UBS

Calculation & Benchmark Administration by
S&P Dow Jones Indices

DFL UBS Index Series

Methodology

January 2026

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Introduction

Index Objective and Highlights

The DFL UBS Indices are a family of rules-based, algorithmic indices that dynamically allocate between different equity, commodity and bond assets. The dynamic allocation is based on UBS AG's rules-based proprietary models: the allocation is defined by the Sharpe Ratio performance of different assets, macroeconomic signals as well as by other index-specific criteria which are described under Index Construction. The Indices are constructed by adjusting a dynamic exposure to an unlevered index and cash to achieve an overall target volatility of 20%.

The Index is subject to overall costs that include 1) roll cost and borrow cost at Index Component Level (RollCost and BorrowRate), 2) transaction cost following any changes in the exposure of the Index to the Index Components (TC), and 3) fee cost at overall Index level (Fee_Rate_1 and Fee_Rate_2). A gross version of the Indices, that excludes the costs / fees (roll cost (RollCost), borrow cost (BorrowRate), fee cost (Fee_Rate_1 and Fee_Rate_2), transaction costs (TC)) is also calculated.

The DFL UBS Indices are composed of the following indices (each an "Index" and together the "Indices"):

- DFL UBS AUD17VA Index,
- DFL UBS USD18VA Index,
- DFL UBS AUD17VAJPY Index,
- DFL UBS USD18VAJPY Index,
- DFL UBS USD18VA Gross Return Index,
- DFL UBS AUD17VA Gross Return Index.

The Indices rebalance monthly on the last Unlevered Index Business Day. Leverage Rebalance Day occurs at least weekly and is subject to the conditions described in the 'Levered Index Calculation Method' section.

The Indices governed by this methodology document ("**Methodology**") are administered and calculated by S&P Dow Jones Indices LLC ("**S&P DJI**" or the "**Index Administrator**"). Any changes to or deviations from this Methodology shall be made in the sole judgment and discretion of S&P DJI.

The Indices were created and launched by Credit Suisse International on 09 March 2015 and transferred to UBS AG on 18 December 2024. S&P DJI assumed the role of benchmark administrator of the Index on behalf of UBS AG on 18 December 2024. Before the 18 December 2024, the Index was administered and governed by Credit Suisse International since its launch.

Summary Description

Index Sponsor:	UBS AG, London Branch
Index Administrator:	S&P DJI

Index Calculation and Publication:	The Index level is calculated on each Index Business Day (subject to Index Policy) and published as soon as reasonably practicable thereafter.

Supporting Documents

This Methodology is intended to be read in conjunction with supporting documentation that helps provide greater detail with respect to the policies, procedures and calculations described herein. References throughout the Methodology direct the reader to the relevant supporting document for further information on a specific topic. The list of the main supplemental documents for this Methodology and the hyperlinks to those documents are set forth below in Table1:

Table1

Supporting Document	URL
S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology	Equity Indices Policies & Practices
S&P Dow Jones Indices' Index Mathematics Methodology	Index Mathematics Methodology
S&P Dow Jones Indices' Commodities Indices Policies & Practices Methodology	Commodities Indices Policies & Practices

Index Constituents

Asset Eligibility and Weight Allocation

Each Index is constructed from the Reference Assets as detailed below in Table 2 with the Weight Allocation defined dynamically as described further in Index Construction section.

Table 2

Index Component i	Reference Asset (RA)	Bloomberg Ticker	RIC code	Index Component Exchange	Index Component FX for DFL UBS AUD index	Index Component FX for DFL UBS USD index	Reference Asset Type
1	Nikkei 225 Index Futures	NK(XY) Index	0#JNI:	Osaka Exchange (prior to 18 Dec 2024: Tokyo Stock Exchange)	FX_AUDJPY	FX_USDJPY	Risky Asset
2	Hang Seng Index Futures	HI(XY) Index	0#HSI:	Hong Kong Futures Exchange (prior to 18 Dec 2024: The Stock Exchange of Hong Kong Limited)	FX_AUDHKD	FX_USDHKD	Risky Asset
3	E-Mini S&P 500 Index Futures (prior to 6 Sep 2021: S&P 500 Index Futures)	ES(XY) Index (prior to 6 Sep 2021: SP(XY) Index)	0#ES:	Chicago Mercantile Exchange (prior to 18 Dec 2024: New York Stock Exchange)	FX_AUDUSD	FX_USD	Risky Asset
4	EURO STOXX 50 Index Futures	VG(XY) Index	0#STXE:	Eurex (STOXX contracts)	FX_AUDEUR	FX_USDEUR	Risky Asset
5	MSCI Emerging Markets Index Futures	MES(XY) Index	0#MEM:	Intercontinental Exchange (MSCI contracts) (prior to 18 Dec 2024: New York Stock Exchange)	FX_AUDUSD	FX_USD	Risky Asset
6	S&P GSCI Light Energy Index ER	SPGCLEP Index	.SPGSLEP	New York Stock Exchange	FX_AUDUSD	FX_USD	Risky Asset
7	10-year JGB Futures	JB(XY) Comdty	0#JGB:	Osaka Exchange (prior to 18 Dec 2024: Tokyo Stock Exchange)	FX_AUDJPY	FX_USDJPY	Bond Asset
8	10-year US Treasury Note Futures	TY(XY) Comdty	0#TY:	Chicago Mercantile Exchange (prior to 18 Dec 2024: New York Stock Exchange)	FX_AUDUSD	FX_USD	Bond Asset
9	Euro-Bund Futures	RX(XY) Comdty	0#FGBL:	Eurex (German fixed income contracts)	FX_AUDEUR	FX_USDEUR	Bond Asset
10	2-year US Treasury Note Futures	TU(XY) Comdty	0#TU:	Chicago Mercantile Exchange (prior to 18 Dec 2024: New York Stock Exchange)	FX_AUDUSD	FX_USD	Risk-free Asset

Where (XY) stands for the relevant month and year of the Reference Assets, as published by the relevant exchange, by considering the month and year of the contract expiry date of the relevant futures contract.

Index Construction

This section describes the Index Construction steps, which are summarized below:

(i) First, the Index Components Levels are calculated based on the Synthetic Index Future Levels for each Reference Asset.
(ii) Second, a Sharpe Ratio is calculated for each Risky Asset and each Bond Asset.
(iii) Third, several signals are calculated: Equity Signal, MXEF Moving Average Signal, and Monthly Indicators.
(iv) Next, Target Allocation is defined based on the Sharpe Ratio levels, Signals and Monthly Indicators levels.
(v) Unlevered Index Levels are calculated based on the monthly Target Allocation and Daily Notional Allocation, incorporating Unlevered Cash Account.
(vi) Levered index level is defined by Target Leverage and Volatility Target.
(vii) Finally, Transaction Costs are applied.

For a list of defined terms used in this Methodology, please refer to Appendix I.

