Refinitiv Benchmark Services (UK) Limited

Canadian Dollar Offered Rate (CDOR) Benchmark statement

Date of Issue: 19 January 2022

Date of Last Review: 19 October 2022 Document Classification: Public



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Introduction

The Canadian Dollar Offered Rate ("CDOR" or "the benchmark") was developed to establish a daily benchmark reference rate for Canadian Bankers' Acceptance borrowings ("BAs"). The Canadian BA market exists primarily within Canada and as of 2017 constituted the largest sector of the Canadian dollar money market after Government of Canada treasury bills. BAs averaged just over 25 percent of the Canadian domestic money market in 2017 in terms of issuance¹. In 2020, trading in BAs amounted to C\$1,846 billion, 41.1% of the total money market volume of C\$4,488 billion². Government of Canada treasury bills accounted for 34.7% of the total volume.

The Canadian BA market originated as a source of funding for small and medium sized corporations but has grown to be an important source of funding for larger corporations. Corporate borrowers maintain lines of credit known as BA facilities with Canadian banks. A BA is typically created when a borrower draws down on a BA facility and the lending bank guarantees ("stamps") the BA in return for a stamping fee. Buyers of BAs include insurance companies, pension funds, money market funds, corporations, banks and asset managers¹.

Refinitiv Benchmark Services (UK) Limited ("RBSL" or "the Administrator") is the administrator of CDOR. CDOR is an interest rate benchmark subject to the UK Benchmark Regulation³ ("BMR") ("Interest Rate Benchmarks"). RBSL is required to comply with Multilateral Instrument 25-102 Designated Benchmarks and Benchmark Administrators, a rule adopted and regulated by members of the Canadian Securities Administrators ("CSA"). RBSL has adopted policies and procedures to comply with these regulations, and Annex I of the BMR that specifies specific regulatory regime for interest rate benchmarks to ensure accurate and sufficient data; an independent oversight committee, an independent external audit of compliance with the benchmark methodology and BMR; and contributor systems and controls requirements. Annex I of the BMR sets out the requirements for the contributors' systems and controls, which must include:

- An outline of responsibilities within each firm, including internal reporting lines and accountability, including the location of submitters and managers and the names of relevant individuals and alternates;
- Internal procedures for sign-off of contributions of input data;
- Regular internal reviews of input data and associated procedures;
- Disciplinary procedures for actual or attempted manipulation of the benchmark;
- Effective conflicts of interest management procedures and communication controls;
- Physical separation of submitters from interest rate derivatives traders and rules against collusion;
- Measures to prevent, or limit, inappropriate influence over persons involved in the provision of input data;
- No direct link between the remuneration of employees involved in the provision of input data and the remuneration of, or revenues generated by, persons engaged in another activity where a conflict of interest may arise;
- Controls to identify any reverse transaction subsequent to the provision of input data;
- Detailed record-keeping in relation to a bank's LIBOR submissions; and
- The compliance function reporting any findings to management on a regular basis.

All of these requirements are included within the Contributors Code of Conduct. All contributors are required to acknowledge in writing that they have read the Code and will comply with it.

CDOR is not considered a critical benchmark for the purposes of the BMR but is designated as a critical benchmark for the purposes of the CSA rule.

¹ See "A Primer on the Canadian Bankers' Acceptance Market", Bank of Canada Staff Discussion Paper, June 2018.

² See Money Market Secondary Trading Statistics published by the Investment Industry Regulatory Organization of Canada.

The Benchmarks (Amendment and Transitional Provision) (EU Exit) Regulations 2019.

CDOR is calculated using input data (each a "Contribution") submitted by a panel of banks (each a "Contributor"). Each Contribution is the rate at which each Contributor would be willing to lend (offer) funds against primary BA issuances with terms to maturity of approximately 1, 2, and 3 months to clients with existing credit facilities that reference CDOR plus a fee. This represents the bid side of primary BA issuance. The majority of BA facilities reference CDOR as the lending rate to which a stamping fee is added by the lending bank. CDOR is therefore a committed lending rate, not a borrowing rate.

CDOR is considered to be reliable provided that:

- there is activity in the primary issuance market or the secondary market for BAs or in related or correlated instruments that allows contributors to establish a representative market level for BAs when making contributions, and
- the panel of contributing banks is sufficiently representative of the banks involved in lending funds against primary BA issuances.

