

IIROC NOTICE

Administrative Notice General

Please distribute internally to:

Corporate Finance
Institutional
Internal Audit
Legal and Compliance
Operations
Senior Management
Trading Desk

Contact:

Mike Prior
Vice President, Market Surveillance
Telephone: 416-646-7217
Fax: 416-646-7263
e-mail: mprior@iiroc.ca

13-0010
January 10, 2013

IIROC review of CDOR supervisory practices

EXECUTIVE SUMMARY

The Canadian Dealer Offered Rate (CDOR) is the recognized benchmark index for Canadian bankers' acceptances (BAs) with a term to maturity of one year or less. It may be viewed generally as the rate at which a principal market-maker would fund a corporate loan without regard to the creditworthiness of the borrower. Determined daily from a survey of eight participants and publicly disseminated by Reuters, CDOR has, over time, been used increasingly in both money markets and derivative markets as a reference rate for futures contracts, forward rate agreements and swaps.

IIROC's oversight of CDOR was initially focused on the timeliness and integrity of CDOR reporting, and has expanded in recent years to the supervisory policies and procedures of those IIROC Dealer Members that participate in the CDOR survey. In carrying out its role, IIROC consults regularly with the Bank of Canada on market practices.



Reference rates in Canada and globally have generally not been subject to specific regulatory requirements. Recent experiences with the London Inter-Bank Offered Rate (LIBOR), however, have pointed to a need for increased scrutiny of such survey-based reference rates. That is why a number of regulatory bodies, including the UK Financial Services Authority (FSA), US Commodity Futures Trading Commission (CFTC), International Organization of Securities Commissions (IOSCO) and IIROC, are examining the need for rules and clarity around accountability for their integrity and use.

In August 2012, IIROC launched a formal review of the CDOR rate-setting process. Representatives from IIROC and the Bank of Canada met each of the firms that participate in the CDOR rate-setting process, and IIROC followed up with a request for written responses to a series of questions. The purpose of this review was to further explore current practices and views related to the calculation, supervision and use of CDOR. As part of the review, we also assessed CDOR against the backdrop of LIBOR issues raised by the Wheatley Review (2012), Timothy Geithner's letter to the Bank of England (2008) and the 2012 Barclays settlement with the FSA and CFTC.

IIROC's review was not an investigation into potential wrongdoing or manipulation of CDOR. Nor did we seek to determine whether CDOR is the appropriate benchmark for existing derivative and other products that reference CDOR.

Our key findings fall into four broad categories:

- **CDOR Calculation and Transparency:** Our review found that participants have a consistent working definition of CDOR but that certain aspects of the definition are unclear. Most firms use similar inputs in calculating their submissions, but there is variation in a number of the assumptions made. Most participants believe, however, that it would be unnecessary and infeasible to tie the CDOR calculation to actual transactions.
- **Survey Participation:** Participation is currently voluntary and there are no documented criteria for participation. Participants suggest that active BA issuance and market-making are essential conditions for firms to contribute in a meaningful way, but a minimum number of contributors is needed to ensure the integrity of the calculation.
- **Rate-setting Supervision:** Most participants have business supervision procedures and conflict-of-interest protocols ("Chinese walls") of varying degrees in place, but independent compliance oversight can be strengthened.
- **Regulatory Jurisdiction:** In many cases, daily CDOR submissions are prepared by employees of dealers' bank affiliates, yet IIROC does not have regulatory jurisdiction over Canadian banks. While a number of IIROC's principles-based rules governing basic business conduct and debt market activity may apply generally, neither existing financial sector legislation nor IIROC rules explicitly address benchmark rate-setting activity or manipulation in the rate-setting context.



IIROC concurs in principle, in the context of CDOR, with the fundamental conclusions reached in the Wheatley Review¹. In particular:

- There is a case in favour of reforming CDOR as a benchmark. Relevant authorities and market participants may, in future, consider whether other benchmarks may now be more appropriate for some of the specific products that currently reference CDOR. Nonetheless, steps can and should be taken to strengthen the safeguards around the integrity of CDOR for its ongoing use with respect to BAs and other instruments.
- Market participants, operating within appropriate regulatory guidelines, should continue to play a significant role in the production and oversight of CDOR.