Index Component Calculation Method

a. Determination of the Synthetic Index Futures Levels

The i^{th} Synthetic Index Future Level is given by the following formula:

$$IFL_{i,t} = nShares_{i,t} \times RA_{i,t}$$

Where:

t	The Index Component Exchange Business Day for the i^{th} Reference Asset (i=1 to 10).
$nShares_{i,t}$	The notional exposure to the i^{th} Synthetic Index Future as of relevant day t
$RA_{i,t}$	In respect to Index Component 1 (Nikkei 225 Index Futures): - Prior to 30 Sep 2021: the official closing price of the 1st Reference Asset as of relevant day t - On or after 30 Sep 2021: the last traded price during the day session as of relevant day t In respect to other Index Components, the official closing price of the i^{th} Reference Asset as of relevant day t

For each Reference Asset except RA_6, on its Roll Day, the relevant futures contract will be rolled into the relevant next active futures contract. The Roll Day for each RA is defined in the table below. The $IFL_{6,t}$ is defined separately in **Determination of the Synthetic Index Future Level for RA_6 (SPGCLEP Index).**

Table 3

Index Component i	Reference Asset (RA)	Roll Cost	Borrow Rate	Roll Day
1	Nikkei 225 Index Futures	0.01%	N/A	2 Index Component Exchange Business Days prior to its relevant Last Trading Date[1]
2	Hang Seng Index Futures	0.01%	N/A	2 Index Component Exchange Business Days prior to its relevant Last Trading Date[2]
3	S&P 500 Index Futures	0.01%	N/A	3 Index Component Exchange Business Days prior to its relevant Last Trade date.[3]
4	EURO STOXX 50 Index Futures	0.01%	N/A	3 Index Component Exchange Business Days prior to its relevant .Last Trading Day[4]
5	MSCI Emerging Markets Index Futures	0.01%	N/A	3 Index Component Exchange Business Days prior to its relevant Last Trading Day[5]
6	SPGCLEP Index	N/A	0.50%	Is further defined in 'Determination of the Synthetic Index Future Level for RA6 (SPGCLEP Index)'.
7	10-year JGB Futures	0.01%	N/A	2 Index Component Exchange Business Days prior to its relevant Last Trading Date[6]
8	10-year US Treasury Note Futures	0.01%	N/A	Prior to the Roll Day on 29 May 2020, 2 Index Component Exchange Business Days prior to its Last Trade Date Since the Roll Day on 29 May 2020: 2 Index Component Exchange Business Days prior to its relevant First Notice Date[7]
9	Euro-Bund Futures	0.01%	N/A	2 Index Component Exchange Business Days prior to its relevant Last Trading Day[8]
10	2-year US Treasury Note Futures	0.01%	N/A	Prior to the Roll Day on 29 May 2020, 2 Index Component Exchange Business Days prior to its Last Trade Date Since the Roll Day on 29 May 2020: 2 Index Component Exchange Business Days prior to its relevant First Notice Date[9]

On a Roll Day t the notional exposure to the i^{th} Synthetic Index Future will be adjusted as per below:

$$nShares_{i,t} = nShares_{i,t_{PreviousRoll}} \times \left(\frac{Index\_Future\_Component_{i,t} - Roll_{i,t}}{Index\_Future\_Component_{i,t}} - RollCost_i \right)$$

where:

$nShares_{i,t}$	the notional exposure to the i^{th} Reference Asset as of Roll Day t
$nShares_{i,t_{PreviousRoll}}$	the notional exposure to the i^{th} Reference Asset as of the Roll Day immediately preceding Roll Day t
$Index\_Future\_Component_{i,t}$	the official closing level of the next active futures contract of the i^{th} Reference Asset as of Roll Day t
$Roll_{i,t}$	the official close roll spread to sell the near futures contract and buy the next futures contract (provided that if the Roll Direction is -1, the spread is quoted in the opposite direction and the quoted spread will be multiplied by -1) of the i^{th} Reference Asset at the same time. For the avoidance of doubt, if the Roll Direction is 1, the spread is quoted as the price to sell the near contract and buy the next futures contract. In such case, if the price of the next futures contract is higher than the price of the near futures contract, the buyer of the roll will need to pay for entering

[1] As defined by Japan Exchange Group (JPX) in Last Trading Day Tables for Index Futures and Options for Nikkei 225 Futures.
[2] As defined by the Hong Kong Exchanges and Clearing Limited (HKEX) in Contract Terms for Hang Seng Index Futures.
[3] As defined by CME Group Inc in E-mini S&P 500 Futures – Calendar.
[4] As defined by Eurex Exchange in Euro Stoxx 50 Futures Specifications.
[5] As defined by Intercontinental Exchange, Inc. (ICE) in Market Specifications for MSCI Emerging Markets Index Futures.
[6] As defined by Japan Exchange Group (JPX) in Last Trading Day Tables for JGB Futures and Options for 10-year JGB Futures.
[7] As defined by CME Group Inc in 10-Year T-Note Futures – Calendar.
[8] As defined by Eurex Exchange in Euro-Bund Futures Specifications.
[9] As defined by CME Group Inc in 2-Year T-Note Futures – Calendar.

	into such position, thus the quoted spread is expected to be positive. On the other hand, if the price of the next futures contracts is lower than the near futures contract, the buyer will be worse off after entering into the roll, thus needs to be compensated and the quoted spread is expected to be negative. If the roll spread is not available on a Roll Day, the price difference calculated as the official closing level of the next active futures minus the official closing level of the near futures contract will be used. For the avoidance of doubt, in such case the price difference will not be multiplied by -1 regardless of the Roll Direction.
$RollCost_i$	The Roll Cost as defined in Table 3.

Table 4

i	RIC code	Roll Direction
1	JNI<M1Y1>-<M2Y2>	1
2	HSI<M1Y1>-<M2Y2>	1
3	ES<M1Y1>-<M2Y2>	1
4	STXE<M1Y1>-<M2Y2>	-1
5	MEM<M2Y2>-<M1Y1>	1
7	JGB<M1Y1>-<M2Y2>	-1
8	1TYRT<M1Y1>-<M2Y2>	-1
9	FGBL<M1Y1>-<M2Y2>	-1
10	1TU<M1Y1>-<M2Y2>	-1

b. Determination of the Synthetic Index Future Level for RA6 (SPGCLEP Index)

The Synthetic Index Future Level for RA_6 (SPGCLEP Index) is given by the following formula:

$$IFL_{6,t} = SPGCLEP\_Notional_{t-1} \times \frac{SPGCLEP_t}{SPGCLEP\_Strike_{t-1}} - BorrowCost_t$$

Where:

t	the Index Component Exchange Business Day for Reference Asset 6 (SPGCLEP Index)
$SPGCLEP_t$	the official closing price of the SPGCLEP Index as of relevant day t
$SPGCLEP\_Notional_t$	the parameter is reset on the last Index Component Exchange Business Day of each month as below: $\begin{cases} IFL_{6,t}, & if\ Month_t \neq Month_{t+1} \\ SPGCLEP\_Notional_{t-1}, & if\ Month_t = Month_{t+1} \end{cases}$, Where $Month_t$ = the calendar month of day t.
$SPGCLEP\_Strike_t$	the parameter is reset on the last Index Component Exchange Business Day of each month as below: $\begin{cases} SPGCLEP_t, & if\ Month_t \neq Month_{t+1} \\ SPGCLEP\_Strike_{t-1}, & if\ Month_t = Month_{t+1} \end{cases}$, Where $Month_t$ = the calendar month of day t.
$BorrowCost_t$	the parameter is reset on the first Index Component Exchange Business Day in the next calendar month as below: $\begin{cases} SPGCLEP\_Notional_{t-1} \times BorrowRate \times \frac{ACT_{(t-1,t)}}{365}, & if\ Month_{t-1} \neq Month_t \\ BorrowCost_{t-1} + SPGCLEP\_Notional_{t-1} \times BorrowRate \times \frac{ACT_{(t-1,t)}}{365}, & if\ Month_{t-1} = Month_t \end{cases}$, Where: $Month_t$ means the calendar month of day t; $ACT_{(t-1,t)}$ means the number of calendar days between day $t-1$ (included) and day t (excluded); $BorrowRate$ is defined in Table 3.

c. Determination of the Index Component Levels

The Index Component Level for each i^{th} Reference Asset is calculated on each Unlevered Index Business Day t, if the Unlevered Index Business Day is an Index Component Exchange Business Day, then the IFL formula is used, otherwise the previous Unlevered Index Business Day value is used:

$$\begin{cases} ICL_{i,t} = IFL_{i,t}, & on\ Index\ Component\ Exchange\ Business\ Day\ for\ i^{th} Reference\ Asset; \\ ICL_{i,t} = ICL_{i,t-1}, & not\ on\ Index\ Component\ Exchange\ Business\ Day\ for\ i^{th} Reference\ Asset. \end{cases}$$

t is any Unlevered Index Business Day.

