



Danish Bond Indices Benchmark Statement

IAS Fixed Income benchmark family / 6 November 2019

Nordea

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1 General Disclosures

Benchmark family name	IAS Fixed Income
Benchmark sub-family name	Danish Bond Indices
Client	Nordea
Date of initial publication of this document	TBD
Date of last update to this document	TBD
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	No, the administrator does not receive contributions of "input data" (as defined by the BMR) in relation to this family of benchmark.
Qualification of the benchmark family	Benchmarks within the IAS Fixed Income family are administered as "significant" (as defined by the BMR).

2 Key terms relating to the benchmark, or family or sub-family of benchmarks

2.1 General description of the market or economic reality

Danish Bond Indices reflect the performance of DKK denominated Danish Mortgage Covered Bonds and Danish Government Bonds. Covered bonds are debt instruments, which give bondholders a preferential claim on a given cover pool normally consisting of residential mortgage loans, commercial mortgage loans and public-sector debt either in separated or mixed pools. Denmark has a variety of mortgage institutions that issue various types of covered bonds from different cover pools that are issued to investors. Covered bonds in Denmark are classified differently according to Danish covered bond legislation.

2.2 Geographical boundaries of the market or economic reality

As implied by the name, Danish Bond Indices are based on the market for Danish bonds issued by the Danish government or Danish mortgage institutions. The bonds are traded in the secondary market whereby Danish and regional institutions act or market makers.

2.3 Other relevant information relating to the market or economic reality

Currency-hedged variants of the Danish Bond Indices exist aiming to mitigate foreign exchange risk by supplementing investment in Danish Bond Indices with a foreign exchange hedge. Currently, five Currency-hedged Indices are offered for EUR or USD.

3 The potential limitations of the benchmark and the circumstances in which the measurement of the market or economic reality may become unreliable

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

Danish Bond Indices are based on contributions of Danish bond prices and basis point values (BPV) (used in the rebalance process for Danish Bond Constant-maturity Indices) by Nordea Bank. The indices rely on the continued availability of these data for the determination and provision of the Danish Bond Indices. In order to ensure the integrity and accuracy of the price and BPV contributions under the scope of these Indices, IHS Markit has put in place a Code of Conduct detailing the governance and control arrangements to be followed by Nordea Bank.

With regard to the Constant-maturity Danish Bond Indices, when the target modified duration of the index cannot be achieved at rebalance, the index Administrator will follow the index methodology and rebalance the index using the bonds with the closest modified duration; index stakeholders will be also notified via the IHSMarkit website.

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 manual and the relevant Markit Disruption Events Policy.

3.2 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

Potential liquidity issues may also be identified as part of the standard input data validation (e.g. as abnormally long periods of stale price data) or may be identified in the context of market disruptions or brought forward through third part index owners in which case the potential issues are escalated to the IAS Index Administration Committee (IAC).

The Danish Bond market is considered to be reasonably liquid. However, to ensure that only sufficiently liquid securities are selected into the Danish Bond Indices, the selection process to determine index membership also applies liquidity considerations. In line with Basel III regulation and the Liquidity Coverage Ratio whereby level 1 high-quality liquid assets are defined as having an issued amount of more than 500m EUR, the Danish Bond Indices apply the same threshold as an indicator of liquidity for the selection of bonds to be included into the index.

4 The controls and rules that govern the exercise of judgment or discretion in the calculation of the benchmark or family of benchmarks

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

The Danish Bond 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;
- Complex corporate events;
- Action by governmental or regulatory bodies that causes market disruption; and
- Events beyond human control.

In the event that the administrator needs to take action or make a decision that has not been foreseen by the methodology or associated policy, senior members of the administration team will consult with the applicable Index Administration Committee to arrive at a decision that is consistent with the objective of the index in question and that causes minimal disruption to index stakeholders. Where appropriate, and reasonably practicable, the administrator may consult with stakeholders. In any event the administrator will make all reasonable efforts to ensure stakeholders are aware that discretion or judgement has been used and how.

4.2 Ex-post evaluation process

As above, the exercise of judgment or discretion in the calculation of a Danish Bond Index would need to be approved by the IAC prior to the publication of a Danish Bond Index to ensure that no conflict of interest arises and the index continues to reflect the underlying economic reality. The decision of the IAC would be recorded and notes on the nature of the judgment or discretion that have been exercised would be published on made available to the public. To the extent there is feedback or comment on the use of judgment or discretion, the IAC will review those comments at the earliest opportunity.

5 Review of the methodology and changes to, or cessation of, the benchmark or family of benchmarks

5.1 The methodology

Danish Bond Indices are weighted baskets of Danish Bonds. The indices are calculated on a daily basis at the close of business using the weighted sums of constituent bond dirty prices. The nominal weights associated with each index are fixed and are recalculated at the monthly rebalancing date, which occurs two index business days before the first of each month.

