (in such capacity, the “**Index Administrator**”) via its internal processes. The Index Administrator controls the creation and operation of the Index administrative process, including all stages and processes involved in the production and dissemination of the Index. Notwithstanding that the Index relies on information from third party sources, the Index Administrator has primary responsibility for all aspects of the Index administration and determination process.

The Index Administrator has implemented and maintains the “UBS Control Framework Document”, which is a control framework for the process of determining and distributing a number of indices in respect of which UBS acts as the Index Administrator, including the Index. A summary of the main features of the UBS Control Framework Document is available on the UBS Website. Neither the UBS Control Framework Document, nor the summary of its main features, forms part of any prospectus into which this Index Manual may be incorporated.

The information in this Index Manual reflects the policies of, and is subject to change by, the Index Administrator. The Index Administrator makes certain determinations and calculations in respect of the Index and publishes the Index Level as further described in this Index Manual. The Index Owner does not have any obligation to ensure that the Index Administrator continues to publish the Index Level and the Index Administrator may discontinue publication of the Index Level upon giving at least 10 Index Administrator Business Days’ notice on the Bloomberg Page (as referred to below) and/or on the UBS Website. Details of any adjustments made to the Index shall be made available by the Index Administrator on application to the Index Administrator’s principal office at UBS, 1 Finsbury Avenue, London EC2M 2PP. The Index Administrator will make available the Index Level in respect of each Index Business Day. The Index Level is published on Bloomberg under the code “**ULTAMAP Index**” (the “**Bloomberg Page**”) and/or on the UBS Website. The Index Level in respect of any Index Business Day will be published on the immediately following London Business Day.

To the extent data used to determine the Index Level is not sourced from a regulated market or exchange with mandatory post trade transparency requirements, the Index Administrator will publish with each publication of the Index Level an explanation of: (i) how such Index Level was determined (including the size and liquidity of the market being assessed (meaning the number and volume of transactions observed for the purposes determining the Index Level), the range and average volume and range and average price, and indicative percentages of each type of market data that has been considered in the determination of the Index Level); and (ii) the extent to which, and the basis upon which, the exercise of discretion (including extrapolating values from prior or related transactions, adjusting values for factors that might influence the quality of data such as market events or impairment of a buyer or seller’s credit quality, or weighting firm bids or offers greater than a particular concluded transaction) if any, was used in determining the Index Level.

Historical records relating to the composition and past performance of the Index are available on the Bloomberg Page and/or the UBS Website.

The Index Administrator may, upon giving at least 10 Index Administrator Business Days' notice on the Bloomberg Page and/or on the UBS Website, change the place and time of the publication of the Index Level and the frequency of publication of the Index Level.

Neither the Index Owner nor the Index Administrator accepts any legal liability to any person for publishing or not continuing to publish for any period of time any Index Level at any particular place or any particular time.

Before making any investment decisions, you should carefully read this Index Manual, *including Section 2 – Overview of the Index, Section 3 – Risk Factors, Section 5 – Adjustments, Extraordinary Events, Index Market Disruption Events and, Force Majeure Events and Section 8 – Disclaimer, Licensing and Trademark.*

This version of the Index Manual is correct as of the date specified on the cover of this Index Manual (the “**Publication Date**”). Upon each update to this Index Manual, the most recent version shall be deemed to supersede the preceding version from the date of such update such that, in the event of any conflict between an earlier version of the Index Manual and the most recent version, the most recent version shall prevail. The Index Administrator will provide notice of such updates on the Bloomberg Page and/or on the UBS Website. The Index Administrator will provide any information about any such updates upon written request.

All determinations and calculations made by the Index Administrator will (in the absence of manifest error) be final, conclusive and binding. The Index Administrator shall have no responsibility to any person for any good faith errors or omissions in any determination or calculation.

The Index relies on information from third party sources. Neither the Index Owner nor the Index Administrator makes any representation or warranty, express or implied, as to the correctness of that information and neither the Index Owner nor the Index Administrator takes any responsibility for the accuracy of such data or the impact of any inaccuracy of such data on the Index. Even if any error or discrepancy on the part of any data source is corrected or revised, neither the Index Owner nor the Index Administrator is under any obligation to, and neither the Index Owner nor the Index Administrator currently intends to, reflect any such correction or revisions into the calculation of the Index Level.

Capitalised terms used in this Index Manual have the meanings given to them in *Section 9 – Definitions*.

No legal relationship (whether in contract, tort, or otherwise) exists between any Index Product Investor and the Index Administrator or the Index Owner and neither the Index Administrator nor the Index Owner owes any duties (whether in contract, tort, or otherwise) to any Index Product Investor.

The information contained in this Index Manual is a summary of the methodology and material rules and risks relating to the Index. This information is subject to change. Neither the Index Owner nor the Index Administrator makes any representation or warranty that the Index will achieve its stated objectives.

Section 2. Overview of the Index

The Index is an excess return index and is denominated in United States dollars (“USD”).

Objective of the Index: The objective of the Index is to track the excess return of a notional investment in a portfolio (the “**Portfolio**”) of 7 underlying indices (each, an “**Index Constituent**”), a non-synthetic interest bearing cash balance (“**Cash**”), as decreased by (1) the value of a notional borrowing (“**BU**”) required to achieve a leveraged investment in the Portfolio and (2) by the value of a notional management fee.

Index methodology:

Determination of the weight of the Index Constituents in the Portfolio:

The Index is rebalanced monthly. On the first Index Business Day of each month which is also a Risk Factor Business Day (each, a “**Determination Date**”) the calculations needed for determination of the weight allocated to each Index Constituent in the Portfolio is determined as described below and as at 11 pm London time on the 5th Index Business Day of each month (each a “**Rebalancing Date**”) the new weights calculated become the weights of each Index Constituent for the purpose of calculation of Portfolio_t on the next Index Business Day. The weight allocated to each Index Constituent is determined as follows:

1) the sentiment of the market is determined using the UBS Dynamic Equity Risk Indicator published by UBS Equity Research (“**DERI**”). DERI is determined and published on each day (each, a “**Risk Factor Business Day**”) which is a Scheduled Trading Date for each of S&P United States 500 Total Return 1988 Index, Eurostoxx 50 Return Index, First 5Y Treasury Note Future, First 10Y Treasury Note, First 5Y Euro Bobl Future, First 10Y Euro Bund Future and the Dow Jones UBS Commodity Index Total Return (each such index being a “**Risk Factor Constituent**”) and is not a Disrupted Day;²⁾ in relation to each Risk Factor Business Day, the return (the “**Daily Performance**”) of each Matched Risk Factor R is calculated;

3) the Daily Performances of a Matched Risk Factor R in respect of the Risk Factor Business Days for which the DERI is greater or equal to zero comprise the positive sentiment series (the “**Positive Sentiment Series**”) for such Matched Risk Factor R. The Daily Performances of a Matched Risk Factor R in respect of the Risk Factor Business Days for which the DERI is less than zero comprise the negative sentiment series (the “**Negative Sentiment Series**”) for such Matched Risk Factor R.

4) if on the Determination Date the DERI is greater or equal to zero, the observation period for the realised volatility of each Matched Risk Factor R is the most recent 500 values of the Positive Sentiment Series for such Matched Risk Factor R up to, and including, the Determination Day and the realized volatility of such Matched Risk Factor R for such observation period (the “**500 Day Realized Volatility**”) is calculated based on such 500 values. If on the Determination Date the DERI is less than zero, the observation period for the realised volatility of each Matched Risk Factor R is the most recent 500 values of the Negative Sentiment Series for such Matched Risk Factor R up to, and including, the Determination Day and the realized volatility of such Matched Risk Factor R for such observation period is calculated based on such 500 values.

5) on the Rebalancing Date the weight of each Index Constituent is calculated based on the lower of a) 1 divided by the 500 Day Realized Volatility of the Matched Risk Factor R to such Index Constituent divided by the sum of the fractions where the numerator is 1 and the denominator is the 500 Day Realized

Volatility of each Matched Risk Factor R and multiplied by an exposure adjustment factor “Y” in respect of such Index Constituent (such adjustment factor “Y” as set out in the table in *Section 4. Calculation of the Index and Rebalancing – paragraph 4. Index Constituents*) and b) a maximum limit of the weight for such Index Constituent (each such limit, a “UWCAP_u”) as set out in the table in *Section 4. Calculation of the Index and Rebalancing – paragraph 4. Index Constituents*.

If due to the limit on the weights of the Index Constituents, following the determination of the weight of each Index Constituent on a Determination Date, less than the whole value of the Portfolio on the Rebalancing Date immediately succeeding such Determination Date is allocated to the Index Constituents, the excess is allocated to a synthetic cash balance.

The DERI seeks to produce a single, objective out-of-sample quantitative measure of investor sentiment and risk appetite across global financial markets in general with a specific focus on equity markets based on contemporarily available information and weighted in relation to its correlation with equity market movements. Specifically, the DERI is calculated as a composite of normalized scores for the following components, dynamically weighted by the rolling correlation of each to rolling daily changes in equity markets over the preceding seven years:

1. Equity index option implied volatility.
2. Credit spreads: Moody’s BAA spread over US 10y treasuries.
3. Swap spreads: average of USD, JPY, EUR and GBP 5y swap spreads.
4. Currency volatility: average of 1m and 3m daily volatility in EUR, JPY, CHF, GBP and AUD versus USD.
5. Cyclical versus defensive sector performance.
6. Excess performance of high-beta regions.
7. Excess performance of high-beta sectors.
8. Equity market momentum: MSCI AC World Index relative to its 200 day moving average.

The DERI is calculated and published by UBS. A copy of the current version of the manual relating to the DERI is available from UBS upon request.

Calculation of the value of the Portfolio

The value of the Portfolio on each Index Business Day (“**Portfolio_t**”) is determined as the sum of a) the sum of the value of each Index Constituent (determined based on the weight of such Index Constituent as determined on the immediately preceding Rebalancing Date (subject to adjustment for foreign exchange rates) and b) the value of the synthetic cash balance (determined based on the weight of such synthetic cash balance as determined on the immediately preceding Date multiplied by a fraction the numerator of which is the current value of the synthetic cash balance and the denominator is the value of the synthetic cash balance on the immediately preceding Rebalancing Date) and will then be reduced by an amount equal to the accrued Euribor Rate for 1 month tenor as of the previous Rebalancing Date).

Determination of the level of the Index Constituents

The level of each Index Constituent in respect of each Index Business Day is determined as the official level for the Index Constituent for that Index Business Day t published at the Valuation Time on that Index Business Day t (subject to *Section 5 – Adjustments, Extraordinary Events, Index Market Disruption Events and Force Majeure Events*), provided that if such official published level is not determined in USD, it is converted into USD by the Index Administrator using the spot foreign exchange rate published by Bloomberg on the BFIX function as of 5pm London time on that Index Business Day t .

Determination of the exposure of the Index to the Portfolio and Cash, notional borrowing

The exposure of the Index to the Portfolio (measured in “**Portfolio Units**” or “**PU_t**”) and to Cash (measured in “**Cash Units**” or “**CU_t**”) is reviewed on each Index Business Day. If on the immediately preceding Index Business Days the Realized Volatility was not higher than the Deleverage Trigger for such Index Business Day and was not lower than the Releverage Trigger for such Index Business Day, the exposure of the Index to the Portfolio and Cash remains unchanged. If on the immediately preceding Index Business Days the Realized Volatility was higher than the Deleverage Trigger for such Index Business Day or was lower than the Releverage Trigger for such Index Business Day (each such occurrence being a “**Trigger Event**”), the exposure of the Index to the Portfolio and Cash is rebalanced.

The new exposure of the Index to the Portfolio is calculated using the lower of a) 200% and b) a fraction where the numerator is 5% (the “**Target Volatility**” or “**TargetVol**”) and the denominator is the Realized Volatility in respect of the immediately preceding Index Business Day (such lower value on any Index Business Day being the “**IdealPortfolioWeight_t**” for such Index Business Day). This means that the exposure of the Index to the Portfolio will be reduced when the Realized Volatility is greater than the Target Volatility and will be increased, up to a maximum leveraged exposure of 200%, when the Realized Volatility is lower than the Target Volatility.

Once the exposure of the Index to the Portfolio is determined, the exposure to Cash for the Index Business Day is calculated as the higher of a) the difference between the Index Level for such Index Business Day and the product of the new exposure to the Portfolio and Portfolio_t for such Index Business Day and b) zero and dividing such higher amount by Cash_t for such Index Business Day.