Sharpe Ratio Calculation Method

For Reference Assets 1 to 9 a Sharpe Ratio is calculated using the formula below:

$$Sharpe\_Ratio_{i,t} = \frac{Return_{i,t}}{Volatility_{i,t}} \times \frac{252}{n\_days\_return_i},$$

Where:

$$Return_{i,t} = \frac{ICL_{i,t}}{ICL_{i,t-n\_days\_return_i}} - 1$$

$$Volatility_{i,t} = \sqrt{\left(\frac{1}{n\_days\_vol(i) - 1} \times \sum_{n=1}^{n\_days\_vol(i)} \left[r_{i,n} - r_i(n\_days\_vol(i)) \right]^2 \times 252 \right)}$$

$$r_{i,n} = ln\left(\frac{ICL_{i,t+1-n}}{ICL_{i,t+1-n-1}} \right)$$

$$r_i(n\_days\_vol(i)) = \frac{1}{n\_days\_vol(i)} \times \sum_{n=1}^{n\_days\_vol(i)} r_{i,n}$$

t	any Unlevered Index Business Day
$ICL_{i,t}$	as defined in section 'Index Component Calculation Method'
$n\_days\_return_i$	Sharpe Ratio Return Number of Days for the i^{th} Index Component, as defined in Table 5 below.
$n\_days\_vol(i)$	Sharpe Ratio Volatility Number of Days for the i^{th} Index Component, as defined in Table 5 below.

Table 5

Index Component i	Reference Asset (RA)	Sharpe Ratio Return Number of Days ($n\_days\_return_i$)	Sharpe Ratio Volatility Number of Days ($n\_days\_vol(i)$)
1	Nikkei 225 Index Futures	200	200
2	Hang Seng Index Futures	30	30
3	S&P 500 Index Futures	60	60
4	EURO STOXX 50 Index Futures	90	90
5	MSCI Emerging Markets Index Futures	50	50
6	SPGCLEP Index	150	150
7	10-year JGB Futures	250	200
8	10-year US Treasury Note Futures	250	200
9	Euro-Bund Futures	250	200

Equity Signal Calculation Method

On Equity Signal Calculation Day t, the 40-day Average SPX_Vol and 40-day Standard Deviation SPX_Vol are calculated according to the following formulas:

$$Average\ SPX\_Vol_t = \frac{\sum_{i=0}^{39} SPX\_Vol_{t-i}}{40}$$

$$Standard\ Deviation\ SPX\_Vol_t = \sqrt{\frac{\sum_{i=0}^{39}(SPX\_Vol_{t-i} - Average\ SPX\_Vol_t)^2}{39}}$$

Where:

Equity Signal Calculation Day	any day on which the New York Stock Exchange is scheduled to be open for trading
SPX_Vol_t	Prior to 18 December 2024 the official level of 3MO_CALL_IMP_VOL (3 month Call Implied Volatility) of SPX Index published by Bloomberg on Equity Signal Calculation Day t, Since 18 December 2024 ("Equity Vol Switch Date") the official level of [CBOE S&P 500 3-Month Volatility Index (RIC: .VIX3M)] ("New Equity Vol Data") published by Reuters on Equity Signal Calculation Day t For the avoidance of doubt, since the Equity Vol Switch Date, the $Average\ SPX\_Vol_t$ and $Standard\ Deviation\ SPX\_Vol_t$ will be calculated solely based on the New Equity Vol Data.

On Equity Signal Calculation Day t, $Equity\ Signal_t$ is set to 1 or 0 according to the below rules:

1. The $Equity\ Signal_t$ is set to 1, if:
$$SPX\_Vol_t > Average\ SPX\_Vol_t + 150\% \times Standard\ Deviation\ SPX\_Vol_t$$
and $SPX\_Vol_t > VolThreshold.$

   $VolThreshold$ means
   - Prior the Equity Vol Switch Date, 20
   - Since the Equity Vol Switch Date, 25.

2. The $Equity\ Signal_t$ is set to 0, if:
$$SPX\_Vol_t < Average\ SPX\_Vol_t + 50\% \times Standard\ Deviation\ SPX\_Vol_t.$$
3. Else, the $Equity\ Signal_t$ is set to be equal to the previous day value:
$$Equity\ Signal_t = Equity\ Signal_{t-1}$$

MXEF Moving Average Signal Calculation Method

On MXEF Moving Average Signal Calculation Day t, the 100 days Average $ICL_{5,t}$ and the 100 days Standard Deviation $ICL_{5,t}$ are calculated according to the following formulas:

$$Average\ ICL_{5,t} = \frac{\sum_{i=0}^{99} ICL_{5,t-i}}{100}$$

$$\text{Standard Deviation } ICL_{5,t} = \sqrt{\frac{\sum_{i=0}^{99}\left(ICL_{5,t-i} - Average\ ICL_{5,t}\right)^2}{99}}$$

Where:

MXEF Moving Average Signal Calculation Day	any day on which the New York Stock Exchange is scheduled to be open for trading
$ICL_{5,t}$	As defined in section 'Index Component Calculation Method'

On MXEF Moving Average Signal Calculation Day t, $MXEF\ Moving\ Average\ Signal_t$ is set to 1 or 0 according to the below rules:

1. $MXEF\ Moving\ Average\ Signal_t$ is set to 0, if:
$$ICL_{5,t} > Average\ ICL_{5,t}$$
2. $MXEF\ Moving\ Average\ Signal_t$ is set to 1, if:
$$ICL_{5,t} < Average\ ICL_{5,t} - 40\% \times Standard\ Deviation\ ICL_{5,t}$$
3. Else, $MXEF\ Moving\ Average\ Signal_t$ is set to be equal to the previous day value:
$$MXEF\ Moving\ Average\ Signal_t = MXEF\ Moving\ Average\ Signal_{t-1}$$

Monthly Indicators Calculation Method

Monthly Indicators are required for the calculation of Max Allocation and are defined as follows:

Table 6

Monthly Indicator (k)	Indicator symbol	Indicator ticker	RIC code	Indicator name	Source
1	$ECI_{1,t}$	LEI TOTL Index	aUSCLEAD/A	the Conference Board US Leading Index Ten Economic Indicators	Conference Board, Inc.
2	$ECI_{2,t}$	JNTSMFG Index	JPBCLG=ECI	Japan Tankan Business Conditions Large Enterprises Manufacturing	Bank of Japan
3	$ECI_{3,t}$	NAPMPMI Index	USPMI=ECI	the ISM Manufacturing PMI SA	Institute of Supply Management
4	$ECI_{4,t}$	EUICEMU Index	EUBUSS=ECI	European Commission Manufacturing Confidence Eurozone Industrial Confidence	Directorate-General for Economic and Financial Affairs (DG ECFIN)

Prior to 18 December 2024 ("Indicator Switch Date"), Monthly Indicator 2 and Monthly Indicator 4 refers to JPPMIF=ECI and EUPMMF=ECI respectively. Since the Indicator Switch Date, Monthly Indicator 2 and Monthly Indicator 4 are as defined in the above table ("New Indicator"). For the avoidance of doubt, since the Indicator Switch Date, the arithmetic average and absolute change described below will be calculated solely based on the New Indicators.

The Monthly Indicators are observed once a month on the Monthly Observation Day. On such day, the latest value of the Monthly Indicators (denoted by k, which is the index of the relevant indicator as defined in Table 6) as of the previous month (denoted by m) is observed. Together the level of indicator k as of a month m (and observed on the Monthly Observation Day following month m) is denoted by $ECI_{k,m}$. When referring to the indicator observed as of a specific date t, it will be denoted by $ECI_{k,m,t}$.

For the avoidance of doubt, if the level published by Reuters of any of the above indicators is revised after the relevant Monthly Observation Day, the Monthly Indicator level will refer to the level available as of the original Monthly Observation Day and is not revised for future calculations. If there is a base date change of Monthly Indicator 1, the following adjustments will be made such that the future observations are comparable to the historical observations:

$$ECI_{1,m} = \frac{100}{ECI_{1,Dec2015,m+1}} \times ECI_{1,m}^{Observed}$$

Where:

- $ECI_{1,Dec2015,m+1}$ means the indicator level of Monthly Indicator 1 as of December 2015 and observed on the Monthly Observation Day falling in month $m+1$.
- $ECI_{1,m}^{Observed}$ is the actual observed level of Monthly Indicator 1 for the month m, prior to any rebasing adjustments.

