20 DECEMBER 2022

SUPPLEMENT 3/2022 TO THE GSSP BASE PROSPECTUS 9



BARCLAYS BANK PLC (Incorporated with limited liability in England and Wales)

Pursuant to the Global Structured Securities Programme

Introduction

This supplement dated 20 December 2022 (the "Supplement") is supplemental to, and must be read in conjunction with, the Securities Note relating to the GSSP Base Prospectus 9 dated 30 June 2022 (as supplemented by Supplement 1/2022 dated 19 August 2022 and Supplement 2/2022 dated 12 December 2022, the "Base Prospectus 9 Securities Note") as prepared by Barclays Bank PLC in its capacity as issuer (the "Issuer") which, together with the Issuer's Registration Document 9/2022 dated 1 June 2022 (as supplemented on 24 August 2022 and 7 October 2022 and as may be further supplemented from time to time, the "Registration Document 9/2022"), constitutes a base prospectus drawn up as separate documents (the "Base Prospectus") for the purposes of Article 8 of Regulation (EU) 2017/1129 (as amended, the "EU Prospectus Regulation") in respect of its Global Structured Securities Programme (the "Programme").

This Supplement constitutes a supplement in respect of the Base Prospectus for the purposes of Article 23 of the EU Prospectus Regulation. This Supplement has been approved as a supplementary prospectus by the Central Bank of Ireland (the "CBI") as competent authority under the EU Prospectus Regulation. The CBI only approves this Supplement as meeting the standards of completeness, comprehensibility and consistency imposed by the EU Prospectus Regulation. Such approval should not be considered as an endorsement of the Issuer or the quality of the securities (the "Securities") that are the subject of this Supplement. Investors should make their own assessment as to the suitability of investing in the Securities.

The Issuer accepts responsibility for the information contained in this Supplement and declares that, to the best of its knowledge, the information contained in this Supplement is in accordance with the facts and contains no omission likely to affect its import. Save as disclosed in this Supplement, no significant new factor, material mistake or inaccuracy relating to the information included in the Base Prospectus (as supplemented by this Supplement), is capable of affecting the assessment of securities issued pursuant to the Base Prospectus has arisen or been noted, as the case may be, since the publication of the Base Prospectus (as supplemented by this Supplement at the date hereof) by the Issuer.

Purpose

The purpose of this Supplement is to:

- (i) include a description of the Patrimoine Protect 90 Index in the Base Prospectus 9 Securities Note;
- (ii) amend each of the sections entitled "Terms and Conditions of the Securities" and "Risk Factors" of the Base Prospectus 9 Securities Note to include information relating to the Patrimoine Protect 90 Index; and
- (iii) make certain changes in the "Risk Factors" section of the Base Prospectus 9 Securities Note.

Updates and supplements

A) "Description of the Patrimoine Protect 90 Index"

A new section entitled "Patrimoine Protect 90 Index" as set out in Schedule 1 attached hereto shall be inserted immediately after the end of the sub-section entitled "Atlas Protection Indices" from the section entitled "Description of Barclays Indices" on page 498 of the Base Prospectus 9 Securities Note (and the Table of Contents on pages 10 to 12 of the Base Prospectus 9 Securities Note shall be deemed to be updated accordingly).

B) "Risk Factors"

The section entitled "Risk Factors" on pages 13 to 81 of the Base Prospectus 9 Securities Note shall be amended, updated and supplemented by:

- 1. the terms set out in Schedule 2 attached hereto; and
- 2. inserting a new paragraph (c) under the existing Risk Factor 4.14 (Additional risks associated with depository receipts) immediately after paragraph (b) (There is a risk of non-recognition of beneficial ownership) on page 49 as follows:

"(c) There is a risk of Delisting occurring in relation to the depositary receipts

If a Delisting occurs in relation to the underlying ADRs or GDRs of the Securities, the ADRs or GDRs become exchangeable for domestic common shares held in the country of domicile of the share issuer. Investors may lose some or all of their investment if the conversion of the ADRs and GDRs into common shares is not possible or if such conversion results in an unfavourable outcome. Further, in the event that converted shares are not freely transferable, meaning for example that they may only be transferred to other foreign investors who previously held ADRs and GDRs, this significantly reduces the possibility of recovering all or some of the original investment and, therefore, investors may suffer a significant loss on the Securities.".

To the extent that there is any inconsistency between (a) any statement in this Supplement (in relation to the Base Prospectus) and (b) any other statement in, or incorporated by reference in the Base Prospectus, the statements in (a) above shall prevail.

In accordance with Article 23(2a) of the EU Prospectus Regulation, investors who have already agreed to purchase or subscribe for securities pursuant to the Base Prospectus before this Supplement is published, and for whom any of the information in this Supplement relates to the issue of the relevant Securities (within Article 23(4) of the EU Prospectus Regulation) have the right, exercisable within three working days after the publication of this Supplement, to withdraw their acceptances, provided that the significant new factor, material mistake or material inaccuracy to which this Supplement relates arose or was noted before the closing of the offer period or the delivery of the securities, whichever occurs first. Investors may contact the relevant distributor of

such securities in connection therewith should they wish to exercise such right of withdrawal. The final date of such right of withdrawal is 23 December 2022.



The date of this Supplement is 20 December 2022

Schedule 1

PATRIMOINE PROTECT 90 INDEX

Dated: 20 December 2022

The information set out in this section "Index Description" ("Index Description") is an overview of the Patrimoine Protect 90 Index. It is summarised from, and is qualified in its entirety by, the Index Rules (as defined below), and should be read in conjunction with the Index Rules.

The complete rules and methodology applicable to the Patrimoine Protect 90 Index are set out in the relevant index rules document (the "**Index Rules**", as may be supplemented, updated or replaced from time to time by the Index Sponsor). The Index Rules are available upon request from the Index Sponsor.

A prospective investor in Barclays Index Linked Securities where one or more of the Underlying Assets is an Index (as defined below) should read the information below and should carefully review the risk factors in the sub-section "Risks associated with Securities linked to specific types of Underlying Asset(s) - Barclays Indices" and the sub-section "Risks associated with conflicts of interest and discretionary powers of the Issuer and the Determination Agent" as set out in the section of the Securities Note entitled "Risk Factors" before purchasing any Barclays Index Linked Securities.