The notional borrowing (“**BU_t**”) in respect of each Index Business Day on which the exposure of the Index to the Portfolio and Cash is recalculated, is an amount equal to the greater of a) the difference between the product of the new exposure to the Portfolio and Portfolio_t for such Index Business Day and the Index Level for such Index Business Day and b) zero. BU_t in respect of each Index Business Day on which the exposure of the Index to the Portfolio and Cash is not being recalculated is the same as BU in respect of the immediately preceding Index Business Day.

Realized Volatility

The Realized Volatility of the Portfolio for each Index Business Day is the annualized volatility of the Portfolio over the last 40 Index Business Days and is calculated pursuant to the formula set out in *Section 4 – Calculation of the Index and Rebalancing*.

Deleverage Trigger and Releverage Trigger

The Deleverage Trigger for each Index Business Day is calculated by dividing 6% by the $\text{IdealPortfolioWeight}$ as of the immediately preceding Index Business Day on which a Trigger Event has occurred. The Releverage Trigger for each Index Business Day is calculated by dividing 4% by the

IdealPortfolioWeight as of the immediately preceding Index Business Day on which a Trigger Event has occurred.

Accumulated Management Fee

The “**Accumulated Management Fee**” on each Index Business Day t is a notional management fee of 0.5% per annum accruing from and including the Index Business Day $t-1$ immediately preceding such Index Business Day t to but excluding such Index Business Day t on the Index Level as of Index Business Day $t-1$.

Determination of Index Level

On each Index Business Day the Index Administrator will determine the level of the Index (the “**Index Level**”) in accordance with the following formula:

- (i) the product of: (a) the number of units (PU_{t-1}) representing the exposure to the Portfolio on the Index Business Day immediately preceding such Index Business Day; and (b) $Portfolio_t$ in respect of such Index Business Day;

plus

- (ii) the product of: (a) the number of units (“ CU_{t-1} ”) representing the exposure to $Cash_t$ on the Index Business Day immediately preceding such Index Business Day; and (b) $Cash_t$ (representing the value of a synthetic deposit that does not accrue interest) on such Index Business Day;

minus

- (iii) the product of: (a) the notional borrowed amount (“ BU_{t-1} ”) on the Index Business Day immediately preceding such Index Business Day; and (b) the cost associated with the BU on such Index Business Day, determined by reference to the accrued interest on each Index Business Day at a rate equal to the prevailing overnight rate for USD on the immediately preceding Index Business Day increased by 100 basis points;

minus

- (iv) the Accumulated Management Fee.

Determination of the Index Level: The Index Level is calculated by the Index Administrator at the Valuation Time and is based on the published official level or value of each Index Constituent on each Index Business Day.

The initial level of the Index was 100.00 (the “**Index Base Level**”) on 7 March 2002 (the “**Index Base Date**”).

The Index has been established and designed only for the purpose of seeking to achieve the objective stated in this *Section 2 – Overview of the Index - Objective of the Index*. It has not been designed to operate as a general benchmark for the wider equities, commodities or fixed income market. The Index Level will be a function of the price, level or value of the Index Constituents. In the absence of an Index Market Disruption Event, Force Majeure Event or other event referred to in “*Section 5 – Adjustments, Extraordinary Events, Index Market Disruption Events and Force Majeure Events*”, the Index Level will

be calculated in accordance with the formulae in the methodology (including in circumstances where the market for an Index Constituent is illiquid or fragmented).

This *Section 2 – Overview of the Index* - only provides a summary of the Index and is subject to, and qualified by, the remainder of this Index Manual. Prospective Index Product Investors should therefore carefully read the whole of this Index Manual.

Prospective Index Product Investors should also note that any purposes, aims and intentions expressed in this Index Manual may not be achieved.

Section 3. Risk Factors

This Index Manual is not, nor does it purport to be, investment advice. Neither the Index Owner nor the Index Administrator is acting as an investment adviser or providing advice of any nature and does not assume any fiduciary obligation to any investors buying, selling, entering into or holding products linked to the Index (such products, the “**Index Products**” and such investors, the “**Index Product Investors**”). You should carefully consider whether the Index Products are suited to your particular circumstances and, if you are in any doubt, seek independent financial advice.

Risk factors in relation to a direct notional investment in the Index are set out below.

This Index Manual does not describe all of the risks associated with a direct notional investment in the Index. It describes only those risks that the Index Administrator considers to be material. There may be additional risks that the Index Administrator currently considers not to be material or of which it is not currently aware. Prospective Index Product Investors should seek independent financial advice where they do not fully understand the risks related to the Index Administrator, the Index Constituents or the Index itself. In addition, each of the risks highlighted below could adversely affect the market value of the Index Product or the rights of Index Product Investors and, as a result, Index Product Investors could lose some or all of their investment. Risk factors in relation to an Index Product may be set out in the relevant documents in relation to such Index Product.

1. Index Products may not be a suitable investment for all investors

Each prospective Index Product Investor must determine the suitability of that investment in light of its own circumstances. In particular, each prospective Index Product Investor should: (a) have sufficient knowledge and experience to evaluate the Index Products, the merits and risks of investing in the Index Products and the information contained or incorporated by reference in the product documentation; (b) have access to, and knowledge of, appropriate analytical tools to evaluate, in the context of its particular financial situation, an investment in the relevant product and the impact the Index Products will have on its overall investment portfolio; (c) have sufficient financial resources and liquidity to bear all of the risks of an investment in the Index Products, including where the settlement currency is different from the prospective Index Product Investor’s currency or may be payable in one or more currencies; (d) understand thoroughly the terms of the Index Products and be familiar with any relevant assets, indices and financial markets; and (e) be able to evaluate (either alone or with the help of a financial adviser) possible scenarios for economic, interest rate and other factors that may affect its investment and its ability to bear the applicable risks.

2. Rules-Based Index

The Index operates on the basis of pre-determined rules. No assurance can be given that the algorithm on which the Index is based will be successful or that the Index will outperform any alternative algorithm that could have been employed.

3. Index Product Investors could lose their entire investment

The Index Level depends on the performance of the Index Constituents, each of which may increase or decrease in value. Neither the Index nor any of the Index Constituents includes any element of capital protection or guaranteed return. The value of any Index Constituents, or the Index itself, may fall below its initial value.

4. Market risks may affect the Index Level

Economic, financial, political, regulatory, geographical, judicial or other events which affect the investment climate and economic sentiment may affect the value of the Index Constituents and, therefore, the Index Level.

5. The Index is not actively managed

The Index operates in accordance with a pre-determined methodology and formulae as further described herein, and the Index Administrator exercises discretion only in limited situations as described in “*Section 4 – Adjustments, Extraordinary Events, Index Market Disruption Events and Force Majeure Events*”. The Index is, therefore, not actively managed. There will be no active management of the Index so as to enhance returns beyond those embedded in the Index. Market participants are often able to adjust their investments promptly in view of market, political, financial or other factors, and an actively managed product could potentially respond more directly and appropriately to immediate market, political, financial or other factors than a non-actively managed index. In contrast, the pre-determined methodology and formulae in respect of the Index will rebalance the weights or quantity assigned to each Index Constituent to its specified value only on each Rebalancing Date.

Neither the Index Owner nor the Index Administrator is acting as an investment adviser or performing a discretionary management role with respect to the Index and, as a result, has any fiduciary duty to any person in respect of the Index.

6. Influence of Currency Exchange Rates

Index Constituents may be denominated in currencies different from the Index Currency, and even if the Index Constituents are currency - hedged some residual currency exposure could affect the performance of the Index. An unfavourable performance of such currencies in relation to the Index Currency may have an adverse effect on the Index Level at any given time.

7. No rights in any Index Constituent

The Index is purely synthetic. The exposure to each Index Constituent is purely notional and will exist only in the records held by the Index Administrator. Investing in Index Products will not make you a holder of the security or securities comprising the Index Constituents. Neither you nor any other holder or owner of the Index Products will have any voting rights, any right to receive dividends or other distributions, or any other rights with respect to any property or securities of any issuer or with respect to any security or securities comprising the Index Constituents.

8. The Index relies on the use of third-party information about the issuer of any securities comprising the Index Constituents

All information in this Index Manual about the issuer of the security or securities comprising the Index Constituents has been derived from publicly available documents. UBS has not participated and will not participate in the preparation of any of those documents. Nor has UBS made or will UBS make any “due diligence” investigation or any inquiry with respect to the sponsor or the issuer of the security or securities comprising the Index Constituents in connection with the maintenance of the Index. UBS does not make any representation or warranty that any such publicly available document or any other relevant publicly available information is accurate or complete. Furthermore, UBS does not know whether all events occurring before the date of this Index Manual, including events that would affect the accuracy or completeness of the publicly available documents referred to above or the level, value or price of any

Index Constituent, have been publicly disclosed. Subsequent disclosure of any events of this kind or the disclosure of or failure to disclose material future events concerning any Index Constituent could affect the Index Level.

9. The Index Administrator may rely upon third party and other external and internal data sources which may be inaccessible and/or inaccurate, and the inputs used by the Index Administrator to run the Index calculations may affect the Index Level

The Index Administrator may rely upon third party brokers or external dealers and other external and internal sources to obtain certain inputs necessary to compute the Index Level. The inability of the Index Administrator to source necessary data to calculate the relevant formulae of the Index may affect the Index Level. In addition, the Index Administrator makes no warranty as to the correctness or completeness of that information and takes no responsibility for the accuracy of such data or the impact of any inaccuracy of such data on the Index Level.

10. The policies of the Index Administrator and changes that affect the composition and the Index Constituents could affect the Index Level

The policies of the Index Administrator concerning the calculation of the Index Level and the values of the Index Constituent could affect the Index Level.

The Index Administrator may, subject to obtaining the prior consent of the Index Owner, modify the methodology for calculating the Index Level and the values of the Index Constituents. In addition, as described herein, under a number of circumstances the Index Administrator may make certain changes to the way in which the Index Level or the value of any of the Index Constituents is calculated. The Index Administrator may also discontinue or suspend calculation or publication of the Index, in which case it may become difficult to determine the Index Level. Notice of such amendments shall be provided in advance on the Bloomberg Page and/or on the UBS Website.

11. The historical or hypothetical performance of the Index or any Index Constituent is not an indication of future performance

The historical or hypothetical performance of the Index or any Index Constituent should not be taken as an indication of the future performance of the Index or any Index Constituent. It is impossible to predict whether the future level, value or price of the Index or any Index Constituent will fall or rise. Past fluctuations and trends in the Index or any Index Constituent are not necessarily indicative of fluctuations or trends that may occur in the future.

12. The level of any Index Constituent that is an Underlying Index may affect the Index Level at any time

The level of any Index Constituent that is an Underlying Index may affect the Index Level at any time. Index Product Investors should carefully read and consider the publicly available index description or manual containing information about such Underlying Index, including the risk factors associated with a notional investment in such Underlying Index.

13. The occurrence of certain events with respect to an Index Constituent that is an Underlying Index may affect the Index Level

The prices, values or levels of component securities or other financial instruments comprising any component contract included in an Underlying Index or any other component included in an Underlying

Index may be adversely impacted by a wide range of events. For example, (i) in respect of any Equity Constituent, component securities or other financial instruments comprised in such Equity Constituent may be subject to corporate actions and other extraordinary events, such as mergers, tender offers, extraordinary dividends and nationalisations; (ii) in respect of any Commodity Constituent, the prices of such contracts or commodities are subject to events such as changes in supply and demand relationships (whether actual, perceived, anticipated, unanticipated or unrealized), weather, agriculture, trade, fiscal, monetary and exchange control programmes, domestic and foreign political and economic events and policies, disease, pestilence, technological developments, changes in interest rates, whether through governmental action or market movements, and monetary and other governmental policies, action and inaction; and (iii) in respect of any Interest Rate Constituent the prices, values or levels of such component are subject to events such as fluctuations caused by volatility and trends in the interest rates based on the factors as described in further detail in paragraph 27 below. The Underlying Index Administrator may be entitled to adjust the composition of the Underlying Index pursuant to the rules of the Underlying Index. Any such events or actions may affect or have an adverse effect on the level of such Underlying Index and in turn on the Index Level.

14. Market and other activities in respect of the Underlying Index may contribute to an increased level of investment in the Underlying Index

The Underlying Index Administrator has licensed, and may continue to license, the Underlying Index for use by other market participants, for publication in newspapers and periodicals, for distribution by information and data dissemination services and for various other purposes, any of which may contribute to an increased level of investment in the Underlying Index. This may have an adverse impact on the level of the Underlying Index and consequently the Index Level.