For each indicator, two metrics are calculated on a monthly basis on the Monthly Observation Day t:

1) An **arithmetic average** is calculated as:

   For Monthly Indicator 2 which is released on quarterly basis:

$$Average\ ECI_{2,m} = \frac{\sum_{i=0}^{3} ECI_{2,m-i\times 3}}{4}$$

   For other Monthly Indicators k (where k equals to 1, 3 or 4 (or 2 prior to the Indicator Switch Date)) which are released on a monthly basis:

$$Average\ ECI_{k,m} = \frac{\sum_{i=0}^{11} ECI_{k,m-i}}{12}$$

2) An **absolute change** is for each Monthly Indicators k (where k is between 1 to 4) is calculated as:

$$Change\ ECI_{k,m} = ECI_{k,m} - ECI_{k,m-2}$$

For the avoidance of doubt:

- For the purpose of calculating the arithmetic average and absolute change, m refers to the month immediately preceding the Monthly Observation Day t
- For the purpose of calculating the metrics for Monthly Indicator 2, if the level is not available for a given month (due to the indicator being released on a quarterly basis only), the observed indicator level from the previous month will be used.

Based on the above metrics, an Effective Indicator $EI_{k,t}$ is set to 1 or 0 according to below:

For Monthly Indicator 2 since the Indicator Switch Date:

1) If the previous month m is not a quarterly release month (i.e. March, June, September, December), the Effective Indicator is calculated as:

$$EI_{2,t} = \begin{cases} 1, & ECI_{2,m} < Average\ ECI_{2,m} \\ 0, & Otherwise \end{cases}$$

2) Otherwise, the Effective Indicator is calculated in the same way as other Monthly Indicators as defined below.

For Monthly Indicator 1, 3, 4 and for each month, and for Monthly Indicator 2 only if m is a quarterly release month, the Effective Indicator is calculated as:

$$EI_{k,t} = \begin{cases} 1, & ECI_{k,m} < Average\ ECI_{k,m}\ and\ Change\ ECI_{k,m} < 0 \\ 0, & Otherwise \end{cases}$$

Finally, 2 different Effective Indicators $EI_{k,t}$ and / or $MXEF\ Moving\ Average\ Signal_t$ calculated for the same Monthly Observation Day t are summed up to define the Max Allocation as per below:

Table 7

Effective Indicators sum	$Max\ Allocation\_Country_t$
$EI_{1,t} + EI_{2,t}$	$Max\ Allocation\ Japan_t$
$EI_{1,t} + EI_{3,t}$	$Max\ Allocation\ US_t$
$EI_{1,t} + EI_{4,t}$	$Max\ Allocation\ Europe_t$
$EI_{1,t} + MXEF\ Moving\ Average\ Signal_t$	$Max\ Allocation\ EM_t$

Depending on the summation result, the Max Allocation for relevant country/region is set as follows:

Table 8

If sum is equal to:	$Max\ Allocation\_Country_t$ for relevant country
2	0%
1	50%
0	100%

The $Max\ Allocation_{i,t}$ in respect of each Index Component 1 to 6 is determined as set out below:

Table 9

i	Reference Asset (RA)	$Max\ Allocation\_Country_t$
1	Nikkei 225 Index Futures	$Max\ Allocation\ Japan_t$
2	Hang Seng Index Futures	$Max\ Allocation\ EM_t$
3	S&P 500 Index Futures	$Max\ Allocation\ US_t$
4	EURO STOXX 50 Index Futures	$Max\ Allocation\ Europe_t$
5	MSCI Emerging Markets Index Futures	$Max\ Allocation\ EM_t$
6	SPGCLEP Index	$Max\ Allocation\ EM_t$

Monthly Asset Selection Method

For monthly asset selection calculation purposes, t is the Monthly Observation Day. For the avoidance of doubt, the data required for asset selection are known after the close of the Monthly Observation Day t.

Monthly Asset Selection Method is as follows:

1. Select 3 Index Components from Index Components 1 to 9 (denoted by i) with the highest $Sharpe\ Ratio_{i,t}$. In the event of a tie, the Index Component will be selected in ascending order of i.

2. Out of those 3 Index Components, select the Index Components with $Sharpe\ Ratio_{i,t}$ > 0.3. If are less than 3 Index Components with $Sharpe\ Ratio_{i,t}$ > 0.3, then only those assets are selected.

The resulting Index Components are considered as "**Selected Assets**". If the Index Component 1 to 9 is a Selected Asset, then:

$Base\ Allocation_{i,t} = 100\%$, otherwise $Base\ Allocation_{i,t} = 0\%$.

Monthly Notional Allocation Method

On a Monthly Observation Day, Risky Asset Allocation and Target Allocation for Risky Assets (Reference Assets 1 to 6) are defined as below:

$$RiskyAssetAllocation_t = \sum_{i=1}^{6} \frac{1}{3} MaxAllocation_{i,t} \times BaseAllocation_{i,t}$$

Where:

t	Monthly Observation Day
$MaxAllocation_{i,t}$	as described in 'Monthly Indicators Calculation Method'
$BaseAllocation_{i,t}$	as described in 'Monthly Asset Selection Method'

If $RiskyAssetAllocation_t$ = 0, then:

1. $TotalRiskyAssetAllocation_t$ is set equal to Minimum Allocation as described below;

2. For each Risky Asset,
   $TargetAllocation_{i,t} = Minimum\_Allocation$ if Index Component i is the Top_Risky_Asset$_t$, otherwise $TargetAllocation_{i,t} = 0\%$, where:

$MinAllocation_t$	is equal to 5%
$Risky\ Asset$	as defined in Table 2
$Top\_Risky\_Asset_t$	is the Index Component with the highest Sharpe Ratio$_{i,t}$ out of Index Components 1 to 6 (denoted by i). In the event of a tie, the Index Component will be selected in ascending order of i.

If $RiskyAssetAllocation_t \neq 0$, then:

1. $TotalRiskyAssetAllocation_t$ is set equal to $RiskyAssetAllocation_t$;
2. For each Risky Asset,

$$TargetAllocation_{i,t} = \frac{1}{3} \times MaxAllocation_{i,t} \times BaseAllocation_{i,t}$$

After $RiskyAssetAllocation_t$ is defined, the next step is to calculate the $Total\ Bond\ Asset\ Allocation_t$ as follows:

$$Total\ Bond\ Asset\ Allocation_t = 100\% - Total\ Risky\ Asset\ Allocation_t$$

If the number of Index Components selected from Index Components 7 to 9 in the Selected Assets ($Number\_Bond\_Asset_t$) is equal to 3 then
For each Index Component 7 to 9,

$$TargetAllocation_{i,t} = \frac{1}{3} \times TotalBondAssetAllocation_t \times BaseAllocation_{i,t}$$

If $Number\_Bond\_Asset_t$= 2 then for each Index Component 7 to 9,

$$TargetAllocation_{i,t} = \frac{1}{2} \times TotalBondAssetAllocation_t \times BaseAllocation_{i,t}$$

If $Number\_Bond\_Asset_t$= 1 then for each Index Component 7 to 9,

$$TargetAllocation_{i,t} = TotalBondAssetAllocation_t \times BaseAllocation_{i,t}$$

If $Number\_Bond\_Asset_t$= 0 then for each Index Component 7 to 9,

$TargetAllocation_{i,t} = Total\ Bond\ Asset\ Allocation_t$, if Index Component i is the Index Component with the highest $Sharpe\ Ratio_{i,t}$ out of Index Components 7 to 9 (denoted by i) ($Top\_Bond\_Asset_t$) (where in the event of a tie, the Index Component is selected in ascending order of i),

otherwise $TargetAllocation_{i,t} = 0\%$.

