

BBVA Index Administration BBVA Equity Rolling-Future Index Series Methodology

BBVA

Global Markets

Madrid, December 2024

Version 1.1

Methodology for BBVA Equity Rolling-Future Index Series

Contents

1. Introduction	2
2. Purpose and scope of application	2
2.1. Purpose	2
2.2. Scope of application	2
2.3. Benchmark Family scope of application	2
3. What is the BBVA Equity Rolling-Future Index Series?	3
4. Index Specifications	4
Index Calculation	4
Indices description	5
Assumptions in the Construction of the Index	7
Roll Specification	7
Parameters	8
General Definitions	9
5. Publication of the Index Value	13
Calculation and Publication of the Index Level	13
Adjustments and corrections	13
6. Consequences of a Disruption Day	14
7. Consequences of an Extraordinary Event	14
Index Component or Other Input Data Successor	15
Removal and Reweighting of the Index Component	15
Substitution of the Index Component or Other Input Data	15
Termination	15
8. Approval and review of the Methodology	16
9. Material Changes and Cessation	16
10. Discretion and Expert Judgement	16
Disclaimer	18

1. Introduction

To ensure that the indices (including the Index Series or Indices, as defined below) administered by Banco Bilbao Vizcaya Argentaria, S.A. (henceforth, “**BBVA**”) are constructed, maintained, operated and governed to the highest standards, BBVA employs a robust governance framework. This framework is used to manage existing indices, to approve new indices and to approve changes to the methodologies of existing indices. Within BBVA, the activity of the administration of the indices is performed by the BBVA Global Markets unit.

2. Purpose and scope of application

2.1. Purpose

This document (henceforth, “**Methodology**”) constitutes the index rules for the BBVA Equity Rolling-Future Index Series family of indices (henceforth, each an “**Index**” and, together, “**Index Series**” or “**Indices**”) and defines the formulae and the procedures for their composition, calculation and maintenance.

This document is published by BBVA. BBVA assumes the role of administrator (“**Administrator**”) of the Indices referred to in this document (as defined under Article 3(1)(6) of Regulation (EU) 2016/1011, as amended).

2.2. Scope of application

This Methodology is applied to the Indices belonging to the Index Series.

2.3. Benchmark Family scope of application

This Index Series is a sub-family belonging to the BBVA Equity Family of Benchmarks. For more details in relation to the BBVA Equity Family of Benchmarks, please refer to the BBVA Equity Family of Benchmarks Benchmark Statement.

3. What is the BBVA Equity Rolling-Future Index Series?

The Index Series is a family of rules-based Indices which represents the performance of notional long or short investments in futures contracts, rolling either on an annual, quarterly, monthly, or bi-monthly basis depending on the expiration schedule of the futures contract.

The Indices roll out from the 1st to expire contract to the 2nd to expire contract. Please see **Table 3. Roll Specification** for the roll schedule.

These Indices enable investors to take exposure to the underlying assets through indices composed of futures contracts on S&P 500, Nasdaq 100, EuroStoxx 50 and Nikkei 225 Equity Indexes without the operational infrastructure required to trade these components in the market.

None of the Indices included within the Index Series pursue ESG objectives or take into account ESG factors.

The Index Series consists of the following eight excess return Indices:

- BBVA US Equity Futures Index, which provides long exposure to the US Equity futures standardised contracts for the purchase and sale of S&P 500 Index.
- BBVA US Equity Futures PM Index, which provides long exposure to the US Equity futures standardised contracts for the purchase and sale of S&P 500 Index.
- BBVA US Tech Equity Futures Index, which provides long exposure to the US Equity futures standardised contracts for the purchase and sale of Nasdaq 100 Index.
- BBVA US Tech Equity Futures PM Index, which provides long exposure to the US Equity futures standardised contracts for the purchase and sale of Nasdaq 100 Index.
- BBVA EU Equity Futures Index, which provides long exposure to the EU Equity futures standardised contracts for the purchase and sale of EuroStoxx 50 Index.
- BBVA EU Equity Futures PM Index, which provides long exposure to the EU Equity futures standardised contracts for the purchase and sale of EuroStoxx 50 Index.
- BBVA Japanese (SGX) Equity Futures Index, which provides long exposure to the Japanese Equity futures standardised contracts for the purchase and sale of Nikkei 225 Index.
- BBVA Japanese (SGX) Equity Futures AM Index, which provides long exposure to the Japanese Equity futures standardised contracts for the purchase and sale of Nikkei 225 Index.

The Indices are calculated on an excess return basis and the value of the Indices are calculated on each Index Business Day (as defined below) in U.S. dollars, Euro and Japanese YEN respectively.

