S&P Dow Jones Indices
A Division of S&P Global

Index Administration Services (IAS) - LGIM Matching Core Index Family

Benchmark Statement

Legal & General
INVESTMENT MANAGEMENT

Jan 2024

Table of Contents

1) General Disclosures

Benchmark family name	LGIM Matching Core Indices
Benchmark administrator	**IHS Markit Benchmark Administration Ltd**. (**IMBA**)
Date of initial publication of this document	1 August 2023
Date of last update to this document	9 January 2024
ISIN (where available)	There are presently no ISINs available or accessible for the benchmarks covered by this Benchmark Statement.
Determination by contributions of input data	IMBA does not receive contributions of “input data” (as defined by the **BMR**) in relation to this family of benchmarks.
Qualification of the benchmark family	This benchmark statement covers non-significant benchmarks as defined by the BMR. However, IMBA administers this benchmark family as though it were ‘significant’ (as defined by the BMR).

2) Market or Economic Reality of the Benchmark

General description of the market or economic reality

LGIM Matching Core Indices reflect performance of fixed income portfolios including nominal gilt, Inflation-Linked gilt, GBP interest rate swaps and GBP inflation swaps. Both gilts and Inflation-Linked gilts are UK Government liability in sterling, issued by HM Treasury and listed on the London Stock Exchange.

- A nominal gilt also known as a conventional gilt, is a liability of the Government which guarantees to pay the holder of the gilt a fixed cash payment (coupon) every six months until the maturity date, at which point the holder receives the final coupon payment and the return of the principal;
- Inflation-linked gilts or index-linked gilts differ from conventional gilts in that the semi-annual payments and principal are adjusted in line with the UK Retail Prices Index (RPI). This means that both the coupons and the principal paid on redemption of these gilts are adjusted to take account of accrued inflation since the gilt was first issued;
- GBP interest rate swaps in LGIM Matching Core Indices are zero-coupon fixed leg versus floating leg swaps where the floating leg is referenced to daily compounded Sterling Overnight Interbank Average Rate (SONIA);

GBP inflation swaps in LGIM Matching Core Indices are swap contract in which a fixed payment on a notional is exchanged for payment at the rate of RPI growth.

Geographical boundaries of the market or economic reality

Nominal gilts and inflation-linked gilts are debt issued by UK government and traded on London Stock Exchange. There has been no default on such bonds historically. GBP interest rate swaps and GBP inflation swaps are traded in over-the-counter market. GBP interest rate swap trading levels are affected by overnight borrow rate among large banks; GBP inflation swaps trading levels are affected by expected RPI levels.

Other relevant information relating to the market or economic reality

The Matching Core Index Family is designed for pension schemes seeking simple access to a Liability Driven Investment strategy (LDI) solution in order to reduce funding level volatility caused by changes in Sterling interest rates and inflation rates.

The methodology

The Matching Core Index Family consists of **four indices** and is designed for pension schemes seeking simple access to a Liability Driven Investment strategy (LDI) solution in order to reduce funding level volatility caused by changes in Sterling interest rates and inflation rates. Each Matching Core index is constructed to hedge a liability cashflow profile. LDI is an investment strategy for a company or individual based on the cashflows needed to fund future liabilities and is designed for situations where future liabilities can be predicted with some degree of accuracy.

Category	Index Name	Description	Underlying Assets
Fixed Liability	Long Fixed	Long Fixed Liability	Nominal Gilt, Interest Rate Swap, Gilt Future
	Short Fixed	Short Fixed Liability	Nominal Gilt, Interest Rate Swap
Real Liability	Long Real	Long Real Liability	Index-linked Gilt, Interest Rate Swap, Inflation Swap
	Short Real	Short Real Liability	Index-linked Gilt, Interest Rate Swap, Inflation Swap

The procedure for initial index construction or monthly constituents rebalance is as follows

1. **Defining tenor points**: tenor points of 2.5, 5, 7.5, 10, 12.5, 15, 17.5, 20, 22.5, 25, ... 45, 47.5, 50 years from the valuation date are used for risk sensitivity calculations.
2. **Hedge instrument selection**: for each tenor point, a suitable hedging instrument is selected following the procedures described under "4.1.1 Hedge instrument selection" of the Index Methodology.
3. **Hedge amount calculation**: Amounts to be held in each of the hedging instruments chosen in the previous step are determined by matching the PV01 and IE01 of the liability cashflow across all tenor points ensuring minimal overall residual hedging error. Further detail is described under "4.1.3 Hedge Weight Calculation" of the Index Methodology.
4. If short positions in gilts occur as a result of Hedge amount calculation, such short positions are replaced by a short position in Long Gilt Future or a long position in Swap.

The Index Methodology outlined the details of the determination methodology for the LGIM Matching Core Indices is made available to stakeholders upon request. Legal & General Investment Management retains the intellectual property to the LGIM Matching Core Indices. Any future changes to the determination methodology or the termination of one or multiple LGIM Matching Core Indices is subject to the IAS change management and consultation process.