1. **Introduction**

The Patrimoine Protect 90 Index (the "**Index**") is a notional rules-based proprietary index which Barclays Bank PLC or its successor(s) (the "**Index Sponsor**") may create from time to time. The Index Sponsor is responsible for the administration of the Index.

The Index Sponsor has appointed Solactive AG (the "Index Calculation Agent") to calculate and maintain the Index. For the avoidance of doubt, references below to the Index Sponsor being responsible for calculations and other determinations and maintenance of the Index include the Index Calculation Agent acting on behalf of the Index Sponsor. The Index Sponsor may remove the Index Calculation Agent and subsequently appoint a successor Index Calculation Agent in its sole and absolute discretion.

The name of the Index is "Patrimoine 90 Protect Index", where "90" denotes the Protection Level (without the percentage symbol) applicable to the Index.

Below, we describe:

- the objective of the Index and overview (section 2)
- how the level of the Index is calculated (section 3)
- how the value of the Lookback Call is calculated (section 4)
- how the carrying value of the Lookback Put is calculated(section 5)
- how the Adjustment Index Component Level is calculated (section 6)
- how the Roll Date and Expiration Date are determined (section 7)
- how the Theoretical Lookback Call and Roll Condition are determined (section8)
- how the amount of the cash component of the Index is calculated (section 9)
- definitions and mathematical functions (section 10)
- the consequences of certain market disruption events and potential adjustment of index events (section 11)
- the manner in which the Index sponsor may terminate the Index or change its methodology (section 12)

2. Objective and overview of the Index

Index: The Index is an investable index designed for use in financial products (including Barclays Index Linked Securities). The Index reflects an investment strategy (the "**Strategy**") in relation to the Fund and a Cash Rate (as described immediately below, and referred to as the "**Index Component**"). The Strategy is long a hypothetical position in (i) the Index Component and (ii) a put option (known as the "**Lookback Put**") in relation to the Index Component. The Index is "synthetic" or "notional", which means it reflects an investment in the Index Component and in the Lookback Put without physically owning such assets. There are no assets to which any investor in a product linked to the Index has any direct or indirect ownership interest or other entitlement.

Index Component: The Index Component is another Barclays Index, the name and ticker (for information purpose only) of which will be specified in the Index Rules. It is a volatility-controlled total return index which reflects the performance of a risk-adjusted exposure to the Carmignac Portfolio – Patrimoine Europe Class F EUR fund (*Bloomberg Ticker: CRPPEFE LX <Equity>*), (the "**Fund**") and a Cash Rate (as defined in section 6). The primary objective of the volatility feature is to manage the risk of the Index Component when it is at or below a target volatility level of 4 per cent. This aims to reduce exposure to the Fund in uncertain volatile markets which is empirically observed during market downturns. The volatility feature means that when the realised volatility of the Fund increases, exposure to the Fund decreases and to the Cash Rate increases, and vice versa. This dynamic allocation is implemented daily, and provides greater certainty with regard to the cost determination of the Lookback Call.

Lookback Call: The purpose of the lookback call option (the "Lookback Call") is to generate a synthetic exposure to the Index Component and related Lookback Put in order to preserve a specific Protection Level (as defined in section 10 Related Definitions) as a percentage of the highest value achieved by the Strategy since its inception until a predetermined date (excluding the three Index Business day before and after an Expiration Date ("Adjustment Period")). Broadly, the value of the Lookback Call is the sum of (i) a linear exposure to the Index Component (subject to temporary adjustment during the Adjustment Period) and (ii) the Lookback Put, in their respective proportions (see section 4 Calculation of the Lookback Call). As described in section 3 Calculation of Index Level below, every time the Index reaches a new maximum value or upon expiration of the then current Lookback Call option (which occurs first), the relevant algorithm within the Index Rules attempts to reset the exposure to the Index Component and Lookback Put (as components of the Lookback Call). If the condition under the Index Rules for such reset is not satisfied, then thereafter the Index will only provide exposure to the Cash Amount (as defined in section 5 Carrying Value of the Lookback Put) with no further participation in the performance of the Index Component.

Calculation of Index Level: Broadly:

- On the Index Base Date, the Index is equal to 100;
- Thereafter, the Index Level will reflect the value of the Lookback Call option or, in certain circumstances, a Cash Amount.
- The initial Lookback Call option will expire on the Initial Expiration Date. The Lookback Call option will be reset or "rolled" (meaning that the relevant algorithm within the Index Rules will substitute the "old" Lookback Call option with the "new" Lookback Call option) every time both (i) the Index Level reaches a new high (Reset Day) and the Roll Condition is realised *OR* both (ii) when the Lookback Call option reaches its expiration (Expiry Day) and the Roll Condition is realised. The terms of the Lookback Call option (and thus its value) are then updated to reflect the new highest protection rate (being the percentage equal to the Protection Level of the highest Index Level since Index Base Date to such day), together with a new Expiration Date, new roll date, and other terms. In this manner, the protection of the Index Level being at least equal to the Protection Level percentage of the highest Index Level to the previous Reset Day or Expiry Day (as applicable) is extended to the next Expiration Date of the new Lookback Call option (and beyond to each following Expiration Date). The new Expiration Date may be not less than 60 days after the prior Expiration Date, and will not be more than two years after the prior Expiration Date.

• However, if on the relevant Reset Day or Expiry Day (as applicable) the Roll Condition is not met (Cash Lock Day), then the Index will become allocated to a Cash Amount (see section 9 Calculation of the Cash Amount) going forward. The Roll Condition is not met when the relevant algorithm within the Index Rules determines that the cost of a new Lookback Call option is above a certain threshold (see section 3 Calculation of the Index Level). In such case, thereafter 100% of the exposure of the Index is allocated to the Cash Amount (referred to as 'monetisation'), being a notional amount of cash on which notional floating interest accrues at the Cash Rate (see section 9 Calculation of the Cash Amount). Following a 'monetisation', the Index will have no further participation in the performance of the Index Component and the sole return on the Index will be derived from the floating rate of interest on the Cash Amount equal to the Cash Rate.

Fees and other deductions: The Index Component is calculated net of an adjustment factor equal to 0.90 per cent., expressed as an annual rate and deducted on a daily accrual basis. This deduction will act as a drag on the performance of the Index.