15. The Underlying Index Administrator may be required to replace a component security and/or contract comprised in an Underlying Index if the relevant existing component security is removed or the relevant existing component contract is terminated or replaced

The Underlying Index may comprise component securities and/or component contracts. Data concerning the component securities and/or component contracts will be used to calculate the Underlying Index. If any component security or component contract was to be removed in accordance with the rules of the index methodology of the Underlying Index, a comparable security or futures contract may be selected by the Underlying Index Administrator (as relevant), if available, to replace that component security and/or component contract. The replacement or termination of any component security and/or component contract may have an adverse impact on the level of the Underlying Index and consequently, the Index Level.

16. The policies of the Underlying Index Administrator and changes that affect the Underlying Index could affect the level of the Underlying Index

The policies of the Underlying Index Administrator concerning its calculation could affect the level of the Underlying Index. The level of the Underlying Index could also be affected if the Underlying Index Administrator changes these policies, for example, by materially changing the manner in which it calculates the Underlying Index, or if it cancels or fails to calculate or publish the Underlying Index, in which case it may become difficult or inappropriate to determine the market value of any financial products linked to the Underlying Index (including the Index Level). If any such policies relating to the Underlying Index are changed, or the calculation or publication of the Underlying Index is discontinued or suspended, this could affect the Index Level.

17. The Underlying Index Administrator will have the authority to make determinations that could materially affect the performance of the Underlying Index in various ways

The Underlying Index was developed, and is currently owned, calculated and maintained, by the Underlying Index Administrator. The Underlying Index Administrator is responsible for the composition, calculation and maintenance of the Underlying Index and has determinative influence over its composition, calculation and maintenance. The judgements that the Underlying Index Administrator makes in connection with the composition, calculation and maintenance of the Underlying Index, could affect the level of the Underlying Index and therefore the Index Level. The Underlying Index Administrator may decide to discontinue calculating and publishing the Underlying Index and has no obligation to take the interests of holders of any product directly or indirectly linked to the performance of the Underlying Index (including any Index Product) into consideration for any reason in making such determination.

18. Use of leverage can amplify losses and gains on Index Products

Because the Index exposure will be based upon the performance of one or more reference assets multiplied by a leverage factor which can be over 100 per cent. or 1.00, the purchaser may participate disproportionately in any positive performance and/or may have a disproportionate exposure to any negative performance of the reference assets. Due to this leverage effect, the Index Products represent a very speculative and risky form of investment since any loss in the value of the reference assets carries the risk of a correspondingly higher loss.

19. Trading and other transactions by the Index Administrator and its affiliates in the Index or the Index Constituents may affect the Index Level

The Index Administrator and its affiliates may also engage in trading in the Index, the Index Constituents, (or any component thereof), futures or options on the Index Constituents (or any component thereof) and other investments relating to or based on the Index or the Index Constituents (or any component thereof) on a regular basis as part of its general business, for proprietary accounts, for other accounts under management, to facilitate transactions for customers or to hedge obligations under products linked to the Index or Index Constituents (or any component thereof). Although they are not intended to, any of these activities could adversely affect the value of the Index Constituents, the relevant interest rates or the Index Level. It is possible that one or more of the Index Administrator and its affiliates could receive substantial returns from these activities while the value of the Index Constituents and the Index Level decline.

The Index Administrator or its affiliates may also issue or underwrite securities or financial or derivative instruments with returns linked or related to changes in the performance of any of the foregoing.

With respect to any of the activities described above, neither the Index Administrator nor its affiliates has any obligation to take into consideration at any time the impact of such activities on the value of the Index Constituents or the Index Level.

20. Termination or Suspension of the Index

The Index Administrator is under no obligation to continue the calculation, publication and dissemination of the Index. The Index may be terminated or temporarily suspended at any time. Should the Index cease to exist, this may have a negative impact on the return on any notional investment in the Index.

21. Amendment or Modification to the Index Manual

This Index Manual may be amended, modified or adjusted from time to time by the Index Administrator, subject to the Index Administrator obtaining the prior consent of the Index Owner. Any such amendment, modification or adjustment may have an adverse effect on the Index Level. The Index Administrator will apply the method described in this Index Manual for the composition of the Index and calculation of the Index Level. However it cannot be excluded that the market environment, supervisory, legal, financial or tax reasons may require changes to be made to this method. The Index Administrator may, subject to the Index Administrator obtaining the prior consent of the Index Owner, also make changes to the provisions of this Index Manual and the method applied to calculate the Index Level, which it deems to be necessary and desirable in order to prevent obvious or demonstrable error or to remedy, correct or supplement incorrect or ambiguous provisions. Notice of such amendments, modifications or adjustments shall be provided on the Bloomberg Page and/or on the UBS Website.

22. Index Administrator Discretion

The Index confers discretion on the Index Administrator in making certain determinations, calculations and corrections from time to time. Although any such determinations, calculations and corrections must be made by the Index Administrator in good faith, the exercise of such discretion in the making of any calculations, determinations and corrections may adversely affect the performance of the Index. Any such determination, calculation or correction by the Index Administrator will be, in the absence of manifest error, final, conclusive and binding. The Index Administrator will determine whether any such correction shall apply retrospectively or from the relevant date forward.

The role played by UBS AG, as Index Administrator and the exercise of the kinds of discretion described above could present it with significant conflicts of interest in light of the fact that UBS AG, of which the Index Administrator is a division, is the issuer or counterparty of Index Products. Neither the Index Administrator nor the Index Owner has any obligation to take into consideration the needs of any Index Product Investor at any time.

23. Change of Index Owner and Index Administrator

The Index Owner may without the consent of Index Product Investors replace the Index Administrator (the “**Successor Index Administrator**”) at its discretion, and furthermore, may also designate a successor Index Owner (the “**Successor Index Owner**”) at its discretion – in the event of such replacement, any reference to the “Index Administrator” and/or the “Index Owner” shall be construed as a reference to the Successor Index Administrator and the Successor Index Owner, respectively.

24. Fees and Costs

The Index Level will be reduced by bid/offer spreads and/or a fee deduction which represents an approximation of the costs incurred by a hypothetical investor replicating the Index, including but not limited to those costs attributable to linking (and, therefore, notionally exposing) the relevant strategy to the Index Constituents. Such cost is not passed on to Index Product Investors as a payment but will instead be deducted from the Index Level in accordance with this Index Manual. As such, prospective Index Products Investors should understand that such cost may have a material effect on the Index Level. For more information about the calculation of these fees and costs, please refer to *Section 4 – Calculation of the Index and Rebalancing* in this Index Manual.

25. Simulated History

As limited historical performance data exist with respect to the Index, any notional investment in the Index may involve greater risk than a notional investment in indices or strategies with a proven track record. The Index first calculated on or around the Index Commencement Date and therefore lacks historical performance prior to such date. All such retrospective closing levels are simulated and must be considered hypothetical and illustrative only.

The actual performance of the Index may be materially different from the results presented in any simulated history relating to the Index. Past performance should not be considered indicative of future performance.

26. Equity market risks may affect the Index Level.

Because the Index Constituents include equity securities, it is expected that the Index Level will fluctuate in accordance with changes in the financial condition of the relevant issuer(s) of the Index Constituents' component stocks, the value of common stocks generally and other factors. The financial condition of the issuer(s) of the components of the Index Constituents may become impaired or the general condition of the equity market may deteriorate, either of which may cause a decrease in the Index Level. Common stocks are susceptible to general equity market fluctuations, to speculative trading by third parties and to volatile increases and decreases in value as market confidence in and perceptions regarding the security or securities comprising the Index Constituents change. Investor perceptions regarding the issuer of an equity security comprising the Index Constituents are based on various and unpredictable factors, including expectations regarding government, economic, monetary and fiscal policies, inflation and interest rates, economic expansion or contraction, and global or regional political, economic, and banking crises.

27. Influence of Interest Rates

Interest Rate Constituents may be affected by changes in interest rates and such movements may affect the Index Level. The prices, values or levels of the Interest Rate Constituents (including, the underlying interest rate contracts and the underlying interest rate) or any components thereof may fluctuate due to volatility and trends in the interest rates based on numerous factors, including (but not limited to) investors perception of the creditworthiness of the Relevant Government, fiscal, monetary and exchange control programmes, domestic and foreign political and economic events and policies, governmental action or market movements and monetary and other governmental policies. These factors may affect the level of the Interest Rate Constituents, and different factors may cause the prices, values or levels of the Interest Rate Constituents or any components thereof, and the volatilities of those prices, values or levels, to move in inconsistent directions at inconsistent rates.

28. Commodity prices may change unpredictably, affecting the Index Level in unforeseeable ways.

Trading in futures contracts on physical commodities, including trading in the Commodity Constituents, is speculative and can be extremely volatile. Market prices of the Commodity Constituents (including the underlying commodity contract and the relevant commodity) may fluctuate rapidly and may be subject to temporary distortions or other market disruptions based on numerous factors, including changes in supply and demand relationships (whether actual, perceived, anticipated, unanticipated or unrealized), weather, agriculture, trade, fiscal, monetary and exchange control programmes, domestic and foreign political and economic events and policies, disease, pestilence, technological developments, changes in interest rates, whether through governmental action or market movements, and monetary and other governmental

policies, action and inaction. The current or “spot” prices of the relevant commodity may also affect, in a volatile and inconsistent manner, the price of the underlying commodity contract. These factors may affect the Index Level in varying ways, and different factors may cause the prices, values or levels of the Commodity Constituents and the volatilities of those prices, values or levels, to move in inconsistent directions at inconsistent rates.

29. If the price of the component commodity increases, the level of a Commodity Constituent will not necessarily also increase.

If the price of the component commodity of a Commodity Constituent increases, the level of the Commodity Constituent itself will not necessarily also increase, for two reasons. The Commodity Constituent tracks the performance of the underlying commodity contract, rather than the component commodity itself. Changes in the prices of the component contract should generally track changes in the price of the component commodity, but the price of the component contract might from time to time move in ways or to an extent that differ from movements in the price of the component commodity generally. Therefore, the prices of the component commodity may go up but the level of the Commodity Constituent may not change in the same way. Second, because the component contract has an expiration date — i.e., the date upon which trading of the component contract ceases, there are certain adjustments that need to be made to the level of the Commodity Constituent in order to retain an investment position in the component contract. These adjustments primarily include the mechanic of “rolling” – which is further described below – and may have a positive or negative effect on the level of the Commodity Constituent. As a result, these adjustments may, in certain instances, cause a discrepancy between the Index Level and the performance of the component contract.

30. Futures prices of the component commodity that are different relative to their current prices may affect the level of the Commodity Constituent.

The Index includes the Commodity Constituent that is composed of the component contracts of the relevant commodity for specific delivery months, rather than the commodity directly. Therefore, the Commodity Constituent is indirectly composed of commodity futures contracts. Unlike equities, which typically entitle the holder to a continuing stake in a corporation, commodity futures contracts normally specify a certain date for delivery of the component commodity. Holding a commodity futures contract to expiration will result in the delivery of the component commodity and net cash settlement. To maintain an investment position in the component contract without a delivery of the component commodity and net cash settlement, when the component contract approaches expiration, it is replaced by a similar contract that has a later expiration. Thus, for example, a component contract purchased and held in August may specify an October expiration. As time passes, the contract expiring in October may be replaced by a contract for delivery in December. This process is referred to as “rolling”.

If the market for the component contract is in “backwardation”, which means that the prices are lower in more distant delivery months than in nearer delivery months, the purchase of the December contract would take place at a price that is lower than the sale price of the October contract. Conversely, if the market for the component contract is in “contango”, which means that the prices are higher in more distant delivery months than in nearer delivery months, the purchase of the December contract would take place at a price that is higher than the sale price of the October contract. The difference between the prices of the two component contracts when they are rolled is sometimes referred to as a “roll yield,” and the change in price that the component contract experiences while it is a component of the Commodity Constituent is sometimes referred to as a “spot return.” An investor in the Commodity Constituent cannot receive either the roll yield or the spot return separately.

The shape of the commodity futures price (forward) curves reflect, among other things, the market conditions that are referred to as contango and backwardation. Commodity futures forward curves (a graph of the price of the futures contracts for a given commodity, with the x-axis being the maturity date) are determined by a variety of economic factors such as storage, insurance, and financing costs, and market activity by market participants such as producers, consumers, speculators and investors. It is not possible to predict the shape or level of the commodity futures forward curves of the component commodity.

Some commodity markets may be in contango, backwardation, or both contango and backwardation at the same time, but at different points on the forward curve. Other commodity markets may be in contango, backwardation, or both at the same time at other different points on the forward curve. Therefore, depending on the specific long and short positions in the component contract, the presence of contango, backwardation, or both contango and backwardation in commodity markets related to the Commodity Constituent could result in net positive roll yields or net negative roll yields.