Wheatley's third conclusion was that transaction data should be explicitly used to support LIBOR submissions. While it may be desirable for benchmark rates in general to be anchored in real, observable transactions, this approach may not be so appropriate for CDOR, given its differences from LIBOR² and other similar benchmarks. This is a point which the relevant authorities will need to consider further.

IIROC has shared the results of its CDOR review with the Bank of Canada, federal Department of Finance, and other Canadian regulators, outlining our findings and providing a number of recommendations. These authorities have agreed to consider further, in conjunction with IIROC, the implications for CDOR of the issues identified in IIROC's review as well as relevant issues identified in ongoing international work in relation to the use and regulation of interest-rate reference rates.

IIROC's review includes suggestions regarding key areas for enhancement to strengthen the integrity of and confidence in CDOR, including:

- specific documented criteria for participation in the rate setting process;
- more explicit documentation regarding the definition, calculation methodology and transparency of CDOR; and
- documented regulatory expectations for participants' supervision of rate-setting activity and controls to prevent potential manipulation.

¹ See Section 1.2 for further discussion regarding the Wheatley Review.

² An important distinction between LIBOR and CDOR is that CDOR is a *lending* rate, while LIBOR is a *borrowing* rate. CDOR is the rate at which contributors are willing to extend credit to corporate clients utilizing a BA facility (at CDOR plus a stamping fee determined by each client's credit risk). LIBOR is a theoretical rate at which the contributor believes it can borrow from other financial institutions. See Section 1.4 for further details.



TABLE OF CONTENTS

1. INTRODUCTION	5
1.1 Background.....	5
1.2 International Review of Benchmark Rates	6
1.3 IIROC’s CDOR Review.....	7
1.4 CDOR vs. LIBOR.....	8
2. KEY FINDINGS.....	9
2.1 Calculation and Transparency	9
2.2 Survey Participation.....	10
2.3 Rate-setting Supervision	10
2.4 Regulatory Jurisdiction.....	11
3. CONCLUSIONS.....	13
4. RECOMMENDATIONS AND NEXT STEPS	13
REFERENCES.....	15



1. INTRODUCTION

1.1 Background

CDOR is the “average rate for Canadian bankers' acceptances for specific terms-to-maturity, determined daily from a survey on bid-side rates provided by the principal market-makers, including the major Canadian banks”³. It may be viewed generally as the rate at which a principal market-maker would fund a corporate loan without regard to the creditworthiness of the borrower. In practice, an additional spread to reflect the credit risk of a borrower, in the form of a stamping fee, is added by the lender’s corporate finance department when advancing a loan to the client.

CDOR is the recognized benchmark index for BAs with a term to maturity of one year or less. It is used in both money markets and derivative markets, as a reference rate for futures contracts, forward rate agreements and swaps.

The firms that participated in the daily CDOR survey as at the date of the review⁴ were:

- BMO Nesbitt Burns
- CIBC World Markets
- Deutsche Bank
- HSBC Bank Canada
- Bank of America Merrill Lynch
- National Bank Financial
- RBC Dominion Securities
- Scotia Capital Inc.
- TD Securities Inc.

For each maturity band (1-month, 2-month, 3-month, 6-month and 1-year BA), the highest and lowest rate submitted are removed and a simple arithmetic average is calculated for the remaining survey rates. High and low bid prices are excluded to minimize any bias in the results.

Since 2003, the CDOR survey has been administered by (Thomson) Reuters. IIROC took steps to ensure that the process, which was initially manual, was automated in 2008. The survey is conducted at 10:00 a.m. each business day by Thomson Reuters, with the calculated average and all individual submissions quoted on the CDOR page of Reuters' Monitor Service by 10:15 a.m. on the same day.

³ Bank of Canada Glossary - <http://www.bankofcanada.ca/glossaries/glossary/>

⁴ Submissions may be made by bank- and/or dealer employees – see Section 2 for further discussion. Merrill Lynch Canada Inc. withdrew from CDOR participation effective December 5, 2012 – see IIROC Administrative Notice 12-0362 at http://www.iiroc.ca/Documents/2012/6ef9a94d-3fa5-43d1-8300-74023d24a3b5_en.pdf.