All benchmark methodologies are assessed prior to their implementation by IAS with respect to their methodological and operational complexity and risks associated with the required data inputs. IAS has put in place policies and procedures applicable to all IAS administered indices ensuring appropriate level of risk management, error identification resolution, handling of market disruptions, escalation to the IAS Index Committee, periodic review of the fitness of the benchmarks. Additional benchmark- specific governance and control arrangements may be put in place as deemed appropriate by the IAS Index Committee. Policies and procedures are documented in the administrator Control Framework.

Rationale for adopting the methodology

Each Matching Core Index rebalances monthly with the exception of December, on T-10 and T-5, where T is the last Index Business Day of each month. Monthly rebalance helps match the interest rate and inflation risk between the portfolio and the liability closely. To aid long-term monitoring, the funds have an intelligent benchmark that switches between swaps and gilts depending on which is offering the higher yield at any given time. The Proforma portfolio from T-10 serves as an indicative portfolio for the incoming month, and the Proforma portfolio from T-5 will be the effective portfolio on the first Index Business day of the following month. There is no constituent rebalance process in December.

The leverage level of the index is monitored on a daily basis. Due to a breach of leverage threshold, cash will be added or removed from the index to decrease or increase the overall leverage level. If the threshold is breached and there is no incoming Rebalancing Event, then a Rebalancing Event is triggered and denoted the Index Business Day as the Trigger Day. The rebalance is scheduled to the next dealing day that is at least 8 days after the Trigger Day.

3) Potential Limitations of the Benchmark

Circumstances in which we would lack sufficient input data to determine the benchmark according to the methodology

Scenarios may arise where underlying input data is not available in order to determine the index, such as if there is a disruption to a particular underlying market that prevents price discovery from taking place. Also, underlying data is provided by third party data providers. Failure of those providers may impact the administrator's ability to determine benchmarks in accordance with the applicable methodology. Generally, in the case of a market or data source disruption, the administrator will either proceed with or defer the determination of the respective index levels in accordance with the relevant Index Methodology or actions determined by the IAS **Index Committee**. Such scenarios remain rare. The Index Committee serves as the index governance body tasked with ensuring that:

- The index objective is clearly stated, and the index is expected to achieve its objective.
- The procedures documented in the methodology are transparent and clearly described.
- The eligible universe, selection criteria and weighting method for constituents are fully detailed and described.
- All aspects of an index – data, calculation, maintenance, presentation and governance – are consistent with IMBA's practices and any exceptions are explicitly discussed and decided upon by the Index Committee.

Circumstances in which the degree of liquidity of the underlying market becomes insufficient to ensure the integrity and reliability of the benchmark determination according to the methodology

There may be instances where the liquidity in an underlying market is not sufficient to adequately represent the economic reality that the index seeks to measure.

Potential liquidity issues may be identified as part of the standard input data validation (e.g. abnormally long periods of stale prices) or may be identified in the context of market disruptions or brought forward through third party index owners, such potential issues are escalated to the Index Committee who will assess and determine the appropriate course of action in such cases.

4) Exercise of Expert Judgment and Discretion

Position of each function or body that may exercise discretion in the calculation of a benchmark and governance thereof

The administrator's indices are rules based and do not typically permit the use of discretion unless there are exceptional circumstances that are not addressed by either the index rules or an administrator policy. Such scenarios may include (but are not limited to):

- Failure of data providers;
- Significant changes to the underlying market;
- Action by governmental or regulatory bodies that causes market disruption; and
- Events beyond human control.

In the event that IMBA needs to take action or make a decision that has not been foreseen by the methodology or associated policy, the Index Committee conveys and makes a determination that is consistent with the objective of the index in question and that causes minimal disruption to index stakeholders.

Ex-post evaluation process

As above, the exercise of judgment or discretion in the calculation of the LGIM Matching Core Indices would need to be approved by the Index Committee prior to the publication of the LGIM Matching Core Indices to ensure that no conflict of interest arises and the index continues to reflect the underlying economic reality. A record of the Index Committee decision detailing the nature of the expert judgment or exercised discretion is maintained.

5) Methodology Changes and Benchmark Cessations

Methodology Changes

When a material change to the index methodology is considered, IMBA publishes a consultation inviting comments from market participants. The following are examples of when a methodology change may be deemed material:

- Methodology changes that impact the index objective, for example altering rules determining the index universe, the selection of its constituents or the weighting of constituents, or
- the Index Committee determines if a proposed change is material.

Consultations are announced through a number of channels, including on the website. Under normal circumstances, the consultation period is open for a minimum of 30 days from publication. In instances where a material change is deemed to be time sensitive, the Index Committee may determine that a shorter consultation period is required. All feedback from consultations is reviewed and considered before a final decision is made by the Index Committee.

Internal Reviews of Methodology

In addition to its daily governance of indices and maintenance of index methodologies, the Index Committee reviews, at least once within any 12-month period, the index methodology to ensure the indices continue to achieve the stated objectives, are transparent, and that the data and methodology remain effective. This is the Annual Review Process.

In the case that an index methodology is reviewed off cycle from the Annual Review, the Index Committee reserves the right to cancel the Annual Review if the requested review covers all the relevant issues.