The presence of net negative roll yields could adversely affect the level of the Commodity Constituent even where the spot or near term price performance of the component commodity is stable or move in a direction that is favourable for the performance of the Index. Therefore, the performance of the Index could be adversely affected by the shape and level (and change in the shape and level) of the commodity futures forward curve.

As it is not possible to predict whether any one or more commodity markets related to the Commodity Constituent will be (or will remain) in contango, backwardation, or both contango and backwardation at the same time, it is not possible to predict the effect of contango or backwardation on the level of the Commodity Constituent.

Section 4. Calculation of the Index and Rebalancing

1. Base Date and Value

Index Base Date	Index Currency	Index Base Value
7 th March 2002	USD	100

2. Index Equations

The Index shall consist of a synthetic investment in a portfolio composed of each of the Index Constituents (the “Portfolio”) and Cash net of cost of borrowing and fees.

The level of the Index (“Index Level”) will be determined in accordance with the following formula at the Valuation Time on each Index Business Day t:

$$Index_t = (PU_{t-1} \times Portfolio_t + CU_{t-1} \times Cash_t) - BU_{t-1} \times (1 + BorrowingCost_t) - AccumulatedManagementFees_t$$

where:

“**Index_t**” is the Index Level determined at the Valuation Time on Index Business Day t;

“**Index₀**” is the Index Base Value;

“**PU_t**” is the number of units representing the exposure to Portfolio t (the “Portfolio Unit”) as determined in accordance with the methodology below:

- If on the immediately preceding Index Business Day t a Trigger Event HAS NOT occurred $PU_t = PU_{t-1}$
- If on the immediately preceding Index Business Day t a Trigger Event HAS occurred PU_t will be determined in accordance with the formula below:

$$PU_t = IdealPortfolioWeight_t \times \frac{Index_{t-1}}{Portfolio_{t-1}}$$

$$PU_0 = 1$$

“**IdealPortfolioWeight_t**” is the ideal exposure in percentage to the Portfolio as determined in accordance with the formula below:

$$IdealPortfolioWeight_t = MIN \left(200\%, \frac{TargetVol}{RealizedVolatility_{t-1}} \right)$$

“**CU_t**” is the number of units representing the exposure to Cash t (the “Cash Unit”) as determined in accordance with the methodology below:

- If on the immediately preceding Index Business Day t a Trigger Event HAS NOT occurred $CU_t = CU_{t-1}$

- If on the immediately preceding Index Business Day t a Trigger Event HAS occurred CU_t will be determined in accordance with the formula below:

$$CU_t = \frac{MAX(Index_t - PU_t \times Portfolio_t ; 0.0)}{Cash_t}$$

$$CU_0 = 0$$

“BU_t” is the notional borrowed amount as determined in accordance with the methodology below:

- If on the immediately preceding Index Business Day t a Trigger Event HAS NOT occurred BU_t = BU_{t-1}

- If on the immediately preceding Index Business Day t a Trigger Event HAS occurred BU_t will be determined in accordance with the formula below:

$$BU_t = MAX(PU_t \times Portfolio_t - Index_t ; 0.0)$$

$$BU_0 = 0$$

“TargetVol” is 5.0%;

“Trigger Event” means if RealizedVolatility t is:

- 1) a) higher than the Deleverage Trigger t or
- 2) b) lower than the Releverage Trigger t and the Ideal Portfolio Weight on the immediately preceding Trigger Event was less than 200%;

“Deleverage Trigger t” means, on any Index Business Day t, 6.0% divided by IdealPortfolioWeight as of the immediately preceding Index Business Day on which a Trigger Event HAS happened;

“Releverage Trigger t” means, on any Index Business Day t, 4.0% divided by IdealPortfolioWeight as of the immediately preceding Index Business Day on which a Trigger Event HAS happened;

“RealizedVolatility_t” is the annualized exponentially weighted volatility of the Portfolio over the last 40 Index Business Days and is calculated as follows:

$$Realized\ Volatility_t = \sqrt{254} \times \sqrt{\frac{\sum_{j=1}^{40} \left(\left(1 - \frac{3}{40} \right)^j \times \left(\frac{Portfolio_{t-j+1}}{Portfolio_{t-j}} - 1 \right)^2 \right)}{\sum_{j=1}^{40} \left(1 - \frac{3}{40} \right)^j}}$$

“Cash_t” or “Cash” means in respect of an Index Business Day the value of a synthetic cash balance of 100 in the Index Currency made on the Index Base Date not accruing any interest;

$$Cash_t = Cash_{t-1}$$

“**BorrowingCost_t**” represents the cost associated with the BU and is equal to the accrual of interest on each Index Business Day at a rate equal to 100 bps. When Portfolio Units and/or Cash Units weighting is rebalanced this borrowing cost factor is reset to zero. The borrowing cost prior to rebalancing is accounted for by a reduction in the number of Portfolio Units and/or Cash Units. For the avoidance of doubt, the BorrowingCost_t is calculated as follows;

- If TriggerEvent has occurred two[2] Index Business Days prior to Index Business Day t:

$$BorrowingCost_t = (1\%) \times \frac{ACT(t-1,t)}{360}$$

- Otherwise:

$$BorrowingCost_t = BorrowingCost_{t-1} + (1\%) \times \frac{ACT(t-1,t)}{360}$$

“**ACT(t-1,t)**” means, number of calendar days between Index Business Day t and Index Business Day t-1

“**Portfolio_t**” is the value of a synthetic portfolio composed of each of the Index Constituents on Index Business Day t and is calculated as follows:

$$Portfolio_t = \sum_{u=1}^M \left[UW_t^u \times \left(\frac{UL_t^u}{UL_{RD}^u} - \left(\frac{(FX_t^u)^{FXScalarU}}{(FX_{RD}^u)^{FXScalarU}} - 1 \right) \right) + CW_t \times \frac{Depo_t}{Depo_{RD}} \right] \times \left(1 - Libor_{RD} \times \frac{Days(RD)}{360} \right)$$

“**Portfolio₀**” is the initial level of the Portfolio, which was 100 on 8th Jan 2002 (the “**Portfolio Base Date**”).

“**M**” is the Number of Index Constituents comprising the Portfolio at the Valuation Time on Index Business Day t;

“**UL_t^u**” means in respect of an Index Business Day t the official level for Index Constituent U for that Index Business Day t published at the Valuation Time on that Index Business Day t provided that if such official published level is not in the Index Currency, it will be converted into the Index Currency by the Index Administrator with reference to the FX Price Source on that Index Business Day t;

“**UL_{RD}^u**” means the Index Level for Index Constituent U (as set out in the table in “*Section 4 – Calculation of the Index and Rebalancing – Paragraph 4 – Index Components*”) t determined in the Index Currency or converted into the Index Currency with reference to the FX Price Source;

“**FX_t^u**” means the Interpolated FX Forward Rate for the FX currency pair of the Index Currency and the currency Index Constituent U on Index Business Day t, and is calculated as follows;

$$FX_t^U = Spot_t^U + FwdPt_t^U \times \frac{NRD(t)}{NRD_{-1}(t)}$$

Where,

“**NRD(t)**” means in respect of an Index Business Day t, the number of calendar days from and excluding Index Business Day t to and including next Rebalancing Date immediately following Index Business Day t

“**NRD₋₁(t)**” means in respect of an Index Business Day t, the number of calendar days from and excluding immediately preceding Rebalancing Date to and including next Rebalancing Date

“**Spot_t^U**” means in respect of an Index Business Day t, the FX Price Source for Index Component U

“**FwdPt_t^U**” means in respect of an Index Business Day t, the 1 month FX Forward Rate for the FX currency pair of Index Component U;

“**FX_{RD}^U**” means the 1 Month FX Forward Rate for the FX currency pair of the Index Currency and the currency Index Constituent U on the immediately preceding Rebalancing Date;

“**FXScalar^U**” means the FX Scalar for the Index Constituent U and can be equal to +1, -1 or 0 as set out in the 4th column of the table in “*Section 4 – Calculation of the Index and Rebalancing – Paragraph 4 – Index Constituents*”;

“**UW_t^U**” is the Underlying Weight of each Index Constituent U comprising the Portfolio, and determined in accordance with the following formula at the Valuation Time on each Index Business Day t:

- If the preceding Index Business Day t is not a Rebalancing Date, then $UW_t^U = UW_{t-1}^U$
- If the preceding Index Business Day t is a Rebalancing Date, then UW_t^U is defined as detailed in “*Section 4 – Calculation of the Index and Rebalancing – Paragraph 3 – Portfolio Determination and Rebalancing*” for such Rebalancing Date;

“**Depo_t**” or “Deposit” represents an exposure to a synthetic cash balance in the Index Currency accruing interest on the each Index Business Day at a rate equal to the prevailing overnight rate for the Index Currency on the immediately preceding Index Business Day

“**Depo_{RD}**” means the level for the Deposit at the Valuation Time on the immediately preceding Rebalancing Date;

“**Cash_{RD}**” means the level for Cash at the Valuation Time on the immediately preceding Rebalancing Date;

“**CW_t**” is the Cash Weight determined in accordance with the following formula at the Valuation Time on each Index Business Day t:

- If the preceding Index Business Day t is not a Rebalancing Date, then $CW_t = CW_{t-1}$

- If the preceding Index Business Day t is a Rebalancing Date, then CW_t is defined as detailed in “Section 4 – Calculation of the Index and Rebalancing – Paragraph 3 – Portfolio Determination and Rebalancing” for such Rebalancing Date.

“**Libor_{RD}**” is 1 month ICE Libor rate for the Index Currency as observed 2 Index Business Days prior to the immediately preceding Rebalancing Date

“**Days (RD)**” means the number of calendar days from and including the immediately preceding Rebalancing Date to but excluding such Index Business Day

“**AccumulatedManagementFees**” means using ACT/360 day count convention. On each Index Business Day immediately succeeding an Index Business Day on which a Trigger Event HAS occurred and the Portfolio Units and Cash Units are rebalanced this fee factor is reset at zero and the number of Portfolio Units and/or Cash Units are reduced so that immediately following such resetting to zero and adjustment of the number of Portfolio Units and/or Cash Units. For the avoidance of doubt, the AccumulatedManagementFees _{t} is calculated as follows;

- If TriggerEvent has occurred two[2] Index Business Days prior to Index Business Day t :

$$AccumulatedManagementFees_t = 0.5\% \times \frac{ACT(t-1,t)}{360}$$

- Otherwise

$$AccumulatedManagementFees_t = AccumulatedManagementFees_{t-1} + 0.5\% \times \frac{ACT(t-1,t)}{360}$$

3. Portfolio Determination and Rebalancing

The Index shall be rebalanced monthly. On the 1st Index Business Day of each calendar month which is also a Risk Factor Business Day (each a “**Determination Date**” or “**DD_t**”), the 500 Day Realized Volatility necessary for the determination of the weight of each Index Constituent within the Portfolio shall be determined. As at 11 pm London time on the 5th Index Business Day of each month (each a “**Rebalancing Date**” or “**RD_t**”), such new weights calculated shall become the weights of each Index Constituent for the purpose of calculation of Portfolio on the next Index Business Day.

The Underlying Weights will be determined following the process detailed hereafter:

a. Observation period

On each Risk Factor Business Day, the UBS Dynamic Equity Risk Indicator (“**DERI**”) is published by UBS Equity Research.

The Positive Sentiment Time Series (the “**Positive Sentiment Series**”) consists of the Daily Performance (as defined below) of the Matched Risk Factor R on any Risk Factor Business Day t (“ $Perf_t^R$ ”) for which the DERI level is greater or equal to 0.

The Negative Sentiment Series (the “**Negative Sentiment Series**”) consists of the Daily Performance (as defined below) of the Matched Risk Factor R on any Risk Factor Business Day t (“ $Perf_t^R$ ”) for which the DERI level is lesser than 0.

“**Daily Performance**” means, in relation to Risk Factor Business Day t, the return of Matched Risk Factor R as calculated in accordance with the formula below:

$$Perf_t^R = \sum_{u=1}^{N_R} \left(MRFWeights_u^R \times \left(\frac{MRF_{u,t}^R}{MRF_{u,t-1}^R} - 1 \right) \right)$$

where:

“ $MRF_{u,t}^R$ ” means in respect of a Risk Factor Business Day t and a Matched Risk Factor R, the official level of the Risk Factor Constituent u, published for that Risk Factor Business Day t.

$MRF_{u,t-1}^R$ ” means in respect of a Risk Factor Business Day t and a Matched Risk Factor R, the official level of the Risk Factor Constituent u (as set out in the table in “*Section 4 – Calculation of the Index and Rebalancing – Paragraph 4 – Matched Risk Factor*”), published for the immediately preceding Risk Factor Business Day.