The Index, including the methodology and underlying assumptions, may not be successful in achieving its objective or in producing positive returns, or may not outperform any alternative investment strategy, including a direct investment in the Fund.

Rebalancing process: The Index is only exposed to a single Index Component together with the related Lookback Put and there is no rebalancing between such notional assets.

Publication of Index Level: The level of the Index (the "**Index Level**") will be calculated for each "**Index Business Day**", being a calendar day on which the sponsor of the Index Component publishes the level of such Index Component and falls on a TARGET Settlement Day, Business Day in Paris, day on which the Euronext Paris is scheduled to be open for trading during its respective trading sessions, and London Business Day. If for any reason there is no price or level of the Index Component for a specific day, then the Index Sponsor may defer, suspend or postpone the calculation and publication of the Index Level until the next Index Business Day.

Currency: The currency in which the Index is denominated (the "**Index Base Currency**") will be Euro.

3. Calculation of the Index Level

- 3.1 The Index Level on the date specified in the Index Rules as the index base date (the "**Index Base Date**") is equal to 100.0000.
- 3.2 Thereafter, the Index Level on each Index Business Day (t) will be calculated by the Index Sponsor as a *product* of:
 - (a) If the Index Business Day (t 1) immediately preceding the Index Business Day (t) is a Cash Lock Day:
 - (i) the Index Level on the Roll Date in respect to the Index Business Day (t), multiplied by
 - (ii) the value of the Cash Amount on Index Business Day (t), divided by the value of the Cash Amount on the Roll Date in respect to the Index Business Day (t);
 - (b) Otherwise:
 - (i) the Index Level on the Roll Date in respect to the Index Business Day (t), multiplied by
 - (ii) the value of the Lookback Call (as specified in section 4 below).

Where:

A "Cash Lock Day" means any Index Business Day (t) where either of the following conditions are satisfied:

- (a) the Index Business Day (t 1) immediately preceding the Index Business Day (t) is a Cash Lock Day; or
- (b) such Index Business Day (t) is an Expiry Day or Reset Day and the Roll Condition has not been satisfied.

An "**Expiry Day**" means any Index Business Day (t) which is the Expiration Date in respect of the Index Business Day (t - 1) immediately preceding such Index Business Day (t). Where such Index Business Day (t - 1) immediately preceding the Index Business Day (t) is also a Reset Day, such Index Business Day will not be an Expiry Day.

A "**Reset Day**" means an Index Business Day (t) other than an Expiry Day on which the Index Level is equal to the highest recorded level since (and including) the Index Base Date to (and including) any such Index Business Day (t).

The Index Level will be published as soon as reasonably practicable on https://indices.barclays and any other generally available information source that the Index Sponsor may select from time to time. The Index Sponsor may, subject to reasonable prior notice published on such website, change the name of the Index, the place and time of the publication of the Index Level and the frequency of publication of the Index Level.

4. Calculation of the Lookback Call

- 4.1 The value of the Lookback Call on the Index Base Date is equal to 1.000.
- 4.2 The value of the Lookback Call on each Index Business Day (t) that is not an Expiry Day shall be calculated by the Index Sponsor as the *product* of:
 - (a) the percentage specified in the Index Rules as the participation (the "Participation"), multiplied by
 - (b) the *exponential function* of (a) the percentage specified in the Index Rules as the product rate (the "**Product Rate**"), *minus* a percentage specified in the Index Rules as the index component fee (the "**Index Component Fee**"), *multiplied* by (b) the number of calendar days from (and including) Index Business Day (t) to (but excluding) the Expiration Date in respect of such Index Business Day (t), *divided* by the number of calendar days in a year specified in the Index Rules as the fee day count (the "**Fees Day Count**"), *multiplied* by
 - (c) the level of the Index Component as adjusted in accordance with section 6 below (the "**Adjusted Index Component Level**") on Index Business Day (t), *divided* by the Adjusted Index Component Level on the Roll Date in respect of the Index Business Day (t) (determined in accordance with section 7 below), *plus*
 - (d) the *exponential function* of (a) the Product Rate, *multiplied* by (b) the number of calendar days from (and including) Index Business Day (t) to (but excluding) the Expiration Date in respect of such Index Business Day (t), *divided* by the Fees Day Count, *multiplied* by
 - (e) the value of the Lookback Put as determined in accordance with section 5.1 below.
- 4.3 The value of the Lookback Call where an Index Business Day (t) is an Expiry Day shall be calculated by the Index Sponsor as the *product* of:
 - (a) the Participation, multiplied by
 - (b) the Adjusted Index Component Level on Index Business Day (t), *divided* by the Adjusted Index Component Level on the Roll Date in respect of the Index Business Day (t) (determined in accordance with section 7 below), *plus*

(c) the value of the Lookback Put on the Expiry Day as determined in accordance with section 5.2 below.

5. Carrying Value of the Lookback Put

- On each Index Business Day (t) from (but excluding) the Index Base Date to (but excluding) the Expiry Day, the Lookback Put will have a carrying value, which is calculated by the Index Sponsor as the *product* of:
 - (a) the value of the Cash Amount as determined in accordance with section 9 (the "Cash Amount") on Index Business Day (t) *divided* by the value of the Cash Amount on the Roll Date in respect of the Index Business Day (t) (determined in accordance with section 7 below), then *multiplied* by
 - (b) the sum of:
 - (i) the *product* of (A) value of variable M on Index Business Day (t), *multiplied* by (B) the *cumulative distribution function* of the *negative* of Amount 2 on Index Business Day (t), *minus*
 - (ii) the product of (A) the value of the variable K on the Index Business Day (t) multiplied by (B) the value of variable F on Index Business Day (t), and further multiplied by (C) the cumulative distribution function of the negative of Amount 1 on Index Business Day (t), plus
 - (iii) the *product* of (A) the value of variable X on Index Business Day (t), *multiplied* by (B) the value of variable H on Index Business Day (t).
- 5.2 On the Index Business Day (t) falling on the Expiry Day, the Index Sponsor will calculate the value of the Lookback Put as the *greater* of:
 - (a) zero (0), and
 - (b) the difference of:
 - (i) the product of (A) the value of the Cash Amount on Index Business Day (t), divided by the value of the Cash Amount on the Roll Date in respect of such on Index Business Day (t) (determined in accordance with section 7 below), then multiplied by (B) the value of variable L on Index Business Day (t), minus
 - (ii) the *product* of (A) the Participation, *multiplied* by (B) the Adjusted Index Component Level on Index Business Day (t), *divided* by the Adjusted Index Component Level on the Roll Date in respect of such on Index Business Day (t) (determined in accordance with section 7 below).