For Index Component 10,

$$TargetAllocation_{i,t} = Total\ Risky\ Asset\ Allocation_t.$$

If day t is not a Monthly Observation Day, then $TargetAllocation_{i,t}$ of each Index Component is set to the previous day value.

Unlevered Index Allocation Method

Monthly Notional Allocation ($MNA_{i,t}$) is updated only on Monthly Unlevered Index Rebalance Day t. On each Monthly Unlevered Index Rebalance Day t, the Monthly Notional Allocation in respect of each Index Component 1 to 10 is:

$$MNA_{i,t} = UIL_t\ x\ Target\ Allocation_{i,t}\ x\ FX_{i,t}\ ,$$

Where:

UIL_t	Unlevered Index Level as defined in the following section 'Unlevered Index Calculation Method'
$FX_{i,t}$	FX rate adjustment is the ith Index Component FX on day t (where t is any Unlevered Index Business Day). The applicable FX rate for each Index Component is listed in Table 2, and are defined further in the table 10 below.

Table 10

For UBS DFL USD18VA index:	
FX_USD_t	1
FX_USDEUR_t	the spot fixings (mid) rate for conversion from EUR to USD (expressed as number of EUR per 1 USD)
FX_USDHKD_t	the spot fixings (mid) rate for conversion from HKD to USD (expressed as number of HKD per 1 USD)
FX_USDJPY_t	the spot fixings (mid) rate for conversion from JPY to USD (expressed as number of JPY per 1 USD)
For UBS DFL AUD17VA index:	
FX_AUDUSD_t	the spot fixings (mid) rate for conversion from USD to AUD (expressed as number of USD per 1 AUD)
FX_AUDEUR_t	the spot fixings (mid) rate for conversion from EUR to AUD (expressed as number of EUR per 1 AUD)
FX_USDHKD_t	the spot fixings (mid) rate for conversion from HKD to USD (expressed as number of HKD per 1 USD)
FX_USDJPY_t	the spot fixings (mid) rate for conversion from JPY to USD (expressed as number of JPY per 1 USD)
FX_AUDJPY_t	$FX\_AUDUSD_t \times FX\_USDJPY_t$
FX_AUDHKD_t	$FX\_AUDUSD_t \times FX\_USDHKD_t$

On each Unlevered Index Business Day t that is not a Monthly Unlevered Index Rebalance Day,

$$MNA_{i,t} = MNA_{i,t-1}\ .$$

The $Daily\_Adjust\_Ratio_t$ is also updated only on $Rebalance\ Day_t$ and only for Risky Assets:

$$Daily\_Adjust\_Ratio_t = \frac{Minimum\_Allocation}{\sum_{i=1}^{6} T\ arg\ e\ tAllocation_{i,t}}$$

On each Unlevered Index Business Day t that is not a Monthly Unlevered Index Rebalance Day,

$$Daily\_Adjust\_Ratio_t = Daily\_Adjust\_Ratio_{t-1}.$$

On each Unlevered Index Business Day t, the Daily Notional Allocation in respect of each Index Component 1 to 10 is given by the below process:

1. if day t is not an Index Component Exchange Business Day for the i^{th} Index Component, then:
$$DN_{i,t} = DN_{i,t-1}$$
2. if day t is an Index Component Exchange Business Day for the i^{th} Index Component, then:

2.1. For the Risky Asset (i = 1 to 6)

2.1.1. if Equity Signal$_{t-1}$ = 1 then
$$DN_{i,t} = Daily\_Adjust\_Ratio_t \times MNA_{i,t}$$

2.1.2 if Equity Signal$_{t-1}$ = 0 then
$$DN_{i,t} = MNA_{i,t}$$

2.2. For Bond Asset (i = 7 to 9)
$$DN_{i,t} = MNA_{i,t}$$

2.3. For Risk free Asset (i = 10)

2.3.1 if Equity Signal$_{t-1}$ = 1 then

$$DN_{i,t} = (1 - Daily\_Adjust\_Ratio_t) \times MNA_{i,t}$$

2.3.2 if Equity Signal$_{t-1}$ = 0 then

$$DN_{i,t} = 0$$

Unlevered Index Calculation Method

On each Unlevered Index Business Day t, the Strike of each Index Component 1 to 10 is given by the below process:

1. if day t is not an Index Component Exchange Business Day for the i^{th} Index Component, then the previous day value is used:
$$Strike_{i,t} = Strike_{i,t-1}$$
2. if day t is an Index Component Exchange Business Day for the i^{th} Index Component, then:

2.1. if day t is a Monthly Unlevered Index Rebalance Day or if $DN_{i,t} \neq DN_{i,t-1}$, then Strike of Index Component is set equal to current Index Component Level:

$$Strike_{i,t} = ICL_{i,t}$$

2.2. Otherwise

$$Strike_{i,t} = Strike_{i,t-1}.$$

On each Unlevered Index Business Day t, the Unrealized Performance of the exposure in each Index Component in USD for UBS DFL USD18VA index and in AUD for DFL UBS AUD17VA Index is given by the below formula:

$$Perf\_Unrealized_{i,t} = DN_{i,t-1} \times \left(\frac{ICL_{i,t}}{Strike_{i,t-1}} - 1\right) \div FX_{i,t}$$

On each Unlevered Index Business Day t, the Settlement of Performance of the exposure in USD for DFL UBS USD18VA index and in AUD for DFL UBS AUD17VA Index is given by the below formula:

If $DN_{i,t} \neq DN_{i,t-1}$, then

$$Perf\_Settlement_{i,t} = Perf\_Unrealized_{i,t}$$

Otherwise,

$$Perf\_Settlement_{i,t} = 0$$

On each Unlevered Index Business Day t, the Unlevered Cash Account in USD for DFL UBS USD18VA index and in AUD for DFL UBS AUD17VA Index is given by the below formula:

$$UCA_t = UCA_{t-1} + SUM\_Perf\_Settlement_t$$

where:

$$SUM\_Perf\_Settlement_t = \sum_{i=1}^{10} Perf\_Settlement_{i,t}$$

On each Unlevered Index Business Day t, the Unlevered Index Level in USD for DFL UBS USD18VA index and in AUD for DFL UBS AUD17VA Index is given by the below formula:

$$UIL_t = UCA_{t-1} + \sum_{i=1}^{10} MTM_{i,t}$$

Levered Index Calculation Method

For Levered Index Allocation calculation purposes, Index Business Day t is any day that is (a) a business day for all Index Component Exchanges, the London Stock Exchange and Deutsche Borse (Xetra) and (b) a New York Banking Business Day for DFL UBS USD18VA index or Sydney Banking Business Day for DFL UBS AUD17VA Index.

For each Index Business Day t,

$$20\_day\_Vol\_UIL_t = \sqrt{\left(\frac{1}{20-1} \times \sum_{n=0}^{19} [r\_UIL_{t-n} - Average20\_UIL_t]^2 \times 252\right)}$$

$$r\_UIL_t = ln\left(\frac{UIL_t}{UIL_{t-1}}\right)$$

$$Average20\_UIL_t = \frac{1}{20} \times \sum_{n=0}^{19} r\_UIL_{t-n}$$

Prior to October 12th, 1993, 250_day_Vol_VA_t = 20%. On and after October 12th, 1993,

$$250\_day\_Vol\_VA_t = \sqrt{\left(\frac{1}{250-1} \times \sum_{n=0}^{249} [r\_VA_{t-n} - Average250\_VA_t]^2 \times 252\right)}$$

$$r\_VA_t = ln\left(\frac{VA\_Index_t}{VA\_Index_{t-1}}\right)$$

$$Average250\_VA_t = \frac{1}{250} \times \sum_{n=0}^{249} r\_VA_{t-n}$$

$$Target\_Leverage_t = min\left(Maximum\ Leverage, \frac{Volatility\_Target}{20\_day\_Vol\_UIL_t} \times min\left(100\%, \frac{Volatility\_Target}{250\_day\_Vol\_VA_t}\right)\right)$$

where:

$Maximum\_Leverage$	400%
$Volatility\_Target$	20%

For Levered Index Allocation calculation purposes, an Index Business Day t is a Weekly Rebalance Day if it is the first Index Business Day in a calendar week (starting from Monday).