Unless otherwise indicated, any public announcement, information or updates contemplated by, and any other document (including any policy) referred to in, this Methodology shall be made available on the website of the Administrator: <https://www.bbvacib.com/gis-regulatory/>

4. Index Specifications

Index Calculation

Table 1. Index Calculation Definitions

Index (j) Start Date	In respect of an Index (j), the relevant Start Date as defined in the <i>Index Description Table</i> .
Index (j) Live Date	In respect of an Index (j), the relevant Live Date as defined in the <i>Index Description Table</i> .
Index (k,j,t)	<p>For the Index (j) Start Date specified in the Index Description Table, referred to as <i>Start Date</i>, the level of the Index is defined as</p> $Index(k, j, Start Date) = 100$ <p>If Index Business Day t is between the Start Date and the next Roll Period (included),</p> $Index Rebalance(k, j, t) = 100$ <p>For any Index Business Day t, level of the Index (k,j,t) is defined as</p> $Index(k, j, t) = Index(k, j, t - 1) + Index Rebalance(k, j, t) \times Return(k, j, t)$
Return (k,j, t)	<p>For the Index (j) Start Date as specified in the Index Description Table,</p> <p>k = Equity Future</p> <p>Return(k,j, Start Date) = 0</p> <p>For any Index Business Day t,</p> <p>If it is not in the Roll Period (k,j,t),</p> <p>k = Equity Future</p> $Return(k, j, t) = \left(\frac{Index Component(k, j, t) - Index Component(k, j, t-1)}{Index Component Rebalance(k, j, t)} \right) \times Index Component Weight(j)$ <p>If it is in the Roll Period (k,j,t),</p> <p>k = Equity Future</p> $Return(k, j, t) = \left(\frac{Index Component(k, j, t, In) - Index Component(k, j, t-1, In)}{Index Component Rebalance(k, j, t, In)} \right) \times Roll Weight(k, j, t - 1, In) + \left(\frac{Index Component(k, j, t, Out) - Index Component(k, j, t-1, Out)}{Index Component Rebalance(k, j, t, Out)} \right) \times Roll Weight(k, j, t - 1, Out)$

For any other day t that is not an Index Business Day,

k = Equity Future

Return $(k,j,t) = 0$

Roll Weight (k, j, t, Out)

If the next Index Business Day lies in the Roll Period $(k, j, t+1)$,

$$\text{Roll Weight } (k,j,t,\text{Out}) = (1 - \text{Roll Weight}(k,j,t,\text{In})) \times \text{Index Component Weight } (j)$$

Roll Weight (k, j, t, In)

If the next Index Business Day lies in the Roll Period $(k, j, t+1)$,

$$\text{Roll Weight } (k,j,t,\text{In}) = \frac{\text{Roll Day } (k,j,t+1)}{\text{Length of Roll Period } (k,j)} \times \text{Index Component Weight } (j)$$

Indices description

The BBVA Equity Rolling-Future Index Series represents the following universe of Instruments being calculated under the rules defined in this Methodology:

Table 2. Index Description

k	j	Index Name	Index Component	Index Component Weight	Base Currency	Index Currency	Future Contract RIC	Length of the Roll Period	Price/Type of data	Roll End Date Lag (RFDL)	Exchange	Ticker	Index (j) Start Date	Index (j) Live Date
Equity Future	1	BBVA US Equity Futures Index	S&P 500 Mini Futures	100%	USD	USD	ES	1	Settlement Price	2	GLOBEX-CME	BBLIEESU	22 Sep 1997	16 Sep 2024
Equity Future	2	BBVA US Equity Futures PM Index	S&P 500 Mini Futures	100%	USD	USD	ES	1	5:00 PM Madrid	2	GLOBEX-CME	BBLIE4EU	22 Sep 1997	10 Dec 2024
Equity Future	3	BBVA US Tech Equity Futures Index	NASDAQ 100 E-MINI Futures	100%	USD	USD	NQ	1	Settlement Price	2	GLOBEX-CME	BBLIENQU	2 Sep 1999	10 Dec 2024
Equity Future	4	BBVA US Tech Equity Futures PM Index	NASDAQ 100 E-MINI Futures	100%	USD	USD	NQ	1	5:00 PM Madrid	2	GLOBEX-CME	BBLIE4NU	2 Sep 1999	10 Dec 2024
Equity Future	5	BBVA EU Equity	EURO STOXX	100%	EUR	EUR	STXE	1	Settlement	2	EUX-Eurex	BBLIEVGE	22 Dec 1998	10 Dec 2024