6. Calculation of the Adjusted Index Component Level

- 6.1 The value of the Adjusted Index Component Level on the Index Base Date is equal to 1.000.
- 6.2 The Adjusted Index Component Level for each following Index Business Day (t) shall be calculated by the Index Sponsor as the *product* of:
 - (a) the Adjusted Index Component Level on the immediately preceding Index Business Day (t-1), multiplied by;
 - (b) the sum of:
 - (i) (A) 1, plus (B) the value of a(t 1), multiplied by the product of (C) the Index Component Level on Index Business Day (t), divided by the Index Component

Level on the immediately preceding Index Business Day (t - 1), and minus 1, plus;

(ii) (A) 1, minus the value of a(t - 1), multiplied by (B) the difference of (I) the Cash Rate on the Index Business Day (t - 1) immediately preceding the Index Business Day (t), multiplied by (II) the number of calendar days from (and including) the Index Business Day (t - 1) immediately preceding the Index Business Day (t) to (but excluding) Index Business Day (t), divided by the amount specified in the Index Rules as the cash day count (the "Cash Day Count"), minus (III) the Index Component Fee multiplied by the number of calendar days from (and including) the Index Business Day (t - 1) immediately preceding the Index Business Day (t) to (but excluding) Index Business Day (t), divided by the Fees Day Count.

Where:

"a(t)" means:

- (a) two thirds of the Adjusted Index Component Level where Index Business Day (t) is three Index Business Days before the Expiration Date for the Index Business Day (t -1) immediately preceding such Index Business Day (t);
- (b) one third of the Adjusted Index Component Level where Index Business Day (t) is two Index Business Days before the Expiration Date for the Index Business Day (t 1) immediately preceding such Index Business Day (t);
- (c) the Adjusted Index Component Level where Index Business Day (t) is one Index Business Day before the Expiration Date for the Index Business Day (t 1) immediately preceding such Index Business Day (t); or
- (d) the lesser of (a) one (1), or (b) a(t -1) *plus* one third of the Adjusted Index Component Level.

"**a(t-1)**" means the value of a(t) on Index Business Day (t - 1) immediately preceding such Index Business Day (t).

The "Cash Rate" means in respect of an Index Business Day, the level of the €STR rate as displayed on Reuters page "EUROSTR=" or any successor page or if such a rate is not available, the rate as determined by the Index Sponsor.

The "Index Component Level" means, on each Scheduled Trading Day, the official closing price or value announced by the sponsor of the Index Component on such day.

A "**Scheduled Trading Day**" means, in respect of the Index Component, any day on which the relevant sponsor is scheduled to publish the level of such Index Component.

7. Determination of a Roll Date and Expiration Date

7.1 Roll Date

The Roll Date in respect of the Index Base Date is the Index Base Date. The Roll Date in respect of each following Index Business Day (t) shall be determined by the Index Sponsor as follows:

- (a) If Index Business Day (t 1) immediately preceding the Index Business Day (t) is (i) a Cash Lock Day; or (ii) a Reset Day and where the Roll Condition (as defined in section 8.3) is satisfied; or (iii) an Expiry Day and where the Roll Condition as defined in section 8.3) is satisfied, then the Roll Date in respect of such Index Business Day (t) will be the Index Business Day (t 1) immediately preceding the Index Business Day (t);
- (b) Otherwise, the Roll Date in respect of such Index Business Day (t) will be the Roll Date in respect of the Index Business Day (t 1) immediately preceding the Index Business Day (t).

7.2 Expiration Date

The Expiration Date in respect of the Index Base Date is the date specified in the Index Rules (the "Initial Expiration Date").

The Expiration Date in respect of each following Index Business Day (t) is determined by the Index Sponsor as follows:

- (a) where the Index Business Day (t 1) immediately preceding the Index Business Day (t) is a Cash Lock Day, then such Index Business Day (t) will be deemed to be the Expiration Date;
- (b) where the Index Business Day (t 1) immediately preceding the Index Business Day (t) is a Reset Day or Expiry Day and the Roll Condition is satisfied (as defined in section 8.3) on each day respectively, the Expiration Date will be calculated by the Index Sponsor as the *greater* of:
 - (i) the Index Business Day (t) which is 60 Index Business Days following Index Business Day (t 1) (the "Min Maturity"); and
 - (ii) longest Index Business Day determined by the Index Sponsor as a result of the Theoretical Lookback Call ((t − 1), t*) (the "Index Business Day (t*)") provided however that the value of the Theoretical Lookback Call ((t − 1), t*) is less than one.
- (c) Otherwise, the Expiration Date in respect of the Index Business Day (t) will be the Expiration Date in respect of the Index Business Day (t 1) immediately preceding the Index Business Day (t).

The Index Sponsor may determine that the Expiration Date in respect of any Index Business Day (t) is no longer an Index Business Day. Upon such event, the Expiration Date in respect of such Index Business Day (t) will be the Index Business Day immediately following such date. All Index Levels determined prior to such determination by the Index Sponsor shall remain unaffected.

8. Determination of a Theoretical Lookback Call and Roll Condition Calculation

8.1 Theoretical Lookback Call

The value of a theoretical lookback call option (the "**Theoretical Lookback Call**") depending on the Index Business Day (t) and Index Business Day (t*) will be calculated by the Index Sponsor as the *product* of:

- (a) the Participation, multiplied by
- (b) the exponential function of (a) the Product Rate, minus the Index Component Fee, multiplied by (b) the number of calendar days from (and including) Index Business Day (t) to (but excluding) Index Business Day (t*), divided by the Fees Day Count, plus
- (c) the *exponential function* of (a) the Product Rate, *multiplied* by (b) the number of calendar days from (and including) Index Business Day (t) to (but excluding) Index Business Day (t*), *divided* by the Fees Day Count, *multiplied* by
- (d) the value of the Theoretical Lookback Put as determined in accordance with section 8.2.