Reuters reports substantially late, missing or unusual submissions, if any, to IIROC for follow-up. To date there have been very few issues; most occurred around the time of the automation process in 2008 and were technology-related matters.

Historically, the timeliness of CDOR was managed by the IDA trade association (now known as the Investment Industry Association of Canada or IIAC). As reliance upon CDOR diversified and expanded beyond Canadian banks, the need for greater oversight became apparent. Following the spin-off of the trade association from the IDA, CDOR oversight was then assumed by the IDA and subsequently IIROC, which was created in 2008.

Unlike the situation in many other jurisdictions, there is a foundation in place in Canada on which to strengthen the oversight of CDOR. IIROC oversight was initially focused on the timeliness and integrity of CDOR reporting. Over the past few years, we have also looked more closely at the supervisory policies and procedures of those IIROC Dealer Members that participate in the survey. In carrying out its role, IIROC has consulted regularly with the Bank of Canada on market practices. Since 2007 there has been a Working Group, comprised of all CDOR survey participants, IIROC and Bank of Canada representatives, which acts as a forum to discuss matters related to the setting and dissemination of CDOR.

1.2 International Review of Benchmark Rates

In 2009, the FSA, together with other regulators began investigating a number of institutions for alleged misconduct relating to LIBOR (the London Inter-Bank Offered Rate) and other benchmarks, including EURIBOR (the Euro Inter-Bank Offered Rate) and TIBOR (the Tokyo Inter-Bank Offered Rate). Following the announcement of findings against Barclays in June 2012, the UK Government tasked Martin Wheatley, the managing director of the FSA and CEO-designate of the Financial Conduct Authority (FCA) to conduct an independent review into the setting and usage of LIBOR (the Wheatley Review). The three fundamental conclusions reached in the Wheatley Review are as follows:

- there is a clear case in favour of comprehensively reforming (rather than replacing) LIBOR as a benchmark;
- transaction data should be explicitly used to support LIBOR submissions; and
- market participants should continue to play a significant role in the production and oversight⁵ of LIBOR.

The investigations into rate manipulation and the subsequent Wheatley Review have prompted other regulators to conduct in-depth examinations of reference rates. The

⁵ In drawing this conclusion, Wheatley notes that “while LIBOR needs to be reformed to address the weaknesses that have been identified, it would not be appropriate for the authorities to completely take over the process of producing a benchmark which exists primarily for the benefit of market participants”, and further suggests that “LIBOR can and should be successfully administered by private organisations, within rules and guidance set by the authorities”.



International Organization of Securities Commissions (IOSCO) announced on September 14, 2012 that it has assembled a Task Force of IOSCO Board members to identify issues and develop policy guidance and principles for financial market benchmarks.

The FSA's December 2012 Consultation Paper (CP) 12/36⁶, "The regulation and supervision of benchmarks", takes into account the recommendations made in the Wheatley Review and the UK Treasury's proposed legislative amendments, and advocates for a new approach to benchmark oversight. This new approach calls for rules and guidance that are clear and unambiguous. The CP sets out specific systems, controls and regulatory expectations, including recommendations that:

- benchmark administrators corroborate submissions and monitor for any suspicious activity;
- submitters have appropriate systems and controls in place to address any conflicts of interest; and
- both submitters and administrators have persons in key positions that fall under the oversight/jurisdiction of the Financial Conduct Authority (FCA).

While feedback on the FSA Consultation paper is pending, and the work of the IOSCO Task Force is ongoing, it appears that the consensus view expressed by policy-makers globally is that the system for determining many commonly used reference-based rates is structurally flawed.

Just as concerns relating to financial market benchmarks have been noted in other jurisdictions, questions have been raised regarding CDOR and its importance as a reference rate. IIROC's CDOR Review looks at some of these questions.

1.3 IIROC's CDOR Review

During August 2012, representatives from IIROC and the Bank of Canada met with each of the firms that participate in the CDOR rate-setting process. Participants were asked questions regarding:

- the parties responsible for determining the daily CDOR submission at each firm;
- the methodology for determining the daily submission at each firm and the level of consistency among contributors;
- "Chinese walls" and how firms address conflicts of interest;

⁶ See <http://www.fsa.gov.uk/static/pubs/cp/cp12-36.pdf>.