		Futures Index	50 Futures						Price					
Equity Future	6	BBVA EU Equity Futures PM Index	EURO STOXX 50 Futures	100%	EUR	EUR	STXE	1	5:00 PM Madrid	2	EUX-Eur ex	BBLIE4XE	22 Dec 1998	10 Dec 2024
Equity Future	7	BBVA Japanese (SGX) Equity Futures Index	SGX Nikkei Futures	100%	JPY	JPY	SSI	1	Settlement Price	2	SGX-Singapore Exchange (was SIMEX), OSE-Osaka Exchange	BBLIENIY	2 Jul 1997	10 Dec 2024
Equity Future	8	BBVA Japanese (SGX) Equity Futures AM Index	SGX Nikkei Futures	100%	JPY	JPY	SSI	1	9:00 AM Madrid	2	SGX-Singapore Exchange (was SIMEX), OSE-Osaka Exchange	BBLIE8NY	2 Jul 1997	10 Dec 2024

Source of Input Data

- The input data for calculating each Index is provided by Refinitiv as per Future Contract RIC, defined in Table 2. Index Description.
- Refinitiv captures the data relating to each Future Contract RIC without modification, entirely and directly from the respective Exchange as defined in the Table 2 Index Description.

Historical Data

- For $j = 1, 3, 5$ and 7 ,
 - From the Index (j) Start Date until Index Live (j) Date (excluded):
Settlement Price
- For $j = 2$ and 4 ,
 - From the Index (j) Start Date until 15 August 2024 (excluded):
Settlement Price
 - From 15 August 2024 (included) until Index Live (j) Date (excluded):
5:00 PM Madrid
- For $j = 6$,
 - From the Index (j) Start Date until 22 October 2024 (excluded):
Settlement Price
 - From 22 October 2024 (included) until Index Live (j) Date (excluded):

5:00 PM Madrid

- For $j = 8$,
 - From the Index (j) Start Date until 2 September 2024 (excluded):
Settlement Price
 - From 2 September 2024 (included) until Index Live (j) Date (excluded):

9:00 AM Madrid

Live Date

- From the Index (j) Live Date onwards:
Please see *Table 2. Index Description* for the respective time and Data Source.

For more details on the input data relating to this Methodology (including, without limitation, the nature and types of input data, the priority given to each type of input data, the requirements relating to the quantity or quality of input data and the factors which will be taken into account in circumstances in which its quantity or quality falls below the required standards) please refer to the BBVA Index Administration Input Data Policy.

Assumptions in the Construction of the Index

The following assumptions have been made during the construction of the Index:

- In certain cases in the backtest where data was missing, the value was assumed to be the same as the last available value, and in certain cases these days were assumed to be holiday.
- In certain cases in the backtest a union of exchange holidays and local holidays were assumed. Local holidays refer to the location of the respective exchange when the commercial banks are open for regular business.
- In certain cases since the live date where data was unavailable as expected due to an Index Component or Other Input Data related holiday, the value was assumed to be the same as the last available value or the Settlement Price as applicable.

Roll Specification

As the futures contracts that comprise each Index Component approach expiration, they are replaced by similar futures contracts that have a later expiration. This process is referred to as “rolling.” The table below represents the pre-defined rolling schedule, First to Expire Contract.

Table 3. Roll Specification

j	Future	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec
1	S&P500 Mini Future	H	H	H (Out) / M (In)	M	M	M(Out) / U(In)	U	U	U (Out)/ Z(In)	Z	Z	Z(Out) / H(In)
2	S&P500 Mini Future	H	H	H (Out) / M (In)	M	M	M(Out) / U(In)	U	U	U (Out)/ Z(In)	Z	Z	Z(Out) / H(In)
3	NASDAQ 100 E-MINI Future	H	H	H (Out) / M (In)	M	M	M(Out) / U(In)	U	U	U (Out)/ Z(In)	Z	Z	Z(Out) / H(In)
4	NASDAQ 100 E-MINI Future	H	H	H (Out) / M (In)	M	M	M(Out) / U(In)	U	U	U (Out)/ Z(In)	Z	Z	Z(Out) / H(In)
5	Eurostoxx50 Future	H	H	H (Out) / M (In)	M	M	M(Out) / U(In)	U	U	U (Out)/ Z(In)	Z	Z	Z(Out) / H(In)
6	Eurostoxx50 Future	H	H	H (Out) / M (In)	M	M	M(Out) / U(In)	U	U	U (Out)/ Z(In)	Z	Z	Z(Out) / H(In)
7	SGX Nikkei Future	H	H	H (Out) / M (In)	M	M	M(Out) / U(In)	U	U	U (Out)/ Z(In)	Z	Z	Z(Out) / H(In)
8	SGX Nikkei Future	H	H	H (Out) / M (In)	M	M	M(Out) / U(In)	U	U	U (Out)/ Z(In)	Z	Z	Z(Out) / H(In)