Possible impact of Changes or the Cessation of Benchmarks

Where it consults, IMBA will make reasonable efforts to address stakeholder concerns expressed in response to consultations and to allow for reasonable advance notice for stakeholders to accommodate changes, unwind existing positions in contracts/instruments referencing the benchmark, or seek an appropriate substitute benchmark.

There may be circumstances where external factors beyond the control of IMBA could lead to short-term changes or the termination of the Index, e.g. where a continuous disruption of the underlying market or an underlying data point requires a change to the methodology or impacts the viability of the index. In such cases, the administrator may shorten the notice period as is appropriate to the urgency of the situation.

Further details of the **S&P Dow Jones Indices Index Cessation Policy** can be found here.

6) Key Terms

BMR	means the retained EU law version of the Benchmarks Regulation ((EU) 2016/1011) that has applied in the UK from the end of the Brexit transition period (11pm on 31 December 2020).
Board	means the Board of Directors of IMBA.
ESG	means Environmental, Social, Governance.
IHS Markit Benchmark Administration Ltd. (IMBA)	means the administrator, which is the UK entity authorised by the FCA responsible for the daily provision of the LGIM Matching Core Indices.
Index Committee	means the committee with responsibility for overseeing day to day administration of the LGIM Matching Core Indices.
Internal Oversight Committee	means the Internal Oversight Committee, the independent function which coordinates and directs IMBA's benchmark oversight function.

7) Additional Information

Updates to this Benchmark Statement

This Benchmark Statement will be updated whenever the information it provides is no longer correct or sufficiently precise and at least where:

- there is a change in the type of the benchmark;
- there is a material change in the methodology for determining the benchmark or, where the Benchmark Statement refers to a family of benchmarks, in the methodology for determining any benchmark within the family of benchmarks.

This Benchmark Statement will be updated at least every two years.

Contact us

For more information, including to request index specific methodologies, please visit https://ihsmarkit.com/products/index-administration-services.html or contact us at mk-indexadministrationoperations@ihsmarkit.com.

8) Consideration of ESG Factors

Type of benchmark family	Other benchmarks
Name of the benchmarks	LGIM Matching Core Indices
Does the benchmark pursue ESG objectives?	No
Where the answer to the above question is negative, is any EU Climate Transition Benchmark or EU Paris-Aligned Benchmark available in the portfolio of IMBA or does IMBA havebenchmarks that pursue ESG objectives or benchmarks that take into account ESG factors?	Yes

9) Disclosure of the Alignment with the Objectives of the Paris Agreement

Does the benchmark align with the target of reducing carbon emissions or the attainment of the objectives of the Paris Agreement?	No
The temperature scenario, in accordance with international standards, used for the alignment with the target of reducing GHG emissions or attaining of the objectives of the Paris Agreement.	Not applicable.
The name of the provider of the temperature scenario used for the alignment with the target of reducing GHG emissions or the attainment of the objectives of the Paris Agreement.	Not applicable
The methodology used for the measurement of the alignment with the temperature scenario.	Not applicable
The hyperlink to the website of the temperature scenario used.	Not applicable
Date on which information has last been updated and reason for the update.	Not applicable

10) Disclaimer

The LGIM Matching Core Indices are proprietary to Legal & General Investment Management . No use or publication may be made of the LGIM Matching Core Indices, or any of its provisions or values, without the prior written consent of Legal & General Investment Management .

It is not possible to invest directly in an index. Exposure to an asset class represented by an index may be available through investable instruments based on that index. S&P DJI does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P DJI makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P DJI is not an investment advisor, commodity trading advisor, fiduciary, "promoter" (as defined in the Investment Company Act of 1940, as amended) or "expert" as enumerated within 15 U.S.C. § 77k(a), and S&P DJI makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. S&P DJI is not a tax advisor. Inclusion of a security, commodity, crypto currency, or other asset within an index is not a recommendation by S&P DJI to buy, sell, or hold such security, commodity, crypto currency, or other asset, nor is it considered to be investment or trading advice.

These materials have been prepared solely for informational purposes based upon information generally available to the public and from sources believed to be reliable. No content contained in these materials (including index data, ratings, credit-related analyses and data, research, valuations, model, software or other application or output therefrom) or any part thereof ("Content") may be modified, reverse engineered, reproduced, or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of S&P DJI. The Content shall not be used for any unlawful or unauthorized purposes. S&P DJI and its third-party data providers and licensors (collectively "S&P Dow Jones Indices Parties") do not guarantee the accuracy, completeness, timeliness, or availability of the Content. S&P Dow Jones Indices Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN "AS IS" "WHERE IS" BASIS. S&P DOW JONES INDICES PARTIES DISCLAIMS ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Dow Jones Indices Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special, or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

S&P DJI reserves the right to vary or discontinue any index at any time for regulatory or other reasons. Various factors, including external factors beyond S&P DJI's control might necessitate material changes to indices.

S&P Global keeps certain activities of its various divisions and business units separate from each other to preserve the independence and objectivity of their respective activities. As a result, certain divisions and business units of S&P Global may have information that is not available to other business units. S&P Global has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

In addition, S&P DJI provides a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions, and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate, or otherwise address.