“ $MRFWeights_u^R$ ” means the percentage specified in the 9th column of the table in “*Section 4 – Calculation of the Index and Rebalancing – Paragraph 4 – Matched Risk Factor*” before the name of the relevant Risk Factor Constituent u.

“ N_R ” means the number of Risk Factor Constituents that consist the Matched Risk Factor R

“**Volatility Observation Period**” means:

A) If the DERI level is positive or equal to 0 on the relevant Determination Day (“ DD_t ”), the Volatility Observation Period is defined as the most recent 500 values of the Positive Sentiment Series up to, and including, Determination Day (“ DD_t ”).

B) If the DERI level is negative on Determination Day (“ DD_t ”), the Volatility Observation Period is defined as the most recent 500 values of the Negative Sentiment Series up to, and including Determination Day (“ DD_t ”).

b. Underlying Weight

On each Determination Date t (“ DD_t ”), the “500 Day Realized Volatility” of each Matched Risk Factor R (“ Vol_t^R ”) is calculated in accordance with the formula below:

$$Vol_t^R = \sqrt{254} \times \sqrt{\frac{1}{n-1} \sum_{k=1}^n \left(Perf_k^R - \frac{1}{n} \sum_{i=1}^n Perf_i^R \right)^2}$$

where:

$n = 500$

$Perf_k^R$ and $Perf_i^R$ means the Daily Performance for $t = i$ or $t = k$ in the relevant Volatility Observation Period for the relevant Matched Risk Factor R;

On each Rebalancing Date t (“ RD_t ”), the Underlying Weight of each Index Constituent (“ UW_t^U ”) is calculated in accordance with the formula below:

$$UW_t^U = MIN \left[\left(\frac{\frac{1}{Vol_{DD}^R}}{\sum_{r=1}^{RF} \frac{1}{Vol_{DD}^r}} \right) \times Y^U ; UWCAP^U \right] \times Portfolio_{RD} \times (1 - RebalancingCost)$$

Also, on each Rebalancing Date t (“ RD_t ”), the Cash Weight (“ CW_t ”) is calculated in accordance with the following formula:

$$CW_t = Portfolio_{RD} \times (1 - RebalancingCost) - \sum_{u=1}^M UW_t^u$$

where:

“ Vol_{DD}^R ” in respect of an Index Constituent is 500 Day Realized Volatility for the Matched Risk Factor R in respect of such Index Constituent on Determination Date t ;

“ Vol_{DD}^r ” is “ Vol_{DD}^R ” of each Matched Risk Factor R;

“ RF ” is the number of Matched Risk Factors R at the Valuation Time on Determination Date t ;

“ Y^U ” is an exposure adjustment factor Y for the Index Constituent U as set out below;

“ $UWCAP^U$ ” is the maximum level for the Underlying Weight of Index Constituent U as set out below;

“ $Portfolio_{RD}$ ” means the Portfolio $_t$ at the Valuation Time on the first Rebalancing Date following the relevant Determination Date;

“**RebalancingCost**” means 0.08%.

“ M ” is the Number of Index Constituents comprising the Portfolio at the Valuation Time on Index Business Day t ;

4. Index Constituents

U	Index Constituent u	Bloomberg Code	FXSclar u	Index Owner	Y u	UWCAP u	Matched Risk Factor R	R
---	-----------------------	----------------	-------------	-------------	-------	-----------	-----------------------	---

							("MRF ^R ")	
1	UBS 5Y US Treasury Total Return Index	UBCIUST5 Index	0	UBS	0.25	20%	25% First 5Y Treasury Note Future (Bloomberg: FV1 Comdty) +25% First 10Y Treasury Note Future (Bloomberg: TY1 Comdty) +25% First 5Y Euro Bobl Future (Bloomberg: OE1 Comdty) +) + 25% First 10Y Euro Bund Future (Bloomberg: RX1 Comdty)	1
2	UBS 5Y Euro Bond Total Return Index	UBCIEUT5 Index	1	UBS	0.25	20%		
3	UBS 10Y US Treasury Total Return Strategy	Not Available please se strategy description in Section 8.1	0	N/A	0.25	20%		
4	UBS 10Y Euro Bond Total Return Strategy	Not Available please se strategy description in Section 8.2	1	N/A	0.25	20%		
5	UBS RADA Long Europe Index Net Total Return (EUR)	ULTARLET Index	1	UBS	0.5	20%	50% EuroStoxx 50 Return Index (Bloomberg: SX5T Index) + 50% S&P 500 TR Index (Bloomberg: SPTR Index)	2
6	UBS RADA Long US Index Net Total Return (USD)	ULTARLUT Index	0	UBS	0.5	20%		
7	Momentum Rotator Strategy on UBS Bloomberg CMCI Composite USD Total Return	Not Available please se strategy description in Section 8.3	0	N/A	1.0	35%	Dow Jones UBS Commodity Index Total Return (Bloomberg: DJUBSTR Index)	3

5. Rounding of Calculated Values

The Index Level shall be rounded to two decimal places. All other determinations shall not be rounded.

6. Exercise of expert judgment

If the Index Administrator is required or entitled to make a determination in relation to the Index pursuant to the Index methodology and that determination involves the exercise of discretion with respect to the use of data in determining the Index Level, then the Index Administrator will exercise that discretion (i) in good faith and in a commercially reasonable manner and (ii) in such manner as to ensure, as far as commercially reasonable, consistency in the approach it adopts with regard to the exercise of such discretion between Index Level determinations, including having regard to previous occasions on which the Index Administrator has exercised that discretion in relation to the Index.

If the Index Administrator requires data (including prices, estimates, values or rates) from a third party or its front office division (each, a "**Data Submitter**") to determine the Index Level and the Data Submitter has discretion as to the data to be provided, then the Index Administrator will provide the Data Submitter with prescribed criteria to be followed by such Data Submitter in exercising such discretion in order to ensure, as far as commercially reasonable, consistency in the approach the Data Submitter adopts with regard to the exercise of discretion.

Section 5. Adjustments, Extraordinary Events, Index Market Disruption Events and Force Majeure Events

1. “Index Market Disruption Event” Definition

Any of the following will constitute an “Index Market Disruption Event”:

- a suspension, absence or material limitation of trading in any Index Constituent or its constituents on their respective primary markets, in each case for more than two hours of trading or during the one hour before the close of trading in that market, as determined by the Index Administrator; or
- a suspension, absence or material limitation of trading in options or futures contracts relating to any Index Constituent or its constituents, if available, in the respective primary markets for those contracts, in each case for more than two hours of trading or during the one-half hour before the close of trading in that market, as determined by the Index Administrator; or
- any Index Constituent, its constituents or options or futures contracts relating to any Index Constituent or its constituents, if available, do not trade on what were the respective primary markets for those indices or contracts, as determined by the Index Administrator; or
- a change in law, such that on or after the Index Commencement Date (a) due to the adoption or announcement of any change in any applicable law or regulation (including, without limitation, any tax law or limitations on the repatriation of invested capital in the jurisdiction or the underlying), or (b) due to the promulgation of or any change in the interpretation by any court, tribunal or regulatory authority with competent jurisdiction of any applicable law or regulation (including any action taken by a taxing authority), the Index Administrator determines that (i) it would be illegal for the Index Administrator and/or any of its affiliates to hold, acquire, deal or dispose of the securities, options, futures or derivatives included in the Index Constituents or (ii) market participants would incur a materially increased cost in performing their obligations of any Index Products (including, without limitation, due to any increase in tax liability, decrease in tax benefits or other adverse effect on their tax position); or
- the Index Administrator is unable to obtain the price in respect of any Index Constituent within a reasonable amount of time;
- any material change in the formula for or the method of calculating the Index Constituents or any other changes which materially modifies the Index Constituents (other than a modification prescribed in that formula or method to maintain the Index Constituents in the event of changes in constituent stock and capitalisation and other routine events); or
- the Index Constituent is permanently cancelled and no successor index exists; or

- any material change in market conditions such that the Index Administrator or its affiliates would incur a materially increased amount of costs or expenses to acquire, establish, re-establish, substitute, maintain, unwind or dispose of any transactions or assets its deems necessary to hedge the risk of performing its obligations with respect to the Index or any Index Products,

and, in any of these events, the Index Administrator determines in good faith, and agreed by the Index Owner, that the event could materially interfere with its ability or the ability of any of its affiliates to unwind all or a material portion of a hedge that could be affected with respect to the Index or any Index Product.

The following event will not be an Index Market Disruption Event:

- a limitation on the hours or number of days of trading, but only if the limitation results from a previously announced change in the business hours of the relevant market.

For purposes of determining whether an Index Market Disruption Event has occurred, an “absence of trading” in the primary securities market on which a component of the Index Constituents is traded or on which options or futures contracts relating to the components of the Index Constituents are traded will not include any time when that market is itself closed for trading under ordinary circumstances. In contrast, a suspension or limitation of trading in any component of the Index Constituents or in options or futures contracts relating to any component of the Components in the primary market for that component or those contracts, by reason of:

- a price change exceeding limits set by that market;
- a disruption in, or an impairment of, the ability of market participants in general to effect transactions in, or obtain market values for, that component of the Index Constituent or those contracts;
- an imbalance of orders relating to the components of the Index Constituent or those contracts; or
- a disparity in bid and ask quotes relating to that component of the Index Constituent or those contracts,

will constitute a suspension or material limitation of trading in that component of the Index Constituent or those contracts in that primary market.

2. “Force Majeure Event” Definition

A “Force Majeure Event” is an event or circumstance (including without limitation, a systems failure, natural or man-made disaster, act of God, armed conflict, act of terrorism, riot or labor disruption or any similar intervening circumstance) that is beyond the reasonable control of the Index Administrator and that the Index Administrator determines affects the Index, any of the Index Constituents or the methodology on which the Index is based.

3. Consequences of an “Index Market Disruption Event” or “Force Majeure Event”

If an “Index Market Disruption Event” or a “Force Majeure Event” occurs or is continuing on one or more Scheduled Trading Days (each a “Disrupted Day”) that, as determined in good faith by

the Index Administrator, affects the Index or any of the Index Constituents or their components, the Index Administrator may:

- defer publication of information relating to the Index until the next Index Business Day on which such Index Market Disruption or Force Majeure Event, as applicable, is not continuing; and
- if such calendar day is a Rebalancing Date, to postpone such rebalancing to the next Index Business Day on which such Index Market Disruption or Force Majeure Event, as applicable, is not continuing.

If an “Index Market Disruption Event” or a “Force Majeure Event” persists for each of the 5 Scheduled Trading Days immediately following the original Scheduled Trading day that is a Disrupted Day, then the Index Administrator shall determine what actions it may take, which includes, but shall not be limited to, the following:

- make such determinations and/or adjustments to the terms of the Index as it deems appropriate in order to determine the level of the Index on such day (if such day is an Index Business Day);
- calculate a substitute level for the Index based on but not restricted to the last published level of the disrupted Index Constituent and such Index Constituent level may be zero;
- make other adjustments to the Index in good faith in order to maintain the objectives of the Index; and
- discontinue supporting the Index or terminate the calculation of the Index Level or the publication of the Index Level.

As soon as reasonably practicable, following the occurrence of an Index Market Disruption Event or a Force Majeure Event, the Index Administrator will provide notice of such events and details of its actions on the Bloomberg Page and/or on the UBS Website.

4. Determinations by the Index Administrator

Where the Index Administrator is required or entitled to make a determination under the provisions of this *Section 5 – Adjustments, Extraordinary Events, Index Market Disruption Events and Force Majeure Events*, it will do so in good faith and in a commercially reasonable manner.

Notwithstanding any other provision of this Index Manual, the Index Administrator may only make adjustments to the Index methodology in respect of which the Index Administrator has obtained the prior consent of the Index Owner.

Section 6. Change in Methodology of the Index and Termination

1. Change in Methodology

While the Index Administrator currently employs the methodology described in this Index Manual to calculate the Index Level, the Index Administrator may determine (acting reasonably and in good faith) that it is necessary or appropriate to modify the Index methodology or any other provision of this Index Manual to:

- (i) take into account market, regulatory, juridical, financial, fiscal or other similar circumstances (including, but not limited to, any changes to or any suspension or termination of or any other events affecting any Index Constituents) that arise;
- (ii) prevent an obvious or demonstrable error; or
- (iii) remedy, correct or supplement any incorrect or ambiguous provisions.

In such event the Index Administrator shall be entitled (acting in good faith) to modify or change the Index and any provision of this Index Manual, subject to the provisions of the following paragraph and the Index Administrator obtaining the prior consent of the Index Owner. Any changes made to the Index or any provisions of this Index Manual will be made in good faith and in a commercially reasonable manner and in a manner that maintains the objectives of the Index. Any such determination by the Index Administrator will be, in the absence of manifest error, final, conclusive and binding.