Where:

The Index Business Day (t*) is always greater than the Index Business Day (t).

8.2 <u>Theoretical Lookback Put</u>

The value of a theoretical lookback put option (the "**Theoretical Lookback Put**") depending on the Index Business Day (t) and Index Business Day (t*) will be calculated by the Index Sponsor as the *sum* of:

- (a) the product of (A) the value of variable C (t,t*), multiplied by (B) the cumulative distribution function of the negative of Amount 2 (t,t*), minus
- (b) the product of (A) the value of variable K (t,t^*) , multiplied by (B) the value of variable F (t,t^*) , and further multiplied by (C) the cumulative distribution function of the negative of Amount 1 (t,t^*) , plus
- (c) the *product* of (A) the value of variable $X(t,t^*)$, *multiplied* by (B) the value of variable $H(t,t^*)$.

8.3 Roll Condition

The Roll Condition on Index Business Day (t) shall be deemed satisfied provided that:

- (a) Index Business Day (t*) is equal to or greater than the Min Maturity number of Index Business Days; and
- (b) the value of the Theoretical Lookback Call is less than 1.

9. Calculation of the Cash Amount

The value of Cash Amount on the Index Base Date is equal to one. Thereafter, the value of the Cash Amount on each Index Business Day (t) will be calculated by the Index Sponsor as the *product* of:

- (a) the value of the Cash Amount on the Index Business Day (t 1) immediately preceding the Index Business Day (t), *multiplied* by
- (b) the exponential function of the product of:
 - (i) the Cash Rate on Index Business Day (t 1) immediately preceding the Index Business Day (t), *multiplied* by
 - (ii) the number of calendar days from (and including) the Index Business Day (t 1) immediately preceding the Index Business Day (t) to (but excluding) Index Business Day (t), *divided* by
 - (iii) the Cash Day Count.

10. Related Definitions and Mathematical Functions

"Amount 1" means, in respect of any Index Business Day (t) the amount calculated as the sum of:

- (a) the *quotient* of:
 - (i) the natural logarithm of the product of (A) the constant K on Index Business Day (t) multiplied by (B) the value of variable F on Index Business Day (t) then divided by (C) the value of variable M on Index Business Day (t), divided by
 - (ii) the *product* of (A) the Volatility *multiplied* by (B) the *square root* of the number of calendar days from (and including) Index Business Day (t) to (but excluding) the Expiration Date in respect of such Index Business Day (t) *divided* by (C) the Fees Day Count, *plus*

(b) the product of (a) one-half (0.5) multiplied by (b) the Volatility and multiplied by (c) the square root of the number of calendar days from (and including) Index Business Day (t) to (but excluding) the Expiration Date in respect of Index Business Day (t) divided by (d) the Fees Day Count.

"Amount 1 (t,t*)" means, in respect of on Index Business Day (t) and Index Business Day (t*), the amount calculated as the *sum* of:

- (a) the *quotient* of:
 - the natural logarithm of the product of (A) the constant K (t,t*), multiplied by
 (B) the value of variable F (t,t*), then divided by (C) the value of variable C (t,t*), divided by
 - (ii) the *product* of (A) the Volatility, *multiplied* by (B) the *square root* of the number of calendar days from (and including) Index Business Day (t) to (but excluding) Index Business Day (t*), *divided* by (C) the Fees Day Count, *plus*
- (b) the *product* of (a) one-half (0.5), *multiplied* by (b) the Volatility, and *multiplied* by (c) the *square root* of the number of calendar days from (and including) Index Business Day (t) to (but excluding) Index Business Day (t*), *divided* by (d) the Fees Day Count.

"Amount 2" means, in respect of any Index Business Day (t) the amount calculated as the difference of:

- (a) the *quotient* of:
 - (i) the natural logarithm of the product of (A) the constant K on Index Business Day (t), *multiplied* by (B) the value of variable F on Index Business Day (t), then *divided* by (C) the value of variable M on Index Business Day (t), *divided* by
 - (ii) the *product* of (A) the Volatility, *multiplied* by (B) the *square root* of the number of calendar days from (and including) Index Business Day (t) to (but excluding) the Expiration Date in respect of such Index Business Day (t), *divided* by (C) the Fees Day Count, *minus*
- (b) the *product* of (a) one-half (0.5), *multiplied* by (b) the Volatility, and *multiplied* by (c) the *square root* of the number of calendar days from (and including) Index Business Day (t) to (but excluding) the Expiration Date in respect of such Index Business Day (t), *divided* by (d) the Fees Day Count.

"Amount 2 (t,t*)" means, in respect of an Index Business Day (t) and an Index Business Day (t*), the amount calculated as the *difference* of:

- (a) the *quotient* of:
 - (i) the natural logarithm of the product of (A) the constant K (t,t*) multiplied by
 (B) the value of variable F (t,t*) then divided by (C) the value of variable C (t,t*), divided by
 - (ii) the *product* of (A) the Volatility *multiplied* by (B) the *square root* of the number of calendar days from (and including) Index Business Day (t) to (but excluding) Index Business Day (t*), *divided* by (C) the Fees Day Count, *minus*
- (b) the *product* of (a) one-half (0.5), *multiplied* by (b) the Volatility, and *multiplied* by (c) the *square root* of the number of calendar days from (and including) Index Business Day (t) to (but excluding) Index Business Day (t*), *divided* by (d) the Fees Day Count.

"Amount 3" means, in respect of any Index Business Day (t) the amount calculated as the difference of:

- (a) the *quotient* of:
 - (i) the sum of:
 - (A) the *natural logarithm* of the *product* of (I) the constant K on Index Business Day (t), *multiplied* by (II) the value of variable M on Index Business Day (t), then *divided* by (III) the value of variable F on Index Business Day (t), *plus*
 - (B) the *product* of (I) two (2), *multiplied* by (II) the variable $\mu(t)$ on the Index Business Day (t), and *multiplied* by (III) the number of calendar days from (and including) Index Business Day (t) to (but excluding) the Expiration Date in respect of such Index Business Day (t) *divided* by (IV) the Fees Day Count, *divided* by
 - (ii) the product of (A) the Volatility, multiplied by (B) the square root of the number of calendar days from (and including) Index Business Day (t) to (but excluding) the Expiration Date in respect of such Index Business Day (t), divided by (C) the Fees Day Count, minus
- (b) the *product* of (a) one-half (0.5) *multiplied* by (b) the Volatility and *multiplied* by (c) the *square root* of the number of calendar days from (and including) Index Business Day (t) to (but excluding) the Expiration Date in respect of such Index Business Day (t), *divided* by (d) the Fees Day Count.