For Levered Index Allocation calculation purposes, an Index Business Day t is a Leverage Rebalance Day if either 1, 2, or 3 of below is true:

1. Index Business Day t is a Weekly Rebalance Day.
2. Or Absolute value of $(Target\ Leverage_{t-1} - Previous\ Leverage_{t-1}) > Volatility\_Rebalance\_Threshold$

   Where $Previous\ Leverage_{t-1}$ is equal to the value of $Target\ Leverage$ on the day prior to the most recent Leverage Rebalance Day (t-1).
3. Or $Implied\_Leverage_{t-1} - Maximum\ Leverage > Volatility\_Rebalance\_Threshold$

   where:

$Volatility\_Rebalance\_Threshold$	15%

On Leverage Rebalance Day all parameters below are updated. If day t is a Leverage Rebalance Day, then:

$$Previous\_Leverage_t = Target\_Leverage_{t-1},$$

$$Used\_Leverage_t = Target\_Leverage_{t-1},$$

$$UIL\_Strike_t = UIL_t,$$

$$VA\_Index\_Strike_t = VA\_Index_t,$$

$$Cash\_Notional_t = VA\_Index_t,$$

otherwise

$$Previous\_Leverage_t = Previous\_Leverage_{t-1},$$

$$Used\_Leverage_t = Used\_Leverage_{t-1},$$

$$UIL\_Strike_t = UIL\_Strike_{t-1},$$

$$VA\_Index\_Strike_t = VA\_Index\_Strike_{t-1},$$

$$Cash\_Notional_t = Cash\_Notional_{t-1} + Cash\_Notional_{t-1} \times Interest\_Rate_t \times ACT_{(t-1,t)}/365.$$

For each Index Business Day t,

$$Implied\_Leverage_t = Used\_Leverage_t \times VA\_Index\_Strike_t/VA\_Index_t.$$

$Interest\ Rate_t$ is defined as below:

- For DFL UBS USD18VA index:
  For Index Business Day t, $Interest\ Rate_t$ is the Federal Funds Effective Rate US (Reuters RIC code: USONFFE=) of the day that is 1 New York Banking Business Day prior to day t.
- For DFL UBS AUD17VA Index:
  For Index Business Day t, until July 26th, 2017 (included), $Interest\ Rate_t$ is the Australian Bank Bill Short Term Rates 1 Day Reference Rate (Bloomberg: BBSW1D Index) of the day that is 1 Sydney Banking Business Day prior to day t. From July 27th, 2017 (included), $Interest\ Rate_t$ is the RBA Interbank Overnight Cash Rate (Reuters RIC code: AUCASH=RBAA) of the day that is 1 Sydney Banking Business Day prior to day t.

If day (t-1) is a Leverage Rebalance Day, then:

$$Interest\_Return_t = Cash\_Notional_{t-1} \times Interest\_Rate_t \times ACT_{(t-1,t)}/365,$$

$$Fee\_Unlevered_t = VA\_Index\_Strike_{t-1} \times Fee\_Rate\_1 \times ACT_{(t-1,t)}/365,$$

$$Fee\_Levered_t = VA\_Index\_Strike_{t-1} \times \max\left(0, Used_{Leverage_{t-1}} - 1\right) \times Fee\_Rate\_2 \times ACT_{(t-1,t)}/365,$$

otherwise $Interest\_Return_t = Interest\_Return_{t-1} + Cash\_Notional_{t-1} \times Interest\_Rate_t \times ACT_{(t-1,t)}/365,$

$$Fee\_Unlevered_t = Fee\_Unlevered_{t-1} + VA\_Index\_Strike_{t-1} \times Fee\_Rate\_1 \times ACT_{(t-1,t)}/365,$$

$$Fee\_Levered_t = Fee\_Levered_{t-1} + VA\_Index\_Strike_{t-1} \times max(0, Used\_Leverage_{t-1} - 1) \times Fee\_Rate\_2 \times ACT_{(t-1,t)}/365.$$

Where:

Fee_Rate_1	0.60%
Fee_Rate_2	0.60%

On each Index Business Day t, the VA Index in USD for DFL UBS USD18VA index and in AUD for DFL UBS AUD17VA Index is given by the below formula:

$$VA\_Index_t = VA\_Index\_Strike_{t-1} \times \left(1 + Used\_Leverage_{t-1} \times \left(\frac{UIL\_A_t}{UIL\_Strike_{t-1}} - 1\right)\right) + Interest\_Return_t - Fee\_Unlevered_t - Fee\_Levered_t - Transaction\_Cost_t.$$

where $Transaction\_Cost_t$ is defined in paragraph '*Transaction Cost Calculation Method*' below.

Transaction Cost Calculation Method

On each Index Business Day t, the $Notional\_Exposure$ in respect of each Index Component (in the local currency of each Index Component) is given by the below formula:

$$Notional\_Exposure_{i,t} = VA\_Index\_Strike_t \times Used\_Leverage_t \times \frac{DN_{i,t}}{UIL\_Strike_t}.$$

On each Index Business Day t, the $Transaction\_Cost\_Individual_{i,t}$ in respect of each Index Component in USD for DFL UBS USD18VA index and in AUD for DFL UBS AUD17VA Index is given by the below formula:

$$Transaction\_Cost\_Individual_{i,t} = abs\left(Notional\_Exposure_{i,t-1} - Notional\_Exposure_{i,t-2}\right)/FX_{i,t-1} \times TC_i$$

where abs(a–b) is the absolute value of (a–b), TC_i is defined in Table 11.

Table 11

Index Component i	Reference Asset (RA)	TC_i
1	Nikkei 225 Index Futures	0.02%
2	Hang Seng Index Futures	0.04%
3	S&P 500 Index Futures	0.02%
4	EURO STOXX 50 Index Futures	0.02%
5	MSCI Emerging Markets Index Futures	0.04%
6	SPGCLEP Index	0.04%
7	10-year JGB Futures	0.03%
8	10-year US Treasury Note Futures	0.03%
9	Euro-Bund Futures	0.03%
10	2-year US Treasury Note Futures	0.03%

The total sum of transaction costs is equal to the sum of individual transaction costs:

If Index Business Day t-1 is a Leverage Rebalance Day:

$$Transaction\_Cost_t = \sum_{i=1}^{10} Transaction\_Cost\_Individual_{i,t}.$$

Otherwise $Transaction\_Cost_t$ carry until next Leverage Rebalance Day:

$$Transaction\_Cost_t = Transaction\_Cost_{t-1}$$

Gross Return Index Calculation Method

A gross return version of VA_Index_t (free of roll cost (RollCost), borrow cost (BorrowRate), the fee cost (Fee_Rate_1 and Fee_Rate_2) and transaction costs (TC)) is also calculated. For both DFL UBS USD18VA Gross Return Index and DFL UBS AUD17VA Gross Return Index:

$Fee_{Unlevered_t} = 0$

$Fee\_Levered_t = 0$

$TC_i = 0$ and $Transaction\_Cost_t = 0$

$RollCost_i = 0$ and $BorrowCost_t = 0$

So, the formula for VA_Index_t simplifies to:

$$Gross\ VA\_Index_t = Gross\ VA\_Index\_Strike_{t-1} \times \left(1 + Used\_Leverage_{t-1} \times \left(\frac{UIL\_A_t}{UIL\_Strike_{t-1}} - 1\right)\right) + Interest\_Return_t$$

Where for the purpose of calculation of i^{th}Synthetic Index Future Level described in 'Index Component Calculation Method.**a'** $nShares_{i,t}$ simplifies to:

$$nShares_{i,t} = nShares\_Pre_{i,t} \times \left(\frac{Index\_Future\_Component_{i,t} - Roll_{i,t}}{Index\_Future\_Component_{i,t}}\right)$$

and for the purpose of calculation of Synthetic Index Future Level for RA_6 (SPGCLEP Index) described in 'Index Component Calculation Method.**b'** $IFL_{6,t}$ simplifies to:

$$IFL_{6,t} = SPGCLEP\_Notional_{t-1} \times \frac{SPGCLEP_t}{SPGCLEP\_Strike_{t-1}}$$

with all other terms similar to the ones defined for both the DFL UBS USD18VA Index and the DFL UBS AUD17VA Index calculation (but, for the avoidance of doubt, $Gross\ VA\_Index_t$ shall refer to the Index Level of the DFL UBS USD18VA Gross Index or DFL UBS AUD17VA Gross Index on any relevant day). The methodology follows same steps as for the DFL UBS USD18VA Index and DFL UBS AUD17VA as described in Index Construction.