Both conditions should be satisfied in order for CDOR to be a reliable reference rate for both the Canadian BA market and for short-term unsecured Canadian dollar interest rates. The panel banks as listed in the CDOR Methodology account for an overwhelming majority of primary BA issuances in a given year.

This benchmark statement shall be reviewed at least every two years, or whenever there is a material change to either the type of the benchmark or to the Methodology used in the determination of the benchmark.

CDOR is subject to a cessation notice⁴. The calculation and publication of all tenors of CDOR will permanently cease immediately following a final publication on Friday June 28, 2024.

^{4 &}lt;u>www.lseg.com/content/dam/ftse-russell/en_us/documents/announcement/cdor-cessation-notice.pdf.</u>

Overview of methodology

Input data for the determination of CDOR is submitted by a panel of banks (each a "Contributor") for each of the CDOR tenors (1, 2 and 3 months). Each Contribution is the rate at which the Contributor would be willing to lend (offer) funds against primary BA issuances with terms to maturity approximately matching each CDOR tenor to clients with existing credit facilities that reference CDOR plus a fee. Each Contributor shall formally designate employees to act as the Submitter and a Supervisor and, at their discretion, one or more alternate Submitters and Supervisors to contribute, using where appropriate expert judgment, and check input data for the CDOR benchmark. Each Contributor will undertake and document a due diligence process to determine who is suitable to be designated as a Submitter and Supervisor.

Each Contribution by each Contributor for each CDOR tenor shall be anchored in any primary BA market issuance and secondary BA market transactions completed after the publication of CDOR on the previous business day but prior to the Contribution being delivered to RBSL. Contributions shall also reflect any adjustment made by the Contributor upon consideration of market data and other expert judgment.

If the Contributor did not complete any such primary BA market issuance or secondary BA market transactions after the publication of CDOR on the previous business day, the primary issuance and secondary market transactions on the most recent business day will be considered by the Contributor but there will be greater emphasis on market data and other expert judgment.

If five or more Contributions are received, the Contributions shall be ranked, the highest and lowest discarded and the remaining rates averaged to determine CDOR at each tenor. If more than one but fewer than five Contributions are received, the rates will be averaged to determine CDOR at each tenor (no rates will be discarded). If only one Contribution is received, the contribution window shall be extended and RBSL will contact all Contributors to encourage additional Contributions. If no additional Contributions are forthcoming, the single Contribution received will stand alone as the CDOR benchmark for the day for that tenor. In such an event that zero Contributions are received, the Administrator will re-publish the previous day's published CDOR rate for the affected tenor(s).

Contributors may make and amend Contributions during the contribution window from 09:40am ET to 10:10am ET. CDOR is then determined and published by the Administrator at 10:15:00am ET. CDOR may be refixed after the publication time of 10:15:00am ET if a Contributor identifies a material error in its Contribution(s) or if RBSL finds a material error in the calculation of CDOR, where a material error is one that has an impact of one basis point or more on the published CDOR benchmark.

No models or method of extrapolation or interpolation are used by RBSL when determining CDOR. Further, CDOR is not determined by means of a portfolio of constituents.

No discretion or expert judgment is exercised by RBSL in the determination of CDOR. In the absence of primary issuance or secondary market transactions the underlying BA market, Contributors will use market data and expert judgment informed by market data from similar unsecured markets or from related markets or by other relevant references.

The CDOR Contributor Code of Conduct requires Contributors to have written submission procedures, policies, templates and records in place which are made available to RBSL upon request. A submission record or template developed by each Contributor is required to act as a general record of factors considered when determining the CDOR Contribution which captures relevant daily notable market movements and should include a clear description of the data taken into account in determining the Contribution. The submission procedures also specify the persons authorized to use expert judgment, the internal controls governing the use of expert judgment and the persons authorized to evaluate ex-post the exercise of expert judgment. Each Contributor's post-Contribution processes used for the monitoring of Contributions should be capable of identifying exceptions in line with predefined parameters, including a requirement to query the Submitter when a Contribution differs from the previous day's Contribution by a pre-determined threshold.

Expert judgement used by contributor banks in determining a submission is evaluated ex post by RBSL using, primarily, Monitoring & Surveillance controls and requesting contributor bank documentation and records as required.

Where expert judgment is used by the Contributor in accordance with the Methodology, the Contributor Code of Conduct requires that expert judgment shall be free from any undue or improper influence and shall not, for greater certainty, take into consideration any factors that would be contrary to the "Improper Market Conduct" or "Conflicts of Interest" provisions of the CDOR Code of

Conduct, such as the consideration of swap resets that are linked to CDOR or with knowledge of any Bid that may be submitted by another Contributor to RBSL prior to the publication of CDOR.