If the Index Administrator proposes to modify or change the Index methodology and the Index Committee determines that the proposed modification or change will have, or is reasonably likely to have, a material effect on the objectives of the Index, the underlying market or economic interests referenced by the Index, the Index Level or the method of calculating the Index Level (a “**Material Change**”), then the Index Administrator will make available details of the proposed Material Change at least 10 Index Administrator Business Days in advance of the proposed Material Change taking effect (such period, the “**Index Modification Consultation Period**”). Such details will be published on the Bloomberg Page and/or on the UBS Website. During the Index Modification Consultation Period, Index Product Investors may provide comments to the Index Administrator in relation to the impact of the Material Change. Following the expiry of the Index Modification Consultation Period, the Index Administrator will make available a summary of any comments received from Index Product Investors in relation to the Material Change, and a summary of the Index Administrator’s responses to such comments, on the Bloomberg Page and/or on the UBS Website (unless the relevant Index Product Investor has requested confidentiality).

The Index Administrator will take into account (but shall not be obliged to follow) any comments received from Index Products Investors during the Index Modification Consultation Period in relation to the implementation of any proposed Material Change.

2. Termination

The Index Administrator may, in its sole and absolute discretion, terminate the calculation and publication of the Index Level. If the Index Administrator proposes to terminate the calculation and publication of the Index Level, then (i) the Index Administrator will give at least 10 Index Administrator Business Days’

notice of such termination by publication on the Bloomberg Page and/or on the UBS Website and (ii) in such notice specify if there will be any transition process in relation to the termination of the calculation and publication of the Index Level and, if so, invite Index Product Investors to provide comments on the proposed transition process within such time period as may be specified by the Index Administrator (the “**Index Transition Consultation Period**”). During the Index Transition Consultation Period, Index Product Investors may provide comments to the Index Administrator in relation to the proposed transition process. Following the expiry of the Index Transition Consultation Period, the Index Administrator will make available a summary of any comments received from Index Product Investors in relation to the proposed transition process, and a summary of the Index Administrator’s responses to such comments, on the Bloomberg Page and/or on the UBS Website (unless the relevant Index Product Investor has requested confidentiality).

The Index Administrator will take into account (but shall not be obliged to follow) any comments received from Index Products Investors during the Index Transition Consultation Period.

The Index Administrator will make available any transition process in relation to the termination of the calculation and publication of the Index Level on the Bloomberg Page and/or on the UBS Website.

3. Errors and Adjustments

The Index Administrator reserves the right to make adjustments to correct errors contained in previously published information relating to the Index, including but not limited to the Index Level, and to publish the corrected information, but it is under no obligation to do so and shall have no liability in respect of any errors or omissions contained in any subsequent publication. The Index Administrator will determine in good faith whether to adjust or correct any previously published Index Level in order to maintain the objectives of the Index. The Index Administrator will provide notice of such adjustments on the Bloomberg Page and/or on the UBS Website. The Index Administrator will provide any information about any such adjustments it makes upon your written request.

The Index Owner may, at any time, change the name of the Index. Notice of such a change will be provided on the Bloomberg Page and/or on the UBS Website.

If the Index Administrator determines (acting reasonably) that market, regulatory, juridical, financial, fiscal, operational or other similar circumstances have arisen that would necessitate a change to the place and time of publication of the Index Level and/or the frequency of publication of the Index Level, then the Index Administrator may, upon giving at least 10 Index Administrator Business Days’ notice, change the place and time of the publication of the Index Level and/or the frequency of publication of the Index Level.

4. Annual review

The Index Administrator will review the Index methodology on an annual basis to evaluate whether the Index methodology continues to achieve its objectives.

5. Construction of this Index Manual

This Index Manual is published by the Index Administrator. In the event of any inconsistency between the English language version of this Index Manual and that translated into any other language, the English language version shall prevail.

Section 7. Index Governance

1. Index Committee

The Index Administrator has established an index committee (the “**Index Committee**”).

The Index Committee’s role is to provide an oversight function to review and provide challenge on all aspects of the Index determination process and provide effective oversight of the Index Administrator in accordance with, and subject to, the applicable procedures set out in the UBS Control Framework Document. The Index Committee’s oversight function includes consideration of the features and intended, expected or known usage of the Index and the materiality of identified existing or potential conflicts of interest. The Index Committee’s oversight function and its composition are appropriate to provide effective scrutiny over the Index Administrator.

The Index Administrator considers information about changes to its indices and related matters to be potentially market moving and material. Therefore, all Index Committee discussions are confidential.

Further details in relation to the Index Committee, including the criteria and procedures for the selection of members of the Index Committee, the membership of the Index Committee and its compliance functions are set out in the UBS Control Framework Document.

2. Conflicts of Interest

The Index confers on the Index Administrator discretion in making certain determinations, calculations and corrections from time to time. The role played by UBS, as Index Administrator and the exercise of the kinds of discretion described above could present it with significant conflicts of interest in light of the fact that UBS, of which the Index Administrator is a division, may be the issuer or counterparty of Index Products. Neither the Index Administrator nor the Index Owner has any obligation to take the needs of any Index Product Investor into consideration at any time. UBS, its affiliates and its subsidiaries may each face conflicts between the roles it performs in respect of the Index and its own interests. In particular, in its other businesses, UBS may have, or enter into transactions to create, a physical, economic or other interest (including an adverse and/or short interest, as the case may be) in the Index, any Index Product, any Index Constituent, any investments referenced by or linked to any Index Constituent or any other related investments and may exercise remedies or take other action with respect to its interests as it deems appropriate.

The following actions could adversely affect the Index Level:

- UBS may actively trade Index Products, any Index Constituent, any investments referenced by or linked to any Index Constituent and any other related investments. These activities could adversely affect the Index Level, which could in turn affect the return on, and the value of, any Index Products.
- UBS may have access to information relating to the Index, any Index Product, any Index Constituent, any investments referenced by or linked to any Index Constituent or any other related investments. UBS is not obliged to use that information for the benefit of any person acquiring or entering into any Index Products.
- UBS, its affiliates and other parties may issue, underwrite, trade or enter into, as applicable, securities, financial or derivative instruments or other investments referenced to the Index or any

Index Constituent. An increased level of investment and trading in these securities, financial or derivative instruments or investments may negatively affect the performance of the Index and could adversely affect the Index Level and, therefore, the amount payable at maturity on any Index Products and the value of any such products before that date.

- Although UBS is not obliged to do so, it may elect to hedge its exposure to the Index, any Index Product, any Index Constituent, any investments referenced by or linked to any Index Constituent or any other related investments with an affiliate or a third party. Such affiliate or third party, in turn, is likely to directly or indirectly hedge any or all of its exposure, including through transactions taking place on the futures and/or options markets. Where UBS or such affiliate or third party chooses to hedge its exposure, it may adjust or unwind such hedges by purchasing or selling Index Products, Index Constituents, products linked to any Index Constituent, any investments referenced by or linked to any Index Constituent or any other products on or before the date that the Index is valued for the purposes of any Index Product. UBS or such affiliate or third party may also enter into, adjust or unwind hedging transactions relating to other instruments linked to the Index or any Index Constituent. Any such hedging activity may adversely affect the Index Level, which could in turn affect the return on, and the value of, any Index Products.
- Certain activities conducted by UBS may conflict with the interests of those acquiring or entering into Index Products. For example, as described above, UBS may elect to hedge its obligations, if any, with an affiliate or a third party. It is possible that UBS could receive substantial returns with respect to these activities while the value of an Index Product may decline.
- UBS may also engage in trading for its proprietary accounts, for other accounts under its management or to facilitate transactions, including block transactions, on behalf of customers relating to one or more Index Products, products linked to any Index Constituent, any investments referenced by or linked to any Index Constituent and/or any other related investments. In the course of these transactions, UBS's customers may receive information about the Index before it is made available to other Index Product Investors. Any of these activities could also adversely affect the Index Level directly or indirectly by affecting the value of any Index Constituent, any investments referenced by or linked to any Index Constituent or any other related investments and, therefore, the amount paid at maturity on any Index Products and the value of any such products before that date.
- UBS, its affiliates and other parties may issue, underwrite, trade or enter into, as applicable, securities or financial or derivative instruments with returns linked or related to changes in the performance of the Index, any Index Product, any Index Constituent, any investments referenced by or linked to any Index Constituent or any other related investments, which might compete with the Index Products. By introducing competing products into the marketplace in this manner, UBS could adversely affect the amount paid at maturity, redemption or termination of any Index Products and the value of any such products before that date. To the extent that UBS serves as issuer, underwriter, trader or counterparty of those securities or instruments, its interests with respect to those securities or instruments may be adverse to the interests of a holder of any Index Products.
- As administrator of the Index, under certain circumstances UBS will have discretion in making various determinations that affect the Index and Index Products. UBS may use these determinations to calculate the amount it must pay at maturity or, as the case may be, upon any early redemption or termination of any such Index Product. The exercise by UBS of this discretion could adversely affect the value of any such Index Product.

3. UBS Control Framework Document

The Index Administrator has implemented and maintains the “UBS Control Framework Document”, which is a control framework for the process of determining and distributing a number of indices in respect of which UBS acts as the Index Administrator, including the Index. A summary of the main features of the UBS Control Framework Document is available on the UBS Website. Neither the UBS Control Framework Document, nor the summary of its main features, forms part of any prospectus into which this Index Manual may be incorporated.

Section 8. Disclaimer, Licensing and Trademark

Disclaimers

No legal relationship (whether in contract, tort, or otherwise) exists between any Index Product Investor and the Index Administrator or the Index Owner and neither the Index Administrator nor the Index Owner owes any duties (whether in contract, tort, or otherwise) to any Index Product Investor. No claims, actions or legal proceedings may therefore be brought against the Index Administrator or the Index Owner in any manner whatsoever by an Index Product Investor or any other person.

Neither the Index Administrator nor the Index Owner makes any representation, warranty or guarantee whatsoever, express or implied, either as to the results to be obtained as to the use of the Index or the figures or levels at which the Index stands at any particular day or otherwise. In addition, neither the Index Administrator nor the Index Owner gives any assurance regarding any modification or change in any methodology used in calculating the Index and is under no obligation to continue the calculation, publication and dissemination of the Index.

Neither the Index Administrator nor the Index Owner warrants or represents or guarantees to any person the accuracy or completeness of the Index and its computation or any information related thereto and makes no warranty or representation or guarantee of any kind whatsoever relating to the Index is given or may be implied. The process and basis of computation and compilation of the Index and the related formulae, constituent benchmarks and factors may at any time be changed or altered by the Index Administrator.

No responsibility or liability is accepted by either the Index Administrator or the Index Owner (whether for negligence or otherwise) in respect of the use of and/or reference to the Index by us or any other person in connection with securities, or for any inaccuracies, omissions, mistakes or errors in the computation of the Index (and neither the Index Administrator nor the Index Owner shall be obliged to advise any person or any Index Product Investor of any error therein) or for any economic or other loss which may be directly or indirectly sustained by any Index Product Investor or any other persons dealing with securities as a result. Any Index Product Investor or other person dealing with securities does so, therefore, in full knowledge of this disclaimer and can place no reliance whatsoever on the Index Administrator or the Index Owner.

This document contains data derived as a result of back-testing of data and is provided by the Index Administrator or the Index Owner in good faith using its standard methodology for information of this kind. That methodology relies on proprietary models, empirical data, assumptions and such other information that the Index Administrator or the Index Owner believes to be accurate and reasonable. Neither the Index Administrator nor the Index Owner makes, however, any representation, warranty or guarantee as to the accuracy, completeness or appropriateness of such methodology and neither the Index Administrator nor the Index Owner accepts any liability for the use of such information. Specifically, there is no assurance that other banks or brokers would derive the same results for the back-test period.

Nothing in the disclaimers in this *Section 8 – Disclaimer, Licensing and Trademark* shall exclude or limit liability to the extent such exclusion or limitation is not permitted by law or regulations to which the Index Administrator or the Index Owner is subject.

S&P DISCLAIMER

Standard & Poor's®, "S&P®," "S&P 500®," "Standard & Poor's 500" , "S&P GSCI" are trademarks of The McGraw-Hill Companies, Inc. and have been licensed for use by UBS. The Product(s) are not sponsored, endorsed, sold or promoted by S&P and S&P makes no representation regarding the advisability of investing in the Product(s).