Calculation of JPY-denominated Indices

For both DFL UBS AUD17VA and UBS USD18VA a JPY denominated index version is calculated. The JPY denominated Indices are calculated based on the Source Index (as defined in table 12 below) last available official closing price. For the avoidance of doubt, if it is an Index Business Day of the JPY-denominated Indices but not an Index Business Day in respect of the Source Index, the JPY-denominated Indices are still calculated.

Table 12

Source index	JPY-denominated Index
DFL UBS AUD17VA	DFL UBS AUD17VAJPY
DFL UBS USD18VA	DFL UBS USD18VAJPY

For each Index Business Day (t+1), the Index level is calculated based on the below formula:

$$VA\_Index\_JPY_t = VA\_Index_t \times FX_{t+1}$$

Where:

Index Business Day t	is any day which is a Tokyo Banking Business Day.
VA_Index_t	is the official closing price of the Index Component as of relevant day t, provided that if t is not an Index Business Day in respect of the Index Component, the latest official closing price of the Index Component is used.
FX_{t+1}	Is the telegraphic transfer middle rate (TTM) for conversion: for DFL UBS AUD17VA Index from JPY to Australian dollars ("AUD") (expressed as number of JPY per 1 AUD, Reuters ticker AUDTT=BTMJ), and for DFL UBS USD18VA Index from JPY to USD (Reuters ticker USDTT=BTMJ), as calculated at 10am Tokyo time of the relevant Index Business Day t+1. For the avoidance of doubt, if the rate is subsequently revised, the original published level will be used.

For the avoidance of doubt, the Index Level of the JPY-denominated Indices as of an Index Business Day are calculated and published on the following Index Business Day.

Index Maintenance

Reconstitution

Asset selection and weights allocation are established monthly on the Monthly Observation Day t.

Rebalancing

The Indices are rebalanced monthly after the close on the Monthly Unlevered Index Rebalance Day. As part of the rebalancing process, Index Components weights are updated using Target Allocation calculated as of the Monthly Observation Day. as described in the Index Construction section.

For further information, please refer to S&P DJI's Equity Indices Policies & Practices and S&P DJI's Commodities Indices Policies & Practices documents located at www.spglobal.com/spdji.

Currency of Calculation

The table below shows the currency of calculation for each Index:

Index	Ccy
DFL UBS AUD17VA Index	AUD
DFL UBS AUD17VAJPY Index	JPY
DFL UBS USD18VA Index	USD
DFL UBS USD18VAJPY Index	JPY
DFL UBS USD18VA Gross Return Index	USD
DFL UBS AUD17VA Gross Return Index	AUD

Exchange Rate

WM/Reuters foreign exchange rates are taken daily at 04:00 PM London time and used in the calculation of the Indices. These mid-market fixings are calculated by the WM Company based on Reuters' data and appear on Reuters pages WMRA.

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Index Data

Excess Return Index

The Index is calculated as an Excess Return index.

Gross Return Index

In order to enhance transparency, a gross return version (free of roll cost (RollCost), borrow cost (BorrowRate), the fee cost (Fee_Rate_1 and Fee_Rate_2) and transaction costs (TC)) of the Indices called the DFL UBS AUD17VA Gross Return Index and DFL UBS USD18VA Gross Return Index are calculated and published.

Base Date and History Availability

Index history availability, Launch Date, Base Date and Launch Value are shown in the table below:

Index	Launch Date	Base Date	Launch Value
DFL UBS AUD17VA Index	9 March 2015	28 August 1992	1092.18546856434
DFL UBS AUD17VA JPY Index	9 March 2015	28 August 1992	101825
DFL UBS USD18VA Index	9 March 2015	28 August 1992	896.669039682116
DFL UBS USD18VA JPY Index	9 March 2015	28 August 1992	108919
DFL UBS USD18VA Gross Return Index	18 December 2024	18 December 2024	1365.74
DFL UBS AUD17VA Gross Return Index	18 December 2024	18 December 2024	1536.87

All information presented prior to the inception date (“Launch Date”) is back-tested.

Index Governance

Index Committee

S&P DJI's S&P Custom BA Index Committee ("Index Committee") maintains the DFL UBS Index Series. The Index Committee meets at regular intervals. At each meeting, the Index Committee reviews matters that may affect the Indices, including the Methodology, constituents, and any significant market events. In addition, the Index Committee may revise index policy and procedures.

S&P DJI considers information regarding changes to the Indices and related matters to be potentially market moving and material, therefore, all Index Committee discussions are confidential.

For information on Quality Assurance and Internal Reviews of Methodology, please refer to S&P DJI's Equity Indices Policies & Practices and S&P DJI's Commodities Indices Policies & Practices documents located here www.spglobal.com/spdji.

Index Policy

Announcements

All Index constituents are evaluated daily for data needed to calculate Index levels and returns. All events affecting the daily Index calculation are typically announced in advance via the Index Corporate Events report (.SDE), delivered daily to authorized clients. Any unusual treatment of a corporate action or short notice of an event may be communicated via email to clients.

The Index Administrator shall review the Index Methodology periodically for best practices, and any material changes shall be announced ahead of time via its website and/or via email.

The Index Methodology is reviewed by the Index Committee as part of the regular index rebalancing process, as well as on at least an annual basis, to ensure that the Methodology is being applied consistently and allows the index to achieve its stated objective. These reviews may highlight situations where changes to the Methodology are necessary to reflect changes in the underlying market.

For more information, please refer to the Announcements section of S&P DJI's Equity Indices Policies & Practices and S&P DJI's Commodities Indices Policies & Practices documents located here www.spglobal.com/spdji

Pro-forma Files

In addition to the corporate events file (.SDE), S&P DJI provides constituent pro-forma files each time an Index rebalances. The pro-forma file is typically provided daily in advance of each Monthly Unlevered Index Rebalance Day and contains all constituents and their corresponding weights and Index shares effective for the upcoming rebalance. As Index shares are assigned based on prices prior to the rebalance, the actual weight of each stock at the rebalance differs from these weights due to market movements.

Holiday Schedule

The Indices are calculated daily on each Index Business Day following the Launch Date of an Index.

Unexpected Exchange Closures

For information on Unexpected Exchange Closures, please refer to S&P DJI's Equity Indices Policies & Practices and S&P DJI's Commodities Indices Policies & Practices documents located here www.spglobal.com/spdji.

Recalculation Policy

For information on the recalculation policy, please refer to S&P DJI's Equity Indices Policies & Practices and S&P DJI's Commodities Indices Policies & Practices documents located here www.spglobal.com/spdji.

For information on Calculations and Pricing Disruptions, Expert Judgment and Data Hierarchy, please refer to S&P DJI's Equity Indices Policies & Practices and S&P DJI's Commodities Indices Policies & Practices documents located here www.spglobal.com/spdji.

Index Dissemination

Index levels are available through S&P DJI's here www.spglobal.com/spdji, and major quote vendors (see codes below).
The Index Administrator retains the right to delay publication of the Index level if it reasonably believes there are circumstances that prevent the correct calculation of the Index.