H, M, U and Z refer, respectively, to the March, June, September and December expiry month for the futures contracts

Parameters

Table 4. Parameters

Length of Roll Period (k,j)	For an Index Component (k,j,t), the number of days in which the future will roll from one contract to another, as defined in the <i>Index Description table</i> .
Roll Period (k,j,t)	For the Index Component (k,j,t), a period which is from and including the Roll Start Date to and including the Roll End Date.
Roll Day (k,j,t)	For the Index Component(k,j,t), on day t, the nth Index Business Day within the Roll Period.
Roll Start Date	The Roll Start Date of the Roll Period, which is “x-1” Index Business Days prior to the Roll End Date, where “x” is equal to the Length of Roll Period (k,j).
Roll End Date	The Roll End Date of the Roll Period, which is “REDL” Index Business Days prior to the Last

	Trade Date. Please refer to the Index Description Table for “REDL”.
Index Component (k,j,t)	Price of the Index Component (k, j, t) on Index Business Day t. Please refer to the <i>Index Description table</i> .
Index Component (k,j,t,In)	Price of the Rolling In Index Component (k, j, t) on Index Business Day t. Please refer to the <i>Roll Specification Table</i> .
Index Component (k,j,t,Out)	Price of the Rolling Out Index Component (k, j, t) on Index Business Day t. Please refer to the <i>Roll Specification Table</i> .
Rolling Out Index Component (k, j, t)	Refers to an Index Component (i, j, k, Out) from which the strategy is synthetically exiting during the Roll Period.
Rolling In Index Component (k, j, t)	Refers to Index Component (i, j, k, In) in which Index is synthetically taking a position during the Roll Period.

General Definitions

Table 5. Definitions

Affected Index Component	An Index Component affected by an Extraordinary Event or a Market Disruption Event.
Base Currency (j)	In respect of an Index, the currency in which the relevant Index Component(k,j,t) is traded.
Component Business Day (j)	A day which is an Exchange Business Day (j) and a day that does not fall on or one Weekday before July 4, December 25 and January 1.
Excess Return Index	The Excess Return Index represents the performance of a synthetic, unfunded exposure to the Components of the Index, that is, the Index tracks what an investor would receive if it purchased or sold the futures contracts underlying the Index without taking into consideration the cost of investment capital.
Exchange (j)	With respect to an Index Component(k,j,t), the relevant exchange or quotation system on which such an Index Component is traded as specified in table 2 above.
Exchange Business Day (j)	A day on which Exchange (j), as defined in the <i>Index Description table</i> , is scheduled to be open (or would have been but for the occurrence of a Disruption Day), for an Index Component (k,j,t).
First to Expire Contract	The Index Component with the nearest Last Trade Date.
Index Business Day or Index Calculation Day	In respect of an Index, any day which is both a London Business Day and a Component Business Day with respect to the relevant Index Component.
Index Component	Any component which complies with the eligibility criteria listed in the Index Description table, including any replacement of it as a result of the application of the provisions contained in this document.
Index Currency	In respect of an Index, the currency in which the relevant Index is calculated, as specified in the Index Description table.

Index Publication Level (j)	On any Index Business Day t, the Index Publication Level means the level of the Index (k,j,t).
Index Rebalance (k,j,t)	In respect of an Index Business Day t, the level of the Index (k,j,t) on two Index Business Days before the last Roll Start Date.
Index Component Rebalance (k,j,t, In)	In respect of an Index Business Day t, the level of the Index Component (k,j,t,In) on two Index Business Days before the last Roll Start Date.
Index Component Rebalance (k,j,t, Out)	In respect of an Index Business Day t, the level of the Index Component (k,j,t,Out) on two Index Business Days before the Roll Start Date preceding the last Roll Start Date.
Index Component Rebalance (k,j,t)	In respect of an Index Business Day t, the level of the Index Component (k,j,t) on two Index Business Days before the last Roll Start Date.
Index Value	The level of the Index (k,j,t).
Last Trade Date	Last date that the Index Component is available for trade.
London Business Day	A day (other than a Saturday or Sunday) on which commercial banks are open for general business in London.
Other Input Data	Means any data or information used in order to determine the inclusion, removal, weighting or quantity of an asset as an Index Component and which is not itself an Index Component.
Rebalance	In respect of an Index, it means a change in the weights or roll or a change in the Index Component from First to Expire Contract to Second to Expire Contract.
Second to Expire Contract	The Index Component with the second nearest Last Trade Date.
Settlement Price	In respect of an Index Component, the official settlement price (however described under the rules of the relevant exchange or its clearing house) published by the Exchange of the Index Component or its clearing house for the relevant futures contract.
Weekday	A day of the week other than Sunday or Saturday.
Extraordinary Events	Means any of the following events or circumstances as determined by the Administrator: <ul style="list-style-type: none"> a) it is not commercially reasonable, or that it is impractical or impossible, for the Administrator to obtain the input data or permissions to use input data. b) an Index Change in Law <p>Index Change in Law means any applicable law or regulation, the imposition of restrictions on buying or selling, or any decision or promulgation of any change in the interpretation by any court, tribunal or regulatory authority of any applicable law or regulation in respect of which the Administrator determines that it has become illegal to hold, acquire, or dispose of or use of any Index Components (or parts thereof), any Other Input Data or any relevant hedge positions relating to the Index or there is a materially increased cost of trading in an Index Component or any related hedge for the Administrator (including, without limitation, due to any increase in tax liability, decrease in tax benefit or other adverse effect on its tax position);</p>