The Product(s) is not sponsored, endorsed, sold or promoted by Standard & Poor's, a division of McGraw-Hill, Inc. ("S&P"). S&P makes no representation or warranty, express or implied, to the owners of the Product(s) or any member of the public regarding the advisability of investing in securities generally or in the Product(s) particularly or the ability of the S&P 500 Index to track general stock market performance. S&P's only relationship to the Licensee is the licensing of certain trademarks and trade names of S&P and of the S&P 500 Index which is determined, composed and calculated by S&P without regard to the Licensee or the Product(s). S&P has no obligation to take the needs of the Licensee or the owners of the Product(s) into consideration in determining, composing or calculating the S&P 500 Index. S&P is not responsible for and has not participated in the determination of the timing of, prices at, or quantities of the Product(s) to be issued or in the determination or calculation of the equation by which the Product(s) is to be converted into cash. S&P has no obligation or liability in connection with the administration, marketing or trading of the Product(s).

S&P DOES NOT GUARANTEE THE ACCURACY AND/OR THE COMPLETENESS OF THE S&P 500 INDEX OR ANY DATA INCLUDED THEREIN AND S&P SHALL HAVE NO LIABILITY FOR ANY ERRORS, OMISSIONS, OR INTERRUPTIONS THEREIN. S&P MAKES NO WARRANTY, EXPRESS OR IMPLIED, AS TO RESULTS TO BE OBTAINED BY LICENSEE, OWNERS OF THE PRODUCT(S), OR ANY OTHER PERSON OR ENTITY FROM THE USE OF THE S&P 500 INDEX OR ANY DATA INCLUDED THEREIN. S&P MAKES NO EXPRESS OR IMPLIED WARRANTIES, AND EXPRESSLY DISCLAIMS ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE WITH RESPECT TO THE S&P 500 INDEX OR ANY DATA INCLUDED THEREIN. WITHOUT LIMITING ANY OF THE FOREGOING, IN NO EVENT SHALL S&P HAVE ANY LIABILITY FOR ANY SPECIAL, PUNITIVE, INDIRECT, OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS), EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES.

EUROSTOXX DISCLAIMER

STOXX and its licensors have no relationship to UBS, other than the licensing of the EURO STOXX 50® Index and the related trademarks for use in connection with the products.

STOXX and its Licensors do not:

- Sponsor, endorse, sell or promote the products.
- Recommend that any person invest in the products or any other securities.
- Have any responsibility or liability for or make any decisions about the timing, amount or pricing of products.
- Have any responsibility or liability for the administration, management or marketing of the products.
- Consider the needs of the products or the owners of the products in determining, composing or calculating the relevant index or have any obligation to do so.

STOXX and its Licensors will not have any liability in connection with the products. Specifically,

- **STOXX and its Licensors do not make any warranty, express or implied and disclaim any and all warranty about:**
 - **The results to be obtained by the products, the owner of the products or any other person in connection with the use of the relevant index and the data included in the relevant index;**
 - **The accuracy or completeness of the relevant index and its data;**
 - **The merchantability and the fitness for a particular purpose or use of the relevant index and its data;**
- **STOXX and its Licensors will have no liability for any errors, omissions or interruptions in the relevant index or its data;**
- **Under no circumstances will STOXX or its Licensors be liable for any lost profits or indirect, punitive, special or consequential damages or losses, even if STOXX or its Licensors knows that they might occur.**

The licensing agreement between UBS AG and STOXX is solely for their benefit and not for the benefit of the owners of the products or any other third parties.

UBS BLOOMBERG CMCI DISCLAIMER

UBS makes no representation or warranty, express or implied, regarding the appropriateness of investing in products referenced to the UBS Bloomberg Constant Maturity Commodity Index Family ("CMCI"), commodity products in general or of the ability of the CMCI to track commodity market performance. In determining the constituents of the CMCI and any amendment thereto, UBS has no obligation to consider the needs of any counterparties that have products referenced to the CMCI.

© UBS 2012. The key symbol and UBS are among the registered and unregistered trademarks of UBS. UBS Bloomberg Constant Maturity Commodity Index, UBS Bloomberg CMCI and CMCI are service marks of UBS and/or Bloomberg. Other marks may be trademarks of their respective owners. All rights reserved. UBS assumes sole responsibility for this Index Manual, which has not been reviewed by Bloomberg.

CMCI is compiled and calculated, in part, using data obtained from a number of futures exchanges ("Exchanges") with their permission. The Exchange's data is provided "as is" and without representation or warranty on their part. The Exchanges have no involvement with and accept no responsibility for the CMCI, its suitability as an investment or its future performance.

UBS DOES NOT GUARANTEE THE QUALITY, ACCURACY AND/OR THE COMPLETENESS OF THE CMCI OR ANY DATA INCLUDED THEREIN AND SHALL NOT HAVE ANY LIABILITY FOR ANY ERRORS OR OMISSION. UBS MAKES NO WARRANTY, EXPRESS OR IMPLIED, AS TO RESULTS TO BE OBTAINED BY OR FROM THE USE OF THE CMCI OR ANY DATA INCLUDED THEREIN OR FOR ANY OTHER USE (WHETHER DIRECTLY OR VIA ANY PRODUCT REFERENCED THERETO). UBS MAKES NO EXPRESS OR IMPLIED WARRANTIES, AND TO THE EXTENT PERMITTED BY LAW HEREBY EXPRESSLY DISCLAIMS ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE WITH RESPECT TO THE CMCI OR ANY DATA INCLUDED THEREIN. WITHOUT LIMITING

ANY OF THE FOREGOING, TO THE EXTENT PERMITTED BY LAW UBS DISCLAIMS ANY LIABILITY FOR ANY PUNITIVE, INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS), EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH.

Licencing and Trademark

The mark and name of the Index is proprietary to UBS.

UBS Multi Asset Portfolio T5 Excess Return USD Index is a trademark of UBS AG and has been licensed for use by UBS AG, London Branch in connection with the calculation of the Index Level.

Section 9. Definitions

“1 Month FX Forward Rate” means the spot foreign exchange rate, bid or ask as applicable, depending on the currency pair for which conversion is required and how the quote for it is published by Bloomberg for 5.00 p.m. London time plus the 1 month forward points (such 1 month forward points as determined by the Index Administrator) based on the prevailing interest rates, bid or ask as applicable, as published by Bloomberg for the relevant currency pair for 5.00 p.m. London time.

“ACT/360” means the actual number of days in a period in respect of which calculation based on this day count fraction is being made divided by 360.

“Bloomberg Page” means the page designated as “ULTAMAP Index” on Bloomberg.

“Commodity Constituent” means the Momentum Rotator Strategy on the UBS Bloomberg CMCI Composite USD Total Return Index.

“DERI” means the UBS Dynamic Equity Risk Indicator.

“Determination Date” means the first Index Business Day of each month.

“Disrupted Day” means a Scheduled Trading Day on which an Index Market Disruption Event or a Force Majeure Event occurs or is continuing.

“Equity Constituent” means UBS RADA Long Europe Index Net Total Return (USD) and UBS RADA Long US Index Net Total Return (USD)

“Exchanges” means, in respect of each Index Constituent, the exchanges or quotation system in which trading of the Index Constituent, or futures or option contracts linked to the Index Constituent principally occurs, as determined by the Index Administrator.

“Force Majeure Event” shall have the meaning given to it in *“Section 5 – Adjustments, Extraordinary Events, Index Market Disruption Events and Force Majeure Events”*.

“FX Price Source” means the spot foreign exchange rate published by Bloomberg for 5.00 p.m. London time on the BFIX function, or any successor thereof.

“ICE LIBOR” (previously BBA LIBOR) is a benchmark rate that some of the world's leading banks charge each other for short-term loans. It stands for Intercontinental Exchange London Interbank Offered Rate and serves as the first step to calculating interest rates on various loans throughout the world.

“Index” means the UBS Multi Asset Portfolio T5 Total Return USD Index.

“Index Administrator” means UBS AG, London Branch, a division of UBS AG (or any successor thereto).

“Index Administrator Business Day” means any day on which commercial banks are open for general business (including dealings in foreign exchange and foreign currency deposits) in London.

“Index Base Date” means 7th March 2002.

“Index Base Value” means the value of the Index on the Index Base Date and shall equal to 100.

“Index Business Day” means any day (other than a Saturday or Sunday) that is a Scheduled Trading Day for all the Index Constituents but is not a Disrupted Day.

“Index Commencement Date” means the date on which the level of the Index is first calculated and shall mean 30th August 2012.

“Index Committee” has the meaning given to such term in *Section 7 – Index Governance*.

“Index Constituent”, and together **“Index Constituents”**, means UBS 5Y US Treasury Total Return Index, UBS 5Y Euro Bond Total Return Index, UBS 10Y US Treasury Total Return Strategy, UBS 10Y Euro Bond Total Return Strategy, UBS RADA Long Europe Index Net Total Return (USD), UBS RADA Long US Index Net Total Return (USD) and the Momentum Rotator Strategy on the UBS Bloomberg CMCI Composite USD Total Return Index.

“Index Currency” means the currency in which the Index is denominated and shall be United States dollars (**“USD”**).

“Index Level” means the level of the Index determined in accordance with *“Section 4 – Calculation of the Index and Rebalancing – Index Equations”* at the Valuation Time on each Index Business Day t.

“Index Manual” means this document as amended, replaced or substituted, from time to time.

“Index Market Disruption Event” shall have the meaning given to it in *“Section 5 – Adjustments, Extraordinary Events, Index Market Disruption Events and Force Majeure Events”*.

“Index Products” means products linked to the Index.

“Index Product Investors” has the meaning given to such term in *Section 3 – Risk Factors*.

“Index Owner” means UBS AG, London Branch, a division of UBS AG (or any successor thereto).

“Interest Rate Constituent” means UBS 5Y US Treasury Total return Index, UBS 5Y Euro Bond Total Return Index, UBS 10Y US Treasury Total Return Strategy and the UBS 10Y Euro Bond Total Return Strategy.

“Interpolated FX Forward Rate” means the spot foreign exchange rate, bid or ask as applicable, depending on the currency pair for which conversion is required and how the quote for it is published by Bloomberg for 5.00 p.m. London time plus the 1 month forward points (such 1 month forward points as determined by the Index Administrator) based on the prevailing interest rates, bid or ask as applicable, as published by Bloomberg for the relevant currency pair for 5.00 p.m. London time multiplied by the ratio between the number of calendar days remaining to the immediately following Rebalancing Date and the total number of calendar days between the immediately preceding and the immediately following Rebalancing Date to the relevant Index Business Day. The Interpolated FX Forward Rate on any Rebalancing Date would be equal to the the spot foreign exchange rate, bid or ask as applicable, as published by Bloomberg for 5.00 p.m. London time.

“London Business Day” means any day (other than a Saturday or Sunday) on which commercial banks settle payments and are open for general business in London.

“Matched Risk Factor R” or **“MRF^R”** means in relation to an Index Constituent, the index or indices set out in the 8th column of the table in *“Section 4 – Calculation of the Index and Rebalancing – Paragraph 4 – Index Constituents”*.

“Number of Index Constituents” or **“M”** means, at any time, the number of Index Constituents included in the Portfolio which shall be equal to 7.

“Overnight USD-Libor” means in respect of an Index Business Day the rate for deposits in USD for a period of one day which appears on the Reuters Screen LIBOR01 Page (or any successor or replacement page) as of 11:00 am, London time on that Index Business Day.

“Portfolio” means a synthetic investment into a basket composed of the Index Constituents allocated in accordance with *“Section 4 – Calculation of the Index and Rebalancing”*.

“Publication Date” means the date of publication of this Index Manual and shall be 17 July 2014.

“Realized Volatility” means the annualized square root of the sum of the Daily Performances of an Index Constituent during a set time horizon as detailed in *Section 4 – Calculation of the Index and Rebalancing*.

“Rebalancing Date” means the 5th Index Business Day of each month.

“Risk Factor Business Day” means any day (other than a Saturday or Sunday) that is a Scheduled Trading Day for all the Risk Factor Constituents, but is not a Disrupted Day.

“Risk Factor Constituent”, and together **“Risk Factor Constituents”**, means S&P United States 500 Total Return 1988 Index, Eurostoxx 50 Return Index, First 5Y Treasury Note Future, First 10Y Treasury Note, First 5Y Euro Bobl Future, First 10Y Euro Bund Future and the Dow Jones UBS Commodity Index Total Return.

“Scheduled Trading Day” means, in respect of each Index Constituent, a day on which the Exchanges are scheduled to be open for trading during their regular trading sessions.

“Successor Index Administrator” has the meaning given to such term in *Section 3 – Risk Factors*.