- the level of business and compliance supervision surrounding this activity, the identification of responsible compliance staff, the quality of policies and procedures, and evidence of reviews being conducted; and
- ways in which the integrity of the rate-setting process could be improved.

IIROC's review was not intended as an investigation into potential wrongdoing or manipulation of the CDOR rate, or to determine if CDOR is the appropriate benchmark for existing derivative and other products that reference CDOR.

As part of IIROC's review, CDOR was also assessed against the backdrop of LIBOR issues raised by the Wheatley Review (2012), the Timothy Geithner letter to the Bank of England (2008) and the 2012 Barclays settlement with the FSA and CFTC.

1.4 CDOR vs. LIBOR

An important distinction between LIBOR and CDOR is that CDOR is a *lending* rate, while LIBOR is a *borrowing* rate. CDOR is the rate at which contributors are *willing* to extend credit to corporate clients utilizing a BA facility (at CDOR plus a stamping fee determined by each client's credit risk). LIBOR is a theoretical rate at which the contributor *believes* it can borrow from other financial institutions.

As such:

- CDOR does not directly reflect the creditworthiness of the submitter; and
- contributors, particularly those that are active BA issuers, are inherently committed, on a daily basis, to the resulting average (i.e. contributors have "skin in the game")⁷.

Given the differences between the two benchmark rates, certain issues that have been identified regarding LIBOR do not apply to the same extent with respect to CDOR. However, many of the concerns that have been raised regarding LIBOR are relevant for our purposes and were considered in the context of IIROC's CDOR Review.

⁷ Note that some LIBOR contributors also lend at LIBOR, and could therefore be seen to have "skin in the game".



2. KEY FINDINGS

Following is an overview of the findings and issues identified by our review.

IIROC found that in most cases, daily CDOR submissions are prepared by employees of dealers' parent / affiliate bank or by persons that are dually-employed at both the IIROC Dealer Member and the bank. As such, the findings outlined below refer generally to "participants" so as to encompass contributing banks and/or dealers.

2.1 Calculation and Transparency

Our review found that participants have a consistent working definition of CDOR – the "bid side of syndicated deals" – but that certain aspects of the definition need to be clarified. Of particular note:

- not all quotes provided represent the actual contributing firm's base BA lending rate; and
- most firms assume CDOR represents the rate for BAs of an undefined size, which means different things to different participants (e.g. size of each corporate loan vs. cumulative size of BA facility drawdowns).

Most firms use similar inputs in calculating the rate to be submitted for the survey. Typically, a firm begins with its previous day's submission and the resultant CDOR rate. The firm then applies a calculation methodology that factors in:

- the Bank of Canada overnight rate,
- any funding pressures that exhibit a predictable pattern (mid-month and month end),
- known funding commitments,
- secondary BA trading (to the extent such information is available), and
- changes in the overnight indexed swap (OIS) curve,

as well as other relevant information such as carrying costs and other costs of capital.

A number of firms also consider interest-rate futures trading (BAX) as part of their calculation methodology, but acknowledged these are forward-looking transactions, and are therefore more of a factor in determining longer-term (i.e. 6- and 12-month) submissions.

Participants raised questions as to the value of the 6- and 12-month rates, though acknowledging that they are currently used in relation to certain instruments. While use of these longer-term rates is less frequent than the shorter terms, the full extent of their use is not easily quantified. Some measure of additional flexibility for guidance and controls applicable to these less commonly-used longer-term rates may be warranted.



Participants concurred that it would be unnecessary and infeasible to tie the CDOR calculation to actual transactions. CDOR is a committed rate in that BA trades are *based on* the published average. This commitment acts as a deterrent for firms to manipulate their submissions. Furthermore, given that the rates at which transactions are executed reflect varying corporate risk premiums, calculating a common base rate would be challenging at best, and possibly skewed where trading activity is thin⁸ so as not to be a reliable representation.

On the issue of transparency, there was no consensus among participants. While most participants believe that it continues to make sense to eliminate the high and low from the calculation (provided there continues to be sufficient participation in the survey), they generally agreed that policy-makers should consider possible changes to the current calculation methodology and practice of publicly disseminating individual submissions.