- c) any event or circumstance that means the value of an Index Component or any Other Input Data becomes unreliable;
- d) an Index Component Event or Other Input Data Event;

an **Index Component Event**

Index Component Event means that (a) (i) the permanent discontinuation of trading in the Index Component on the Exchange (if any) or in the relevant market; (ii) the disappearance of, or of trading in, the Index Component; (iii) the disappearance or permanent discontinuance or unavailability of the relevant Settlement Price, or (b) the announcement by the relevant sponsor or price source, Exchange (if any) or any relevant regulatory authority or industry body, of forthcoming action that would result in the occurrence of (a) (i) to (iii), whether or not such event actually occurs;

Other Input Data Event means (i) the permanent discontinuation or unavailability of the relevant Other Input Data; or (ii) the announcement by the relevant provider or price source, or any relevant regulatory authority or industry body, of forthcoming action that would result in the occurrence of (i), whether or not such event actually occurs.

- e) a material change in the formula or method by which the value of an Index Component is calculated, such change being in definition of the underlying future contracts as announced by the administrator of the relevant Index Component;
 - f) a material change in the formula or method by which the value of any Other Input Data is calculated by the provider of the relevant Other Input Data;
 - g) a closure of the markets denominated in a relevant currency other than for ordinary public holidays, or a restriction or suspension in trading in these markets that would materially impact the determination arising in the construction or calculation of the Index;
 - h) the failure, suspension or postponement of any calculation within the Index strategy in respect of any Index Business Day, any event resulting in a breakdown in any means of communication or a procedure normally used to enable the determination of an Index Value;
 - i) any other event that either (i) has a material impact on the ability of the Administrator to perform its duties, or (ii) in the sole determination of the Administrator, serves to frustrate the purpose or aims of the Index strategy (for example if the Administrator determines at any time that there is a material risk of an Index Value becoming negative), or (iii) constitutes commercially reasonable grounds for the termination of the Index.
 - j) any other event that would make impossible or infeasible, technically or otherwise, to calculate, compute, compile, hedge and/or maintain the Index as such or that would make the Index non-representative in respect of market prices, or that undermines the strategy or objectives of the Index, in each case, as determined by the Administrator.
-

Market Disruption Events

Means, the occurrence of any of the following events or circumstances:

- (a) **Trading Disruption:** The occurrence, in respect of any Index Component, of any suspension of or limitation imposed on trading by the relevant Exchange or Exchanges and whether by reason of movements in price exceeding limits permitted by the relevant Exchange or a change in either (i) the liquidity of any Index Component or (ii) the trading volume, terms or listing of any Index Component;
- (b) **Price Disruption:** means, with respect to an Index Component or Other Input Data, in respect of an Index Calculation Day the unavailability of the Settlement Price, or the level, or price, rate or other value for any of, or data or information of any Index Component or Other Input Data used in order to determine the inclusion, removal, weighting or quantity of an asset as, an Index Component are either (i) not available due to the failure of any price source to calculate, announce or publish the Settlement Price or any other such data or information or (ii) available but do not represent accurately and reliably the market liquidity and tradable levels, as determined by the Calculation Agent in good faith and in a commercially reasonable manner.

For the avoidance of doubt, if the relevant price source used for the calculation of the relevant data is not available but an alternative price source covering the same data is available, the Administrator would be entitled to use, subject to compliance with any applicable licence requirements, such alternative price source for such purposes and, therefore, no Price Disruption would be deemed to have occurred.

