

Summary of the Goldman Sachs FICC and Equities Policy on Global Benchmark Incidents and Restatements

1. Introduction

The Goldman Sachs FICC and Equities Policy on Global Benchmark Incidents and Restatements (“**Policy**”) sets out various procedures for dealing with Restatement Events affecting Benchmarks administered by Goldman Sachs International (“**GSI**”) and Goldman Sachs & Co. LLC (“**GSCO**”), acting through the Global Banking & Markets, as set out in the [Summary of the Goldman Sachs FICC and Equities Global Benchmark Policy and Control Framework](#) (“**Framework**”).

The Administrator is entitled to make modifications or changes to the Policy at its sole discretion without consulting counterparties to, or investors in, financial instruments linked to or referencing Benchmarks (“**Linked Products**”), subject to the oversight of the Index Committee and in accordance with the relevant provisions of the Framework.

2. Definitions

- **Additional Costs:** With respect to an Incident, an amount equal to the Incorrect Costs exceeding the Correct Costs deducted from the Benchmark level from the Incident Date of such Incident onwards. Any increased cost which has occurred as a result of or derived from any incorrect asset weights or asset quantities arising from an Incident does not constitute “Additional Costs”.
- **Administrator:** GSI or GSCO acting as the “Administrator” as set out in the Framework.
- **Affected Benchmark Level:** The published level of a Benchmark affected by an Incident.
- **Benchmark Publication Date:** With respect to a Benchmark, each date on which a new level of the Benchmark is published or made available to counterparties to, or investors in, a Linked Product.
- **Benchmark:** A Benchmark, as set out in the Framework.
- **Correct Costs:** The cost amount calculated by reference to the rates of costs in accordance with the relevant Investor Disclosure and synthetically deducted when calculating a Benchmark, as set out in the relevant Investor Disclosure.
- **Corrected Benchmark Level:** The restated Benchmark level with respect to each individual Benchmark level.
- **Corrected Daily Return:** In respect of a date in the Restatement Period, the daily return of the Benchmark for the period from and including (i) the relevant Benchmark Publication Date immediately preceding such date, to and including (ii) such date, as it would have been had the Incident not occurred. For Intraday Benchmarks such Corrected Daily Return shall reflect that Non-Cash Quantities, as defined below, will not be corrected.
- **Cut-off Date:** The date falling three (3) Weekdays prior to the Discovery Date.

- **Discovery Date:** With respect to an Incident, the first London business day on which the Administrator becomes aware of or identifies such Incident.
- **External Calculation Agent:** A third-party agent appointed to calculate, on behalf of the Administrator, the relevant Benchmark levels as set out in the applicable Investor Disclosures.
- **Incident:** Error or anomaly with respect to the published level of a Benchmark which has resulted from any of the circumstances laid down in section 4.b)(A) and 5 below.
- **Incident Date:** With respect to an Incident, the first date when such Incident has occurred.
- **Incorrect Costs:** The cost amount resulting from an incorrect implementation of the Correct Costs, as required in the Investor Disclosure.
- **Index Committee:** The Index Committee, as set out in the Framework.
- **Input Data:** The data used by the Administrator, directly or indirectly, to determine or calculate a Benchmark level.
- **Intraday Benchmark:** Benchmarks for which the Parameter “Intraday Strategy” in the Investor Disclosures is specified to be “Applicable”.
- **Investor Disclosures:** Documentation outlining the methodology for each Benchmark that is made available to counterparties to, or investors in, a Linked Product.
- **Non-Cash Quantities:** Quantities of non-cash assets or non-cash components.
- **Publication Error:** Erroneous publication of the levels of a Benchmark.
- **Restatement:** Re-calculation and re-publication of Affected Benchmark Levels in accordance with section 4.C, using corrected Input Data and/or a revised methodology following the resolution of an Incident such that Benchmark reflects the Corrected Daily Returns for each day in the relevant Restatement Period.
- **Restatement Date:** The date on which the Restatement is effected and if applicable, the Corrected Benchmark Level is published by the Administrator or the relevant External Calculation Agent of the Benchmark.
- **Restatement Event:** With respect to an Incident, the determination by the Administrator or the External Calculation Agent, that a Restatement shall be implemented with respect to such Incident.
- **Restatement Period:** The period from and including the Cut-Off Date to and including the Restatement Date.
- **Third Party Errors:**

- i. an Incident caused by a third party data source or provider; and/or
 - ii. a restatement by any third party of Input Data which has been used to calculate the Affected Benchmark Level.
- **Weekday:** Monday to Friday of each calendar week.