"Amount 3 (t,t*)" means, in respect of an Index Business Day (t) and an Index Business Day (t*) the amount calculated as the *difference* of:

- (a) the *quotient* of:
 - (i) the sum of:
 - (A) the *natural logarithm* of the *product* of (I) the constant K (t,t*) *multiplied* by (II) the value of variable C (t,t*), then *divided* by (III) the value of variable F (t,t*), *plus*
 - (B) the product of (I) two (2) multiplied by (II) the variable μ and multiplied by (III) the number of calendar days from (and including) Index Business Day (t) to (but excluding) Index Business Day (t*) divided by (IV) the Fees Day Count, divided by
 - (ii) the *product* of (A) the Volatility *multiplied* by (B) the *square root* of the number of calendar days from (and including) Index Business Day (t) to (but excluding) Index Business Day (t*), *divided* by (C) the Fees Day Count, *minus*
- (b) the *product* of (a) one-half (0.5) *multiplied* by (b) the Volatility and *multiplied* by (c) the *square root* of the number of calendar days from (and including) Index Business Day (t) to (but excluding) Index Business Day (t*), *divided* by (d) the Fees Day Count.

"Amount 4" means, in respect of any Index Business Day (t) the amount calculated as the difference of:

- (a) the quotient of:
 - (i) the *natural logarithm* of the *product* of (A) the constant K on Index Business Day (t), *multiplied* by (B) the value of variable M on Index Business Day (t),

- then *divided* by (C) the value of variable F on Index Business Day (t), *divided* by
- (ii) the *product* of (A) the Volatility, *multiplied* by (B) the *square root* of the number of calendar days from (and including) Index Business Day (t) to (but excluding) the Expiration Date in respect of such Index Business Day (t), *divided* by (C) the Fees Day Count, *minus*
- (b) the *product* of (a) one-half (0.5), *multiplied* by (b) the Volatility, and *multiplied* by (c) the *square root* of the number of calendar days from (and including) Index Business Day (t) to (but excluding) the Expiration Date in respect of such Index Business Day (t), *divided* by (d) the Fees Day Count.

"**Amount 4 (t,t*)**" means, in respect of an Index Business Day (t) and an Index Business Day (t*), the amount calculated as the *difference* of:

- (a) the quotient of:
 - the natural logarithm of the product of (A) the constant K (t,t*), multiplied by
 (B) the value of variable C (t,t*) then divided by (C) the value of variable F (t,t*), divided by
 - (ii) the *product* of (A) the Volatility, *multiplied* by (B) the *square root* of the number of calendar days from (and including) Index Business Day (t) to (but excluding) Index Business Day (t*), *divided* by (C) the Fees Day Count, *minus*
- (b) the *product* of (a) one-half (0.5), *multiplied* by (b) the Volatility, and *multiplied* by (c) the *square root* of the number of calendar days from (and including) Index Business Day (t) to (but excluding) Index Business Day (t*), *divided* by (d) the Fees Day Count.

Constant "K" means the quotient of:

- (a) (i) the Participation divided by (ii) the Protection Level, multiplied by
- (b) the *exponential function* of (a) the Product Rate *minus* the Index Component Fee, *multiplied* by (b) the number of calendar days from (and including) the Roll Date in respect to an Index Business Day (t) to (but excluding) the Expiration Date in respect to such Index Business Day (t), *divided* by the Fees Day Count.

Constant **"K (t,t*)**" means the *quotient* of:

- (a) (i) the Participation divided by (ii) the Protection Level, multiplied by
- (b) the *exponential function* of (a) the Product Rate *minus* the Index Component Fee, *multiplied* by (b) the number of calendar days from (and including) Index Business Day (t) to (but excluding) Index Business Day (t*), *divided* by the Fees Day Count.

"MCR" means the percentage specified as such in the Index Rules. The MCR may be a negative value.

"Protection Level" means the percentage specified in the Index Rules.

The "cumulative distribution function" of a variable measures the probability of such variable taking a value less than or equal to a specific number in a standard normal distribution.

The "**exponential function**" of a variable means the Euler's number *e* raised to the power of a value equal to such variable.

The "natural logarithm" of a variable means the logarithm of such variable to the base of the Euler's number e.

Variable "C (t,t*)" on the Index Business Day (t) and Index Business Day (t*) will be calculated as the *product* of:

- (a) the Protection Level, multiplied by
- (b) the *exponential function* of (a) *minus* MCR, *multiplied* by (b) the number of calendar days from (and including) Index Business Day (t) to (but excluding) Index Business Day (t*), *divided* by the Cash Day Count, *multiplied* by
- (c) the highest Index Level reached by the Index during the period from (and including) the Index Base Date to (but excluding) on Index Business Day (t) *divided* by the Index Level on Index Business Day (t)

Variable "F" on Index Business Day (t) will be calculated as the product of:

- (a) the value of variable X on Index Business Day (t), multiplied by
- (b) the exponential function of the difference of:
 - (i) MCR *multiplied* by the number of calendar days from (and including) Index Business Day (t) to (but excluding) the Expiration Date in respect to such Index Business Day (t) *divided* by the Fees Day Count, *minus*
 - (ii) the Product Rate *multiplied* by the number of calendar days from (and including) Index Business Day (t) to (but excluding) the Expiration Date in respect to such Index Business Day (t) *divided* by the Fees Day Count.

Variable "**F** (t,t*)" in respect of the Index Business Day (t) and Index Business Day (t*) will be calculated as the product of:

- (a) the Protection Level, multiplied by
- (b) the exponential function of (a) minus Product Rate, multiplied by (b) the number of calendar days from (and including) Index Business Day (t) to (but excluding) Index Business Day (t*), divided by (c) the Fees Day Count.