2.2 Survey Participation

Under the current regime, participation in the survey is voluntary and there are no published criteria for inclusion as a reporting participant. Originally, the list of survey participants was limited to active BA issuers. Others were subsequently included in the interests of broader participation to limit the potential for manipulative behaviour.

Most participants felt that active participation in both BA issuance and (secondary) market-making (excluding internal transactions) is an essential condition for participation.

Many participants expressed the view that a minimum number of contributors are needed to ensure integrity in the calculation of CDOR, this number ranging between 5 and 9. If active BA market participation were a pre-requisite (as suggested above) this may be challenging. Most indicated, however, that if the definition and calculation methodology were more clearly defined, a lower number of contributors would still result in a rate with integrity.

2.3 Rate-setting Supervision

At most participant firms, the person or department responsible for preparing and submitting information for the daily CDOR survey is involved in short-term fixed income trading, including BAs (primary and secondary), short-term provincial and municipal debt products, asset-backed commercial paper, and short-term funding. Involvement in this activity is key to these individuals' ability to assess the market and make an appropriate CDOR contribution. Most of these desks also trade short-term Canada bonds, strip bonds

⁸ In general, the view was that there is insufficient activity in BA trading, in particular in the longer terms, to achieve a meaningful transaction-based benchmark.



and residuals, and are involved in some debt repo transactions. Some may also use interest-rate swaps and futures, but their activity is typically limited to hedging their commitments in other instruments.

All participants recognize the potential for manipulation to take place. To address the issue, participants have put in place internal rules prohibiting other departments, staff or external parties from influencing the firm's CDOR submission. These may be in the form of specific written policies applicable to CDOR rate-setting participation, or more generic policies, such as the firm's general code of conduct. All participants have in place protocols designed to limit access to information from different departments.

Most firms confirmed that at the time of our review they had business supervision procedures of varying degrees in place regarding their CDOR submissions. However, several indicated that their Compliance department does not currently have a significant role in supervision of the rate-setting activity. Most confirmed they are in the process of enhancing the role of Compliance to address this gap.

Our review noted that a few firms already have in place robust supervision procedures, which include:

- recording daily inputs on a tracking sheet for review by compliance staff;
- a review of swap and futures positions (performed by Compliance);
- sampling deals based on CDOR and working backwards to review the rate submitted that day for possible conflicts or manipulation; and
- performing ongoing surveillance of electronic and voice communications surrounding the CDOR submission (which may include monitoring and reviewing when a red flag occurs, or reviewing communications when an anomalous rate is submitted).

2.4 Regulatory Jurisdiction

As noted above, in most cases CDOR submissions are prepared by bank employees or persons that are dually-employed at both the IIROC Dealer Member and its parent / affiliate bank. Given that IIROC does not have jurisdiction over banks or bank employees, there is a gap in regulatory jurisdiction over the rate-setting process and the participants themselves.

As is the case with benchmark rates globally, neither current legislation nor IIROC rules *explicitly* address benchmark rate-setting activity or manipulation in the rate-setting context; however, a number of IIROC's principles-based rules do apply. These include the basic business conduct requirements set out in Rule 29.1, as well as Rule 2800 (Code of Conduct for Corporation Dealer Member Firms Trading in Wholesale Domestic Debt Markets), the introduction to which states that:



Aspects of the Rule require the co-operation of affiliates and customers of Dealer Members, for example in reporting and certain disclosure, and Dealer Members are expected to conduct their business in a way that will encourage compliance with the Rule by affiliates, customers and counterparties to the extent applicable.

Moreover, dealings between Dealer Members, their related companies, affiliates, customers and other counterparties must be on terms which are consistent with this Rule and such dealings shall be deemed to include any terms necessary for a party to implement or comply with this Rule. Dealer Members must not condone or knowingly facilitate conduct by their affiliates, customers or counterparties that deviates from this Rule and its purpose of maintaining and promoting public confidence in the integrity of the Domestic Debt Market. Subject to Applicable Law, the surveillance provisions of this Rule require reporting to [IIROC] or appropriate authorities of the failure, or suspected failure, of Dealer Members, their affiliates, customers and counterparties to comply with this Rule.