3. Scope

This summary of the Policy sets out various procedures for dealing with Incidents and the relevant associated Restatement Events. Section 4 applies to Benchmarks calculated and published by the Administrator. Section 5 applies to Benchmarks for which a third party acts as the External Calculation Agent for such Benchmarks.

4. Restatement Events Related to Benchmarks calculated by the Administrator a) Restatement Event Determination

The Administrator, at its sole discretion and under the oversight of the Index Committee, makes the determination as to whether or not an Incident constitutes a Restatement Event in accordance with the Policy.

b) Restatement Events Criteria

An Affected Benchmark Level will be restated for each day in the Restatement Period if (A) and (B) below are both satisfied:

- A. The underlying cause of such Affected Benchmark Level results (in whole or part) from:
 - i. a discrepancy between the formula and methodology of such Benchmark as described in the related Investor Disclosure, and the way in which the Benchmark is actually determined or calculated;
 - ii. any one or more discrete errors by the Administrator in documenting, calculating, or making determinations under, the Benchmark, including:
 - a discrepancy between the economic reality that a Benchmark intends to measure (as determined by the Administrator) and the actual description of such economic reality in the Investor Disclosure;
 - any error in calculating, or in the application of, any formulae or rules set out in the Investor Disclosure; and
 - using data, inputs or information sources not specified in, or otherwise permitted by, the Investor Disclosure;
 - iii. Publication Errors;
 - iv. Third Party Errors;
 - v. the restatement of any underlying component which is administrated by the Administrator which is itself a Benchmark as a result of any of the above; or

- vi. any other act or omission by the Administrator where the Index Committee has determined a Restatement is required;

and

- B. the published level of the Benchmark would have been different from the Affected Benchmark Level on the relevant date (or dates) had the applicable Restatement Event not occurred.

c) Restatement Period and Restatement Methodology

Provided the criteria in section 4.b) above are satisfied, a Restatement will be applied to the Affected Benchmark Levels falling within the Restatement Period in accordance with the methodology described below.

The Restatement will be applied as follows:

- a. The Affected Benchmark Levels falling before the Restatement Period shall remain unchanged and no Restatement shall be applied to such levels. As a result, a Restatement Event will not lead to a Restatement of any Benchmark levels if all Affected Benchmark Levels fall before the Restatement Period.
- b. Any Input Data or methodology which is used for the computation of the level of the Benchmark falling before the Restatement Period shall remain unchanged and no Restatement shall be applied to such Input Data or methodology.
- c. The Corrected Benchmark Level for a given date in the Restatement Period, shall be the product of:
 - i. the Corrected Benchmark Level for the Benchmark Publication Date immediately preceding such date; and
 - ii. the sum of:
 - I. one (1); and
 - II. the Corrected Daily Return for the period from the Benchmark Publication Date immediately preceding such date to such date
- d. Following the completion of the Restatement the level of the Benchmark for the days falling after the Restatement Period shall be computed taking into account the ratio between (i) the Corrected Benchmark Level as of the Restatement Date and (ii) the Affected Benchmark Level as of the Restatement Date.
 - a. For Intraday Benchmarks only, for each day in the Restatement Period the computed Non-Cash Quantities shall remain unchanged and shall not be corrected, and the Corrected Benchmark Level shall be calculated based on the originally computed Non-Cash Quantities, regardless of the type of Incident. The quantities of cash assets or cash components, as the case may be, shall be adjusted for the Restatement Period if impacted by an Incident,

unless stated otherwise in the Investor Disclosures, due to the fact that the Non-Cash Quantities shall remain unchanged and shall not be corrected.

In case the Investor Disclosure provides for a restatement methodology which differs from the Policy then the restatement methodology described in the Investor Disclosure shall prevail.

5. Incidents related to Benchmarks calculated by an External Calculation Agent

The Administrator may, from time to time, appoint an External Calculation Agent in respect of a Benchmark. In such situations, the External Calculation Agent would independently determine if a Restatement Event has occurred and whether any action, (including the restatement of an Affected Benchmark Level) is required in relation to an Incident, following their own policies and procedures.

6. Incidents resulting in Additional Costs

For every Incident resulting in Additional Costs the relevant Goldman Sachs Group entity shall offer to reimburse any such Additional Costs, where due and payable as determined by Goldman Sachs, to investors in, or counterparties to, Linked Products, in accordance with, and where permitted by, applicable laws and regulations and the contractual provisions and offering documents of the relevant instruments. Any reimbursement of Additional Costs shall be limited to the Additional Costs charged during the three (3) years prior to the Discovery Date.