Variable "H" on Index Business Day (t) will be calculated as the product of:

- (a) (i) one-half (0.5), multiplied by (ii) the square of the Volatility, then divided by (iii) variable $\mu(t)$ on Index Business Day (t), multiplied by
- (b) the difference of:
 - (i) the *product* of:
 - (A) the exponential function of (I) variable $\mu(t)$ on Index Business Day (t), multiplied by (II) the number of calendar days from (and including) Index Business Day (t) to (but excluding) the Expiration Date in respect to such Index Business Day (t), divided by (III) the Fees Day Count, multiplied by
 - (B) the value of constant K on the Index Business Day (t), raised to the power of (I) minus two (-2), multiplied by (II) variable $\mu(t)$ on Index Business Day (t), divided by (III) the square of the Volatility, multiplied by
 - (C) the *cumulative distribution function* of the *negative* of Amount 4 on Index Business Day (t), *minus*

- (ii) the product of:
 - (A) the *quotient* of (I) the value of variable X on the Index Business Date (t), *divided* by (II) the value of variable M on the Index Business Date (t), which is then raised to the *power* of (1) minus two (-2), *multiplied* by (2) variable μ (t) on Index Business Day (t), *divided* by (3) the *square* of the Volatility, *multiplied* by
 - (B) the *cumulative distribution function* of the *negative* of Amount 3 on Index Business Day (t).

Variable "**H (t,t*)**" in respect of the Index Business Day (t) and the Index Business Day (t*) will be calculated as the product of:

- (a) (i) one-half (0.5), multiplied by (ii) the square of the Volatility, then divided by (iii) variable μ , multiplied by
- (b) the difference of:
 - (i) the product of:
 - (A) the exponential function of (I) variable μ , multiplied by (II) the number of calendar days from (and including) Index Business Day (t) to (but excluding) Index Business Day (t*), divided by (III) the Fees Day Count, multiplied by
 - (B) the value of constant K (t,t*) raised to the power of (I) minus two (-2) multiplied by (II) variable μ , divided by (III) the square of the Volatility, multiplied by
 - (C) the *cumulative distribution function* of the *negative* of Amount 4 (t,t*), *minus*
 - (ii) the product of:
 - (A) the *quotient* of (I) the value of variable X (t,t*) *divided* by (II) the value of variable C (t,t*), which is then raised to the *power* of (1) minus two (-2), *multiplied* by (2) variable μ , *divided* by (3) the *square* of the Volatility, *multiplied* by
 - (B) the cumulative distribution function of the negative of Amount 3 (t,t^*) .

Variable "L" on Index Business Day (t) will be calculated as the *product* of:

- (a) the Protection Level, multiplied by
- (b) the value of variable Z on Index Business Day (t), multiplied by
- (c) (a) the highest Index Level reached by the Index during the period from (and including) the Index Base Date to (but excluding) on Index Business Day (t) *divided* by (b) the Index Level on the Roll Date in respect of the Index Business Day (t).

Variable " \mathbf{M} " on Index Business Day (t) will be calculated as the *greater* of the values of variable X and variable L on such day.

Variable "X" on Index Business Day (t) will be calculated as the *product* of:

- (a) the Protection Level, multiplied by
- (b) the exponential function of the difference of (I) (a) the Index Component Fee minus the Product Rate, then multiplied by (b) the number of calendar days from (and including) the Roll Date in respect to the Index Business Day (t) to (but excluding) Index Business Day (t) and (c) divided by the Fees Day Count and minus (II) (a)

MCR, multiplied by (b) the number of calendar days from (and including) Index Business Day (t) to (but excluding) the Expiration Date in respect of the Index Business Day (t), then divided by (c) the Fees Day Count, multiplied by

- (c) the Adjusted Index Component Level on Index Business Day (t) *divided* by the Adjusted Index Component Level on the Roll Date, *multiplied* by
- (d) the value of the Cash Amount on the Roll Date in respect of the Index Business Day (t) *divided* by the value of the Cash Amount on Index Business Day (t).

Variable "Z" on Index Business Day (t) will be calculated as the product of:

(a) the exponential function of (a) minus MCR, multiplied by (b) the number of calendar days from (and including) the Roll Date in respect of the Index Business Day (t) to (but excluding) the Expiration Date in respect of the Index Business Day (t), then divided by (c) the Cash Day Count.

Variable "µ" means, the amount calculated as the *quotient* of:

- (a) minus Product Rate, plus
- (b) MCR, multiplied by
- (c) the value of the Fees Day Count, divided by the Cash Day Count

Variable " $\mu(t)$ " means, in respect of Index Business Day (t), the amount calculated as the *quotient* of:

- (a) the *natural logarithm* of the *quotient* of (a) the value of variable F on Index Business Day (t) *divided* by (b) the value of variable X on Index Business Day (t), *divided* by
- (b) the number of calendar days from (and including) Index Business Day (t) to (but excluding) the Expiration Date in respect of the Index Business Day (t), *divided* by
- (c) the Fees Date Count.

"Volatility" means the percentage specified as such in the Index Rules.

11. Market Disruption Events and Potential Adjustment of Index Events

11.1 Market Disruption Events

Certain events may occur in respect of an Index Component and an Index Business Day which the Index Sponsor determines to be material to the Index Component (each a "**Market Disruption Event**"), including:

- (a) the declaration of a general moratorium in respect of banking activities in London or New York;
- (b) any suspension of or limitation imposed on trading on the London Interbank Market;
- (c) any event that makes it impossible or not reasonably practicable for the Index Sponsor to obtain the level of the Index Component, or any other value for the purposes of calculating the level of the Index Component; or
- (d) a market disruption event or other equivalent event affecting such Index Component howsoever described in the applicable and relevant index management rules in respect of the Index Component or any underlying assets comprising the Index Component (the "Index Component Index Management Rules").
- (e) where the administrator of the Fund, as determined by the Index Sponsor (the "**Fund Administrator**") fails to calculate and publish the net asset value per the interest

issued to or held by an investor (the "**Fund Shares**") in respect of a Dealing Date (as defined below) (the "**Net Asset Value**") prior to the corresponding date that publication of the Net Asset Value by the Fund Administrator is expected to have occurred (the "**NAV Deadline Date**"). Unless otherwise determined by the Index Sponsor, such NAV Deadline Date shall be no later than the first scheduled date on which subscriptions and/or redemptions in the Fund Shares of the relevant Fund can be effected (the "**Dealing Date**") and immediately follows the relevant Dealing Date. Publication of the Net Asset Value shall be deemed complete on a day on which the Net Asset Value has been received by the Index Sponsor no later than 03:00 p.m. (London time) by reference to such information source (or successor information source) as specified in the Index Rules. Where the Net Asset Value has been received by the Index Sponsor after 03:00 p.m. (London time), publication will be deemed complete on the following calendar day.