The indices fall into three categories:

Main Indices

1. Danish Government Bond Index
2. Danish Mortgage Bond Index
3. Danish Callable Mortgage Bond Index
4. Danish Non-callable Mortgage Bond Index
5. Danish Non-callable Mortgage Bond Short Maturity Index
6. Danish Non-callable Mortgage Bond Long Maturity Index

Constant-maturity indices

1. Danish Government Bond 2-year Constant-maturity Index
2. Danish Government Bond 3-year Constant-maturity Index
3. Danish Government Bond 5-year Constant-maturity Index
4. Danish Government Bond 6-year Constant-maturity Index
5. Danish Government Bond 7-year Constant-maturity Index
6. Danish Mortgage Bond 2-year Constant-maturity Index
7. Danish Mortgage Bond 3-year Constant-maturity Index
8. Danish Mortgage Bond 5-year Constant-maturity Index
9. Danish Callable Mortgage Bond 3-year Constant-maturity Index
10. Danish Callable Mortgage Bond 5-year Constant-maturity Index
11. Danish Callable Mortgage Bond 7-year Constant-maturity Index
12. Danish Non-Callable Mortgage Bond 1-year Constant-maturity Index
13. Danish Non-Callable Mortgage Bond 3-year Constant-maturity Index

Currency-hedged Indices

1. Danish Government Bond Index Hedged into EUR
2. Danish Government Bond Index Hedged into USD

3. Danish Mortgage Bond 5-year Constantmaturity Index Hedged into EUR
4. Danish Callable Mortgage Bond Index Hedged into EUR
5. Danish Callable Mortgage Bond Index Hedged into USD

Main and Constant-maturity Indices comprise of bonds, while Currency-hedged Indices are computed as an overlay to specific Main and Constant-maturity Indices. The only types of bonds eligible for inclusion are Danish government and callable and non-callable covered bonds (including Flex bonds) that are issued by specific mortgage institutions. Constituent bonds are selected according to different selection criteria including bond type (SDO, SDRO, RO (after-2008), GFRO (before-2008)), combination of issuer and capital centre (as described in [Table 1: Eligible Issuers and Capital Centres](#)), amount outstanding (at least 500 million EUR) or bond series amount outstanding (at least 10 billion DKK), and time to maturity.

Table 1: Eligible Issuers and Capital Centres

Issuer	Capital Centre
Jyske Realkredit A/S	B and E
Nordea Kredit Realkreditaktieselskab	1 and 2
Realkredit Danmark A/S	S and T
Nykredit Realkredit A/S	C, D, E and H

Constant-maturity Indices, each index represents a subset of a Main Index whereby the weighted modified duration reaches a desired target on the rebalancing date. As for Currency-hedged Indices, at each rebalancing date, a long position in a Danish Bond Index is hedged by selling DKK and buying the foreign currency at one month forward (maturing at the next Rebalancing Date). The notional size of the forward contract in DKK is given as the expected value of the Index at the expiration date of the forward contract, where the Index is assumed to grow at the one-month CIBOR rate. At the next Rebalancing Date, any proceeds or losses from the forward contract are added/subtracted directly to/from the Index and a new forward contract is entered.

The index manual outlined the details of the determination methodology for the Danish Bond Indices is made available to stakeholders upon request. Nordea Bank retains the intellectual property to the Danish Bond Indices. Any future changes to the determination methodology or the termination of one or multiple Danish Bond 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 IAC, 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 IAC. Policies and procedures are documented in the administrator Control Framework.

5.2 Possible impacts of changes to, or the cessation of the benchmarks upon the financial contracts, financial instruments that reference the benchmark or the measurement of the performance of investment funds

Generally, IAS will publicly consult on any planned material change to or the cessation of a Danish Bond Index to allow stakeholders to indicate where changes to or the termination of a benchmark are expected to have adverse impacts. IAS will make reasonable efforts to address stakeholder concerns expressed in response to such consultation and to allow for reasonable advance notice for stakeholders in order to unwind existing contracts or instruments or seek an appropriate substitute benchmark. However, there may be circumstances where external factors beyond the control of the administrator could lead to short-term changes to or the termination of one or more Danish Bond Indices without proper consultation or adequate notice period, 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 indices. This may have a direct impact on investors with positions in financial contracts or financial instruments referencing the Danish Bond Indices.

6 Additional Information

Additional information

For more information, including to request index specific methodologies, please visit www.ihsmarkit.com/products/index-administration-services or contact us support@markit.com.

IMPORTANT

This Benchmark Statement will be updated whenever the information it provides is no longer correct or sufficiently precise and at least where: (a) there is a change in the type of the benchmark; (b) 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.

ABOUT US

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CONTACT US

For more information, including to request index specific methodologies, please visit www.ihsmarket.com/products/index-administration-services or contact us support@markit.com.

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