“Successor Index Owner” has the meaning given to such term in *Section 3 – Risk Factors*.

“UBS” means UBS AG, acting through its London Branch (or any successors thereto).

“UBS Control Framework Document” has the meaning given to such term in *Section 1 – Introduction*.

“UBS Dynamic Equity Risk Indicator” means the dynamic equity risk indicator as determined by UBS and published on the Bloomberg Ticker ULTADERI Index.

“UBS Website” means the following website: www.ubs.com/indexgroup.

“Underlying Index” means any of the Index Constituents.

“Underlying Index Administrator” means the administrator of and Underlying Index.

“Underlying Weight” means, in respect of each Index Constituents, a weight determined in accordance with *“Section 4 Calculation of the Index and Rebalancing - Portfolio Rebalancing – Underlying Weight”*.

“Valuation Time” means 10.00 *pm* London time or such other time as the Index Administrator may determine.

Section 10. Description of Index Constituents

Treasury Index – The UBS 5Y Treasury Index reflects the performance of a future rolling strategy applied to the 5Y US Treasury Note Futures rolled every 3rd Friday of February, May, August and November.

The UBS 10Y US Treasury Strategy (as calculated according to Section 8.1) reflects the performance of a future rolling strategy applied to the 10Y US Treasury Note Futures rolled every February, May, August and November.

Euro Bond Index – The UBS 5Y Euro Bond Index reflects the performance of a future rolling strategy applied to the Euro Bobl Futures rolled every March, June, September and December.

The UBS 10Y Euro Bond Strategy (as calculated according to Section 8.2) reflects the performance of a future rolling strategy applied to the Euro Bund Futures rolled every March, June, September and December.

RADA - The UBS RADA Long Index (the “**RADA**”) reflects the performance of an algorithmic strategy that takes directional exposures to referenced equity index depending on current market sentiment as measured by the UBS Dynamic Equity Risk Indicator (“**DERI**”). DERI is an indicator which has been developed by UBS Equity Research aiming to measure the market sentiment, investor risk appetite and equity positioning. The DERI indicator is calculated and published on a daily basis.

The directional exposure of RADA means that the RADA can be long or flat the referenced equity index.

UBS RADA Europe Long Index references the Euro Stoxx 50[®] Index.

The Euro Stoxx 50[®] Index is a free-float market capitalization-weighted index of fifty European blue-chip stocks from those countries participating in the European Monetary Union. Each component’s weight is capped at 10 per cent. of the index’s total free float market capitalization.

UBS RADA US Long Index references the S&P 500[®] Index.

The S&P 500[®] Index is a free-float market capitalization-weighted index of 500 blue-chip stocks listed in the United States of America.

Momentum Rotator Strategy on the UBS Bloomberg CMCI Composite Index - The Momentum Rotator Strategy (as calculated according to Section 8.3) reflects the performance of an algorithmic strategy that takes directional exposures to the UBS Bloomberg CMCI Composite Total Return Index depending on the current market momentum of the index and current market sentiment as measured by the UBS Dynamic Equity Risk Indicator (“**DERI**”).

The current market momentum will be determined by observing the slow and fast moving average of the UBS Bloomberg CMCI Composite Total Return Index.

The directional exposure of the Momentum Rotator means that the strategy can be long or flat the UBS Bloomberg CMCI Composite Index depending of the signal determined by the current market momentum and sentiment.

The UBS Bloomberg CMCI Composite Index reflects the performance of the Constant Maturity Commodity Index methodology which aims to track commodity market performance by taking positions across various tenors in commodity futures and trying to minimize the commodity future roll cost.

Section 11. Calculation of Index Constituents

1. UBS 10Y US Treasuries Total Return Strategy

The UBS 10Y US Treasuries Total Return Strategy was developed by UBS to reflect the performance of a rolling investment into 10 year US Treasury Notes futures.

Calculation

On any *US Treasury Strategy Business Day* t' ,

$$Strategy(t') = Strategy(r) \times \left(\frac{Futures(t')}{Futures(r)} + \frac{Cash(t')}{Cash(r)} - 1 \right)$$

Base Value = 100 USD on 19th November 1999.

Where:

$Cash(t')$ means, in relation to US Treasury Strategy Business Day t' , the value of an exposure to a synthetic cash balance in US Dollars accruing interest on each US Treasury Strategy Business Day at a rate equal to ICE Libor USD 1 Month as at the day falling two (2) US Treasury Strategy Business Days prior to the third Friday of each month or, if such day is not a US Treasury Strategy Business Day the immediately following US Treasury Strategy Business Day.

$$Cash_{t'} = Cash_r \times \left(1 + Rate_r \times \frac{Days_{t'}}{360} \right)$$

Where,

$Cash_r$ is the level of $Cash_{t'}$ on the immediately preceding USD Cash Roll Date

$Rate_r$ refers to ICE Libor USD 1 Month as at the day falling two (2) US Treasury Strategy Business Days prior to the immediately preceding USD Cash Roll Date

$Days_{t'}$ means number of calendar from, and including, immediately preceding USD Cash Roll Date to and excluding US Treasury Strategy Business Day t'

USD Cash Roll Date refers to the third Friday of each month or, if Third Friday is not a US Treasury Strategy Business Day then immediately following US Treasury Strategy Business Day.

$Futures(t')$ means, in relation to US Treasury Strategy Business Day t' , the settlement price of the current 10Y US Treasury Note Futures Contract on the Chicago Board of Trade.

$Cash(r)$ means, in relation to any US Treasury Strategy Business Day t' , the value of an exposure on the immediately preceding Future Rolling Date to a synthetic cash balance in US Dollars accruing interest on each US Treasury Strategy Business Day at a rate equal to ICE Libor USD 1 Month as at the day falling two (2) US Treasury Strategy Business Days prior to the third

Friday of each month or, if such day is not a US Treasury Strategy Business Day the immediately following US Treasury Strategy Business Day.

Futures(r) means, in relation to any US Treasury Strategy Business Day t' , the settlement price of the current 10Y US Treasury Note Futures Contract on the Chicago Board of Trade on the immediately preceding Future Rolling Date.

Strategy(r) means in relation to any US Treasury Strategy Business Day t' , the level of the UBS 10Y US Treasuries Total Return Strategy on the immediately preceding Future Rolling Date.

US Treasury Strategy Business Day t' means any London Business Day on which the relevant Exchange on which underlying future contracts are traded is open for trading. The UBS 10Y US Treasuries Total Return Strategy is calculated by UBS.

2. Futures Rolling Dates

Futures Rolling Dates are the third Friday of February, May, August and November provided that if any such day is not a US Treasury Strategy Business Day the relevant Future Rolling Date shall be the immediately following US Treasury Strategy Business Day.

On each Futures Rolling Date the current 10Y US Treasury Note Futures Contract shall roll from the front month contract to the next.

3. Rounding of Calculated Strategy Values

The UBS 10Y US Treasuries Total Return Strategy value shall be rounded to two decimal places. All other determinations shall not be rounded.

4. UBS 10Y Euro Bond Total Return Strategy

The UBS 10Y Euro Bond Total Return Strategy was developed by UBS to reflect the performance of a rolling investment into 10 year Euro Bund futures.

Calculation

On any *Euro Bond Strategy Business Day t'* ,

$$Strategy(t') = Strategy(r) \times \left(\frac{Futures(t')}{Futures(r)} + \frac{Cash(t')}{Cash(r)} - 1 \right)$$

Base Value = 100 EUR on 3rd December 1999.

Where:

Cash(t') means, in relation to Euro Bond Strategy Business Day t' , the value of an exposure to a synthetic cash balance in Euros accruing interest on each Euro Bond Strategy Business Day at a rate equal to Euribor 1 Month on the first Euro Bond Strategy Business Day of each month.

$$Cash_{t'} = Cash_t \times \left(1 + Rate_t \times \frac{Days_{t'}}{360} \right)$$

Where,

$Cash_t$ is the level of $Cash_{t'}$ on the immediately preceding Euro Cash Roll Date

$Rate_t$ refers to Euribor 1 Month as at the day falling two (2) Euro Bond Strategy Business Days prior to the immediately preceding Euro Cash Roll Date

$Days_{t'}$ means number of calendar from, and including, immediately preceding Euro Cash Roll Date to and excluding Euro Bond Strategy Business Day t'

Euro Cash Roll Date refers to the third Euro Bond Strategy Business Day of each month.

$Futures(t')$ means, in relation to Euro Bond Strategy Business Day t' , the settlement price of the current 10Y Euro Bund Futures Contract on the Eurex.

$Cash(r)$ means, in relation to any Euro Bond Strategy Business Day t' , the value of an exposure on the immediately preceding Future Rolling Date to a synthetic cash balance in Euros accruing interest on each Euro Bond Strategy Business Day at a rate equal to Euribor 1 Month on the first Euro Bond Strategy Business Day of each month.

$Futures(r)$ means, in relation to any Euro Bond Strategy Business Day t' , the settlement price of the current 10Y Euro Bund Futures Contract on the Eurex on the immediately preceding Future Rolling Date.

$Strategy(r)$ means in relation to any Euro Bond Strategy Business Day t' , the level of the UBS 10Y Euro Bond Total Return Strategy on the immediately preceding Future Rolling Date.

Euro Bond Strategy Business Day t' means any London Business Day on which the relevant Exchange on which underlying future contracts are traded is open for trading. The UBS 10Y Euro Bond Total Return Strategy is calculated by UBS.

5. **Futures Rolling Dates**

Futures Rolling Dates are the third Euro Bond Strategy Business Day of March, June, September and December.

On each Futures Rolling Date the current 10Y Euro Bund Futures Contract shall be rolled from the front month contract to the next.

6. **Rounding of Calculated Strategy Values**

The UBS 10Y Euro Bond Total Return Strategy value shall be rounded to two decimal places. All other determinations shall not be rounded.

7. **Momentum Rotator Strategy on UBS Bloomberg CMCI Composite USD Total Return**

The Momentum Rotator Strategy on the UBS Bloomberg CMCI Composite USD Total Return Index was developed by UBS to reflect the performance of a strategy rotating between an

exposure to the UBS Bloomberg CMCI Composite USD Total Return Index and a synthetic cash balance depending on a transparent momentum indicator as described in the section below.

8. Calculation

On any CMCI Momentum Rotator Strategy Business Day t' :

A) If the value of the Fast Moving Average (FMA) on the preceding CMCI Momentum Rotator Strategy Business Day is higher than, or equal to, the Slow Moving Average (SMA) or the value of the UBS Dynamic Equity Risk Indicator is greater than or equal to -0.75, then the CMCI Momentum Rotator Strategy shall track the UBS Bloomberg CMCI Composite USD Total Return Index on close of CMCI Momentum Rotator Strategy Business Day t and the strategy level will be calculated as follows:

$$Strategy_{t'+1} = Strategy_{t'} \times \left[1 + \left(\frac{UI_{t'+1}}{UI_{t'}} - 1 \right) \right]$$

B) Otherwise the CMCI Momentum Rotator Strategy shall track a synthetic cash balance on close of CMCI Momentum Rotator Strategy Business Day t and the strategy level will be calculated as follows:

$$Strategy_{t'+1} = Strategy_{t'} \times [1 + Libor_{t'} \times Day(t') / 360]$$

Where:

$Libor_t$ means the overnight LIBOR fixing for US Dollars on the CMCI Momentum Rotator Strategy Business Day t' ;

$Day(t')$ means the number of calendar days between the CMCI Momentum Rotator Strategy Business Day t' and the CMCI Momentum Rotator Strategy Business Day $t'+1$;

UI_t : means the official closing level of the UBS Bloomberg CMCI Composite USD Total Return Index on CMCI Momentum Rotator Strategy Business Day t' ;

$UI_{t'+1}$: means the official closing level of UBS Bloomberg CMCI Composite USD Total Return Index on CMCI Momentum Rotator Strategy Business Day $t'+1$.

Fast Simple Moving Average (FMA) and Slow Simple Moving Average (SMA) on any CMCI Momentum Rotator Strategy Business Day t' are calculated as follows:

$$FMA_{t'} = \frac{1}{15} \sum_{k=t'-14}^{t'} UI_k$$

$$SMA_{t'} = \frac{1}{60} \sum_{k=t'-59}^{t'} UI_k$$

Base Value = 100 USD on 3rd December 1999.

CMCI Momentum Rotator Strategy Business Day t' means any day on which the UBS Bloomberg CMCI Composite USD Total Return Index is calculated by the sponsor of such index.

9. Rounding of Calculated Strategy Values

The Momentum Rotator Strategy value on the UBS Bloomberg CMCI Composite USD Total Return Index shall be rounded to two decimal places. All other determinations shall not be rounded.