The Index level will be calculated by the Index Administrator and published on Bloomberg page CSJADAUD <Index>, rounded to 2 decimal places (with 0.005 being rounded upwards). Calculation and publication of the Index level in respect of each Index Business Day t-1 will take place on or before 11 a.m. Hong Kong time on the Index Business Day following the relevant Index Business Day t-1.

Tickers

The table below contains the Bloomberg tickers for the headline Indices:

Index	Bloomberg
DFL UBS AUD17VA Index	CSJADAUD Index
DFL UBS AUD17VAJPY Index	CSJAAUDJ Index
DFL UBS USD18VA Index	CSJADUSD Index
DFL UBS USD18VAJPY Index	CSJAUSDJ Index
DFL UBS USD18VA Gross Return Index	N/A
DFL UBS AUD17VA Gross Return Index	N/A

SFTP

Daily stock level and Index data are available via SFTP subscription.

Web site

For further information, please refer to https://www.spglobal.com/spdji/en/custom-index-calculations/ubs/all/#overview.

Appendix I – Defined Terms

"Base Allocation" has the meaning given to such term in Monthly Asset Selection Method.

"Borrow Rate" means borrow costs for a Reference Asset and is defined in Table3.

"Daily Notional Allocation" has the meaning given to such term in Unlevered Index Allocation Method.

"Equity Signal Calculation Day" means any day on which the New York Stock Exchange is scheduled to be open for trading.

"Equity Vol Switch Date" means 18 December 2024, the date of switch to the New Equity Vol Data from 3MO_CALL_IMP_VOL (3 month Call Implied Volatility) of SPX Index used historically.

"Index" means each index comprising the DFL UBS Index Series and **"Indices**" shall be construed accordingly.

"Index Business Day" means:

- In respect to the Levered Indices, each day when all Exchanges as listed in Index Calendar are scheduled to open for trading for their regular trading sessions;
- In respect to the JPY-denominated Indices, each Tokyo Banking Business Day.

"Index Calendar" means each day following the launch of an Index that is (a) a business day for all Index Component Exchanges (as defined in Table2), the London Stock Exchange and Deutsche Borse (Xetra) and (b) a New York Banking Business Day for DFL UBS USD18VA index or Sydney Banking Business Day for DFL UBS AUD17VA Index.

"Index Component" means each of the Reference Assets as listed in Table2.

"Index Component Exchange Business Day" means each day when a relevant for Reference Asset Exchange is open for trading for its' regular trading session for the Index Component. If the Index Component is not listed on the specified Reference Asset Exchange, each day on which the Reference Asset Exchange is open for trading for its regular trading session. The relevant for Reference Asset Exchanges are listed in Table2.

"Indicator Switch Date" means 18 December 2024, the date the Monthly Indicator 2 was switched from JPPMIF=ECI to JPBCLG=ECI and the Monthly Indicator 4 was switched from EUPMMF=ECI to EUBUSS=ECI.

"Interest Rate" has the meaning given to such term in Levered Index Calculation Method.

"Unrealized Performance" has the meaning given to such term in Unlevered Index Allocation Method.

"Max Allocation" has the meaning given to such term in Table 9.

"Monthly Indicator" has the meaning given to such term in Monthly Indicators Calculation Method.

"Monthly Notional Allocation" has the meaning given in Unlevered Index Allocation Method.

"Monthly Observation Day" means the Unlevered Index Business Day before the last Unlevered Index Business Day of any month.

"Monthly Unlevered Index Rebalance Day" The last Unlevered Index Business Day of each month.

"MXEF Moving Average Signal Calculation Day" means any day on which the New York Stock Exchange is scheduled to be open for trading.

"New York Banking Business Day" means a day (other than a Saturday or Sunday) on which commercial banks are open for business (including dealings in foreign exchange and foreign currency) in New York.

"New Equity Vol Data" means the official level of CBOE S&P 500 3-Month Volatility Index,

"Reference Asset" has the meaning given to such term in Table2. As defined in Table2, each Reference Asset is assigned a Reference Asset type: Reference Assets i 1 to 6 are each referred to as '**Risky Asset**', Reference Assets i 7 to 9 are each referred to as '**Bond Asset**', Reference Asset i=10 is referred to as '**Risk free Asset**'.

"Roll Cost" means roll cost and is defined per Reference Asset in Table3.

"Roll Day" has the meaning given to such term in Table3.

"Selected Assets" has the meaning given to such term in Monthly Asset Selection Method.

"Strike of Index Component" has the meaning given to such term in Unlevered Index Allocation Method.

"Sharpe Ratio" has the meaning given to such term in Sharpe Ratio Calculation Method.

"Sydney Banking Business Day" means a day (other than a Saturday or Sunday) on which commercial banks are open for business (including dealings in foreign exchange and foreign currency) in Sydney.

"Synthetic Index Future Level" has the meaning given to such term in Index Component Calculation Method.

"Target Allocation" has the meaning given to such term in Monthly Notional Allocation Method.

"Tokyo Banking Business Day" means a day (other than a Saturday or Sunday) on which commercial banks are open for business (including dealings in foreign exchange and foreign currency) in Tokyo.

"Top Bond Asset" has the meaning given to such term in Monthly Notional Allocation Method.

"Top Risky Asset" has the meaning given to such term in Monthly Notional Allocation Method.

"Unlevered Cash Account" has the meaning given to such term in Unlevered Index Allocation Method.

"**Unlevered Index Business Day**" means each weekday.

Appendix II – Methodology Changes

In calculating and determining the value of each Index, S&P DJI will, subject as provided below, use the Methodology and its interpretation of such Methodology shall be conclusive and binding. While S&P DJI uses the Methodology described in this document to calculate each Index, no assurance can be given that market, regulatory, juridical, financial, fiscal or other circumstances (including, but not limited to, any changes to or any suspension or termination of any constituent of an Index or any other events affecting transactions on the same or similar terms to any constituent of an Index) will not arise that would, in the view of S&P DJI, necessitate or make desirable a modification of or change to such Methodology (including, but without limitation, a change in the frequency of calculation of any Index level) in order for each Index to continue being calculated and determined notwithstanding the relevant circumstances and S&P DJI shall be entitled to make any such modification or change in its sole discretion.

S&P DJI shall be entitled to make such modifications and/or changes to the Methodology as it, in its sole discretion, deems necessary or desirable, including (without limitation), provided, in each case, that any such modifications are not intentionally designed to increase or decrease the performance of the Index:

i. To correct any manifest error or proven error or to cure, correct or supplement any ambiguity or defective provision contained in this Methodology; and/or

ii. To preserve the intended Index Objective, where such modification and/or change is of a formal, minor or technical nature; and/or

iii. To take into account any change in the terms (whether in relation to settlement mechanics or otherwise) on which relevant instruments concerning any Index Constituent are traded.

In deciding what is necessary or desirable, S&P DJI will consider and/or take into account what it determines to be the intended objective of the Index.

In making any such modifications, however S&P DJI will (x) ensure that such modifications or changes pursuant to this section “Change in Methodology” will result in a methodology that, in S&P DJI’s sole determination, is consistent with the intended objective of the Methodology described herein and (y) limit any such modification or change to the Index rules and/or method of calculating any Index Level(s).

All proposals to discontinue an index are assessed to determine any potential impact on the market. S&P DJI may at its option, consult with market participants regarding the index termination.
Methodology changes since 18 December 2024 are as follows:

Change	Effective Date (After Close)	Methodology	
		Previous	Updated

Appendix III – Data Assumptions

In the event that a day is an Index Business Day but is not a trading day for an Index Component, then the following assumptions shall be made:

- The price for the Index Component on the relevant Index Business Day will be deemed the price of the Index Component from the previous Index Business Day.

If the Equity Signal or MXEF Moving Average Signal cannot be determined on a Signal Calculation Day, or if the day is not a Signal Calculation Day, the Equity Signal or the MXEF Moving Average Signal shall equal the last determined relevant Equity Signal or MXEF Moving Average Signal.

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