- (c) **Exchange Disruption:** The occurrence, relating to any Index Component of any event that disrupts or impairs, as determined by the Administrator, the ability of market participants in general to effect transactions in, or to obtain market values for, any Index Component.
- (d) **Early Closure:** The closure on any Exchange Business Day of the relevant Exchange in respect of any Index Component before its scheduled closing time, unless such earlier closing time is announced by such Exchange at least one hour before the earlier of (i) the actual closing time for the regular trading session on such Exchange on such Exchange Business Day and (ii) the submission deadline for orders to be entered into the Exchange system for execution at the scheduled closing time on such Exchange Business Day.

Disruption Day

Means any Exchange Business Day or Index Business Day on which a relevant Exchange fails to open for trading during its regular trading session or on which a Market Disruption Event has occurred.

5. Publication of the Index Value

Calculation and Publication of the Index Level

Each Index will be calculated by the Administrator as described in this Methodology document (*Index Specifications* Section) and subject to the provisions in the *Adjustments and corrections* Section.

Each Index will be published on Bloomberg as set out in the Index Description above or any successor pages thereto, and/or on any other data provider's system or any website that the Administrator deems appropriate.

Calculation and publication of each Index in respect of the relevant Index Business Day will take place at or shortly after 11:00 am Madrid time on the immediately following Index Business Day.

Adjustments and corrections

The Administrator acts in a commercially reasonable manner to accurately calculate and maintain its Indices. However, errors in the Index determination process may occur from time to time for a variety of reasons (internal or external) and therefore, cannot be completely ruled out.

- The Administrator retains the right to delay publication of each Index if it reasonably believes there are circumstances that prevent the correct calculation of a specific Index.
- In the event that an Index Value is amended after it is initially published, but before the publication of the following Index Value, the amended relevant Index Value will be considered the official fixing level and used in all applicable calculations under this Methodology.
- The Administrator may determine the Index Component price, or composition, and/or weighting, and may require the price of the Index to be amended either with immediate or retrospective effect.

Please see BBVA Index Administration Error Correction Policy for further details, which is published on the BBVA Quantitative Investment Strategies website <https://www.bbvacib.com/gis-regulatory/>

6. Consequences of a Disruption Day

If any Index Business Day is a Disruption Day in respect of one or more Affected Index Components, or Other Input Data, the Administrator will aim to calculate and publish the Index Level and (where necessary) Rebalance the Index on such Index Business Day using the last price, level or rate which was available for the Affected Index Component or Other Input Data. Also, the Administrator may shift any Rebalance to the following Index Business Day.

However, if the Administrator determines the last price, level or rate (as applicable) does not reflect the economic reality of the Affected Index Component or Other Input Data, the calculation and publication of the Index Level may be postponed to the first succeeding Index Business Day which is not a Disruption Day, unless each of the five (5) Index Business Days following the initial Disruption Day for any Component Other Input Data, is also a Disruption Day, in which case the Administrator will determine whether or not the circumstances causing the Disruption Day constitute an Extraordinary Event, and:

- if an Extraordinary Event has occurred, the Administrator will adjust the Index Level in accordance with the provisions of Section *Consequences of an Extraordinary Event*;
- if an Extraordinary Event has not occurred, the Administrator shall
 - resume the calculation and publication of the Index Level and the rebalancing of the Index using the last value which was available for the Affected Index Component(s) or Other Input Data; or,
 - if the Administrator determines that the use of the last value for the Affected Index Component(s) or Other Input Data would result in an Index Level that is not commercially reasonable, use its good faith estimate based on estimated or adjusted data of the value that would prevail on such day but for the occurrence of the Disruption Day and to calculate and publish the Index Level and Rebalance the Index accordingly. Also, the Administrator may shift any Rebalance to the following Index Business Day.

7. Consequences of an Extraordinary Event

If an Extraordinary Event occurs in respect of one or more Affected Index Components or Other Input Data, then the Administrator will use commercially reasonable endeavours to make the relevant adjustment in the relevant Index on the date on which the Extraordinary Event is determined or within five (5) Index Business Days by applying the following consequences. The Affected Index Component price, level or rate (as applicable) or Other Input Data Settlement

Price, will be determined as defined below, preserving (non-exhaustive list): (i) the economic reality, (ii) the Index objective, and (iii) similar treatment to prior similar events.

The Administrator, for the period between the date on which the Extraordinary Event is determined and five (5) Index Business Days following such date (the “**Interim Period of the Extraordinary Event**”), will choose to apply any of the following provisions:

Index Component or Other Input Data Successor

If the Affected Index Component is replaced by a successor such successor shall be deemed to be the Index Component, unless the Administrator determines that the inclusion of such successor in the Index will not preserve the Index objective.