The benchmark does not have corresponding ISINs. The Benchmark is determined using contributed input data and is an interest rate benchmark as per the BMR. Consequently, the Benchmark is not any of the following types of benchmark as specifically defined by the BMR: readily available data, regulated data, or commodity.

Potential limitations of the benchmark

Determination of CDOR is dependent on receiving sufficient input data from Contributors for each CDOR tenor. Technical problems or extreme market events may lead to an insufficient number of Contributions, resulting in no calculation re-publication of the previous day's published CDOR rate. Further, RBSL considers that five Contributors is a realistic minimum to ensure reliable Contributions and avoid concentration in sources of input data.

There may also be insufficient market liquidity to support the panel banks when making Contributions. Contributors have a range of references to use when deciding Contributions in accordance with the hierarchy described in the CDOR Methodology. These include transactions in the underlying primary BA issuance market and secondary BA market and, following that, Contributors may also use expert judgment informed by market data from a range of related markets or by other relevant references.

The design of CDOR is therefore resilient in the event of a lack of liquidity in the underlying BA market alone. However, an extreme market event may lead to a loss of liquidity across a range of markets, or to increased volatility in the spreads between related markets and the BA market, preventing the Contributors from making the Contributions required for the determination of CDOR and resulting in the re-publication of the previous day's published CDOR rate.

Methodology changes and benchmark cessation

The CDOR Methodology has been adopted as being a reliable and resilient means for providing a benchmark that accurately represents both BA lending rates and unsecured interest rates in the Canadian dollar money market.

The CDOR Methodology is subject to a review in order to assess its ongoing fitness for purpose on at least an annual basis. In the event that the review leads RBSL to believe that a change to the Methodology is required and that the change is material in its effect on the benchmark, a market consultation will be conducted in accordance with the RBSL Methodology Change Procedures in order to seek feedback from a representative range of stakeholders. RBSL will review all feedback and, if following such review, it resolves to proceed with the proposed change or changes, will provide sufficient notice to users of the benchmark before implementing such change or changes.

Circumstances beyond the control of RBSL may necessitate an immediate change to or the cessation of the benchmark. Such circumstances include without limitation (i) a loss of liquidity in the underlying BA markets and similar markets, or in the related markets used to inform expert judgment and (ii) a loss of Contributors such that a representative panel of banks cannot be maintained.

In the event that an immediate change is required, RBSL will provide as much notice as is practicable and following such change will conduct an internal review of the Methodology.

If it becomes necessary to cease calculation and distribution of the benchmark, RBSL will implement the RBSL Benchmark Cessation Policy. This includes conducting an analysis of the estimated usage of the benchmark and, where feasible, the selection of a credible alternative benchmark. In all cases, RBSL will take all reasonable steps to ensure that all users and other stakeholders are made aware as soon as possible of any intention or possible necessity to cease the benchmark.

CDOR is subject to a cessation notice⁵. The calculation and publication of all tenors of CDOR will permanently cease immediately following a final publication on Friday June 28, 2024.

Any material change to the Methodology or cessation of the benchmark may have an impact on any financial contract or financial instrument that references the benchmark or on the measurement of the performance of an investment fund that uses or refers to the benchmark. A material change to the Methodology may lead to a change in the economic reality represented by the benchmark and therefore to the economic exposure of any financial contract or financial instrument that references the benchmark. A cessation of the benchmark would require the selection of an alternative benchmark or the implementation of any fallback procedures for financial contracts or financial instruments that reference the benchmark. Any financial contracts or other financial instruments that reference the benchmark should be able to withstand, or otherwise address the possibility of changes to, or cessation of the benchmark.

 $^{^{5} \ \}underline{\text{https://www.lseg.com/content/dam/ftse-russell/en_us/documents/announcement/cdor-cessation-notice.pdf}.$

Further information

The following documents provide additional information and definitions of key terms and are available on LSEG's website:

- CDOR Methodology
- CDOR Contributor Code of Conduct

Further information on Canadian bankers' acceptances can be found in "A Primer on the Canadian Bankers' Acceptance Market", Bank of Canada Staff Discussion Paper, June 2018.

For further information about CDOR, please contact RBSL at index_queries@lseg.com.

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