(f) where the cut off time for the valid and timely subscription, redemption or transfer of Fund Shares in respect of a dealing date as provided by Allfunds Bank S.A.U. is earlier than 4 p.m. London time.

If the Index Sponsor determines that a Market Disruption Event has occurred that affects the Index, the Index Sponsor may take one or more of the following actions:

- (a) defer, suspend or postpone the calculation and publication of the Index Level and any other information relating to the Index until the next Index Business Day on which the Index Sponsor determines that no such Market Disruption Event exists or is continuing;
- (b) make such determinations and/or adjustments to the index methodology or the Index Level as it deems necessary to maintain the objectives of the Index;
- (c) where a Market Disruption Event is deemed to have occurred on an Index Business Day that is an Expiry Day, postpone such a date to the next Index Business Day on which it determines that the Market Disruption Event is not continuing; and/or
- (d) permanently cease to calculate and make available the Index Level if the Index Sponsor determines that the above actions will produce results that are inconsistent with the objectives of the Index.

11.2 Index Adjustment Events

Certain events may occur in respect of an Index which the Index Sponsor determines to be material to such Index (each an "**Index Adjustment Event**"), including:

- (a) there is any event or circumstance that is beyond the reasonable control of the Index Sponsor and affects the Index and/or the Index Component or the methodology on which the Index is based or the Index Sponsor's ability to calculate and publish the Index;
- (b) there has been (or there is pending) a change in taxation generally affecting commercial banks organised and subject to Tax in the United Kingdom or affecting market participants in the United Kingdom or the United States generally who hold positions in the Index Component or any underlying assets comprising the Index Component;
- (c) any other event that would make the calculation of the Index impossible or infeasible, make the Index non-representative of its market prices, or undermine the objectives of the Index or its reputation as a fair and tradable index;
- (d) an index adjustment event, a potential adjustment of index event or any such other equivalent event as described in the Index Component Index Management Rules that the Index Sponsor may deem as material;

- (e) the Cash Rate has been or is below the MCR and the Index Sponsor deems this event to be material to the protection mechanism of the Index against sharp declines of the Index Component; or
- (f) a Market Disruption Event that continues for at least 30 consecutive calendar days.

If the Index Sponsor determines that an Index Adjustment Event has occurred is continuing that materially affects the Index, the Index Sponsor may take one or more of the following actions:

- (a) select a successor Index Component to replace the Index Component affected by the Index Adjustment Event which uses the same or substantially the same formula and method of calculation as the affected Index Component;
- (b) make such determinations and/or adjustments to the index methodology or the Index Level as it deems necessary to maintain the objectives of the Index;
- (c) defer or suspend the publication of the Index Level and any other related information until it determines that no Index Adjustment Event is continuing;
- (d) if the Index Adjustment Event occurs or is continuing on an Expiry Day, postpone such date to the next Index Business Day on which no Index Adjustment Event is continuing; and/or
- (e) discontinue supporting the Index or terminate the calculation and publication of the Index Level.

12. Change in Methodology and Termination of Index

12.1 Change in Methodology

The Index Sponsor may, but is not obliged to, make changes to the methodology of the Index which it determines necessary as a result of market, regulatory, juridical, financial, fiscal or other circumstances. The Index Sponsor will make reasonable efforts to ensure that any such changes will result in a methodology that is consistent with the Index methodology. Such changes will be published on https://indices.barclays. Any such changes could have a material adverse effect on the value of and return on Barclays Index Linked Securities linked to the Index.

12.2 Termination of Index

The Index Sponsor may, at any time by giving one Index Business Day's notice, terminate the calculation and publication of the Index Levels of an Index. The Index Sponsor will publish an announcement of such event on https://indices.barclays on the first Index Business Day following termination of an Index.

Schedule 2

The following additional two paragraphs shall be included at the bottom of Risk Factor 4.56 (A Barclays Index may contain an embedded 'Lookback Put' option in respect of a Component) at page 70:

"Also, where the protection level is less than 100% of the principal amount, there is a risk of loss. Where the level of the relevant Barclays Index does not rise above the protection level, a Holder of a Barclays Index Linked Securities linked to such Barclays Index will suffer a capital loss to the extent of the difference between the protection level and 100% of the principal amount.

Further, a Barclays Index (such as the Patrimoine Protect 90 Index) may exclude certain days for the purposes of observing the Index performance in order to lock in a highest level (for example, the Patrimoine Protect 90 Index excludes the three Index Business Days both before and after each Expiration Date for such purpose). In such case, there is a risk that the highest Index level will fall on one or more of such excluded days and, in such case, the value of and return on such Barclays Index Linked Securities would be lower than if such days were not excluded for such purpose."

The following new risk factor shall be added immediately after Risk Factor 4.56 (*A Barclays Index may contain an embedded 'Lookback Put' option in respect of a Component*) at page 70, and current Risk Factor 4.57 (*A Barclays Index may contain a Component which comprises a series of rolling futures contracts*) and all subsequent risk factors (and all cross references thereto) shall be deemed to be re-numbered accordingly:

"4.57 A Barclays Index which includes a "cash lock" or "monetisation" feature will, where such "cash lock" event or "monetisation" occurs, thereafter only provide a return equal to that of the applicable floating rate of interest on a cash amount

A Barclays Index (such as the Patrimoine Protect 90 Index) may provide that, following the occurrence of certain events, the Index may only thereafter offer hypothetical exposure to a cash amount with a floating rate of interest (a "monetisation"). In such case, investors in Barclays Index Linked Securities linked to such Barclays Index will have no further participation in the performance of the Index component(s) (e.g. a fund) that was previously driving the performance of the Barclays Index, and instead the sole return on the Index (and therefore Barclays Index Linked Securities linked to such Index) thereafter will be derived from the applicable floating rate of interest on the relevant cash amount. Accordingly, a monetisation may have an adverse impact on the level of the relevant Barclays Index and, in turn, on the value of and return on Barclays Index Linked Securities linked to such Barclays Index.".