If no successor exists, or if it exists but it does not preserve the Index objective, the Administrator will apply any of the sections below.

Removal and Reweighting of the Index Component

The Administrator will remove the Affected Index Component from the Index and continue to calculate and publish the Index Level without such Index Component or any replacement therefor and either (i) apply the weighting or exposure of the Index to the Affected Index Components on a pro rata basis to the remaining Index Components, or (ii) not reweight the Index and value the Affected Index Component at zero (0), unless the Administrator determines that removal of the Affected Index Component would fail to preserve the Index objective, or determines in any other manner the re weighting as deemed appropriate ensuring the Index reflects both Index objective and economic reality.

Substitution of the Index Component or Other Input Data

The Affected Index Component or Other Input Data shall be replaced by the Administrator with another instrument or input data with, in the opinion of the Administrator, substantially similar characteristics as the Affected Index Component or Other Input Data.

Termination

If the Administrator determines that there is no successor and it is unable to make an adjustment to the Index in accordance with the provisions of the sections above that would preserve the Index objective, the Administrator shall terminate the Index. Any such termination shall follow

the provisions contained in the BBVA Index Administration Cessation and Material Change Policy and shall be announced as per such Policy.

The occurrence of Extraordinary Events or a Disruption Day, may lead to a change in the way the Index is calculated or constructed. In such events, BBVA would follow the provisions contained in the BBVA Index Administration Cessation and Material Change Policy and such announcements as per such Policy will be published on the BBVA Quantitative Investment Strategies website.

8. Approval and review of the Methodology

Approval of this Methodology is done by the BBVA Index Administration and Management team (henceforth, “BIAM”) based on information provided by BOAT which includes (without limitation) an analysis of the related input data, the robustness of this Methodology and independent implementation of the model.

The Indices are rules-based indices clearly stated in this Methodology. Prior to the approval of the Index, the Methodology and the related input data has been subject to review and verification of its robustness and appropriateness. Changes to the Methodology can only be decided by the BIAM with the oversight of the BBVA Index Oversight Group.

Non-periodic reviews of the Methodology will be performed based on the occurrence of extraordinary circumstances such as regulatory changes or when the design of the Indices are not fit for the purpose of representing the market or economic reality that it intends to measure.

9. Material Changes and Cessation

The Indices and their methodologies may be subject to cessations or changes (including material changes) which are subject to the relevant procedures. Please refer to the BBVA Index Administration Cessation or Material Change Policy on the BBVA Quantitative Investment Strategies website for more details.

10. Discretion and Expert Judgement

Any discretion which may need to be exercised in relation to the determination of the relevant Index, the selection of the Index Component (if applicable) or any other relevant decisions in relation to the Index pursuant to the provisions of the Methodology shall be made in accordance with the BBVA Index Administration Discretion and Expert Judgement Policy, which is available

on the BBVA Quantitative Investment Strategies website. For the avoidance of doubt, the BBVA Index Administration Discretion and Expert Judgement Policy specifies the factors which should be taken into account (including the use of input data and the hierarchy that will generally be applied to determine the most appropriate input data) when exercising discretion and expert judgement.

Should the exercise of such discretion give rise to conflicts of interest, these will be managed in accordance with the BBVA Index Administration Conflicts of Interest Policy which is available on the BBVA Quantitative Investment Strategies website.

Disclaimer

This document and its contents (hereinafter, the **"Document"**), have been prepared by Banco Bilbao Vizcaya Argentaria, S.A. and/or one of its affiliates (collectively, **"BBVA"**) and are subject to changes without prior notice. BBVA shall not be liable for failing to give notice of such changes or to update the contents hereof.

It is not possible to invest directly in an index. Exposure to assets or strategies represented by the relevant Index is made through the entry into of, or the acquisition of (as applicable), any transaction or financial instrument, product or investment (each, a **"Product"**) that at any time may be related or linked to, based on, developed in connection with, or may otherwise use or track the relevant Index. BBVA does not endorse or make any representation or warranty, express or implied, in connection with any transaction or any Product that references the relevant Index including as to the advisability of purchasing or entering into a Product or the results to be obtained by any party using the relevant index in connection with a Product. The Document contains no provisions relating to any Product. Furthermore, BBVA has no obligation or liability in connection with the administration, marketing or trading of any such Product. The conclusion of any transaction with BBVA (if any) is subject to BBVA internal approvals and formal agreement, none of which is (or shall be deemed to be) given in, or contemplated by, this Document. All statements, information and data in this Document are provided for information purposes and shall not in any case be deemed to constitute an offer, invitation, solicitation, investment advice or a recommendation to adopt any investment strategy, to enter into any transaction or to trade, nor shall they form the basis of any contract, commitment or investment decision of any kind.

During the course of its businesses, BBVA may enter into or promote, offer or sell Products that may be related or linked to, based on, developed in connection with, or may otherwise use or track the relevant Index. In addition, BBVA may have, or may have had, interests or positions, or may buy, sell or otherwise trade positions in or relating to the relevant Index or any of its components or may invest or engage in transactions with other persons, or on behalf of such persons, relating to any of these. Such activity could have an impact, positive or negative, on the level of the relevant Index. BBVA does not have any duty (a) to consider the circumstances of any person when participating in such transactions or (b) to conduct themselves in a manner that is favourable to anyone with exposure to the relevant Index.

This document and all of the information contained in it, including without limitation all text, data, graphs, charts (collectively, the **"Information"**) is the property of BBVA and/or its licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (collectively, with BBVA, the **"Information Providers"**) and is provided for informational purposes only. The Information may not be modified, reverse-engineered, reproduced or disseminated in whole or in part without prior written permission from BBVA. All rights in the Information are reserved by BBVA and/or its Information Providers.

Historical performance of the relevant Index should not be taken as an indication of future performance, and no assurance can be given as to the levels or performance of the relevant Index on a future date. Past performance may be simulated past performance (including back-testing) which may involve the relevant Index methodology adjustments where necessary. In calculating hypothetical back-tested Index levels,

BBVA may have applied the disruption provisions specified in this Document differently than it otherwise would have applied such provisions in a “live” calculation scenario.

This Document does not constitute investment advice, legal advice, tax advice or personal recommendation. Before contracting any Product relating to the relevant Index, you should evaluate based on your personal circumstances the financial, market, legal, regulatory, credit, tax and accounting risks, the merits and the terms and conditions and consequences involved of exposure to the relevant Index and any related Product and consult your own advisors. BBVA is not providing any such advice.

BBVA makes no representation whatsoever, whether express or implied, as to the suitability for you of the relevant Index to track relevant markets’ performances, or otherwise relating to the Index or any Product with respect thereto, or of assuming any risks in connection therewith. BBVA has no obligation to take the needs of any party into consideration in determining, composing or calculating the relevant Index. The relevant Index may be derived from sources, including market prices, data and other information, that are considered reliable, but BBVA does not warrant their completeness or accuracy or any other information furnished in connection with the relevant Index.

BBVA does not guarantee the accuracy or completeness of the relevant methodology, nor that there will be no errors or omissions in the calculation or publication of the Indices. BBVA shall not have any liability for any such errors or omissions, but will use commercially reasonable endeavours to correct any that occur. BBVA has no obligation to point out errors in the Index to third parties including but not limited to investors and/or financial intermediaries in respect of any Product linked thereto. Neither publication of the Index by BBVA nor the licensing of the Index for its use in connection with any financial Product constitutes a recommendation by BBVA to invest in such a financial Product.

BBVA reserves the right to amend or adjust the methodology from time to time in accordance with the rules governing the relevant Index and accepts no liability for any such amendment or adjustment.

BBVA is not under any obligation to continue the calculation, publication or dissemination of the Indices and accept no liability for any suspension, interruption or cessation in the calculation thereof which is made in accordance with the rules governing those. Therefore, BBVA reserves the right to terminate the relevant Index at any moment. Users of the Indices should ensure that they have put in place their own fallbacks and contingency provisions in the event any of the Indices are not available or in case of Index discontinuation or in the event that there is a change to the relevant Index that results in it no longer being suitable for the users.

BBVA does not accept any liability for any action taken by you or any third party in reliance on the matters stated in this Document, nor for any direct or indirect damage, cost or loss of any nature whatsoever arising out of any error or inaccuracy in it, for any determination made or anything done (or omitted to be determined or done) in respect of any Index or any use to which any person may put the relevant Index or the levels of the relevant Index in any Product. This Document is not intended for distribution to, or to be used by, any person or entity in any jurisdiction or country which distribution or use would be contrary to law or regulation.

BBVA has policies and procedures to identify, consider and manage potential conflicts of interest that may arise in certain circumstances (please see Conflicts of Interest policy available at BBVA Quantitative Investments Strategies website).

No part of this Document may be (i) copied, photocopied or duplicated by any other form or means (ii) redistributed or (iii) quoted, without the prior written consent of BBVA, (iv) used in another way vs the intended purpose of the sharing of the document. It is understood that you accept all of the warnings and conditions contained herein in its entirety.