IIROC has the ability to enforce compliance *by its Dealer Members* with this rule. Unclear and untested are:

- IIROC's ability to establish specific requirements that apply, for all intents and purposes, directly to its Dealer Members' parent / affiliate banks; and
- where regulatory responsibility would lie (including rule-making, compliance monitoring, and jurisdiction to bring enforcement proceedings):
 - for CDOR-related activity, carried out by an IIROC Dealer Member's parent / affiliate bank, that is independent of the IIROC Dealer Member; and
 - in the potential scenario involving CDOR participation by banks with no IIROC Dealer Member affiliate.

Other Canadian regulators may therefore also have a role to play in the oversight of CDOR participants going forward.



3. CONCLUSIONS

IIROC concurs in principle, in the context of CDOR, with the fundamental conclusions reached in the Wheatley Review. In particular,

- There is a case in favour of reforming CDOR as a benchmark. Relevant authorities and market participants may, in future, consider the appropriate use of CDOR for specific products or potential replacement benchmarks. Nonetheless, steps can and should be taken to strengthen the integrity of CDOR for its ongoing use with respect to BAs and other instruments. To that end, specific recommendations are set out below.
- Market participants should continue to play a significant role in the production and oversight⁹ of CDOR. An open process could be undertaken to define and choose an appropriate administrator. Appropriate regulations must be in place (as discussed below) to govern survey participation, CDOR calculation and transparency.

Wheatley's third conclusion was that transaction data should be explicitly used to support LIBOR submissions. While it may be desirable for benchmark rates in general to be anchored in real, observable transactions, this approach may not be so appropriate for CDOR, given its differences from LIBOR and other similar benchmarks. This is a point which the relevant authorities will need to consider further.

4. RECOMMENDATIONS AND NEXT STEPS

IIROC has provided its CDOR review to the Bank of Canada, federal Department of Finance, and other Canadian regulators, outlining our findings and making a number of recommendations. These authorities have agreed to consider further, in conjunction with IIROC, the implications for CDOR of the issues identified in IIROC's review as well as relevant issues identified in ongoing international work in relation to the use and regulation of interest-rate reference rates.

Our review has also suggested key areas for enhancements to strengthen the integrity of and confidence in CDOR, including:

- specific documented criteria for participation in the rate-setting process, clarifying, among other things:
 - whether participants must be active BA issuers and/or active in the secondary markets;
 - whether participation should be mandatory for firms that satisfy the criteria; and

⁹ Note that this does not suggest that an administrator should have a regulatory role. As suggested in the Wheatley Review, the administrator should operate within rules and guidance set by the authorities.



- whether there is a minimum number of participants needed to ensure the integrity of the rate;
- clarity regarding the definition, calculation methodology and transparency of CDOR, addressing:
 - the scope and applicability of the rate contribution (i.e. what it represents);
 - required and acceptable inputs for both short- and longer-term rates; and
 - use and public dissemination of (all or some) contributions;
- documented regulatory expectations for participants' supervision of rate-setting activity and controls to prevent manipulation, including rules and/or guidance addressing:
 - acceptable compliance / supervisory roles and responsibilities;
 - specific Chinese wall procedures; and
 - CDOR manipulation.

As noted above, much work is underway internationally to strengthen rules and clarify accountability for the implementation and use of LIBOR and other similar benchmarks. IIROC looks forward to working with other Canadian agencies and regulators to ensure that oversight of CDOR is also strengthened in line with international standards.



REFERENCES

Financial Services Authority (FSA). Barclays fined 59.5 million pounds for significant failings in relation to LIBOR and EURIBOR (press release). FSA, June 27, 2012.

Geithner, Timothy. LIBOR recommendations. Federal Reserve Bank of New York, May 27, 2008.

Haroutunian, Nicole. CFA Institute on LIBOR Reforms. CFA Institute, September 11, 2012.

The Global Financial Markets Association (GFMA). Principles for Financial Benchmarks. GFMA, September 7, 2012.

U.S. Commodity Futures Trading Commission (CFTC). CFTC Orders Barclays to pay \$200 Million Penalty for Attempted Manipulation of and False Reporting concerning LIBOR and Euribor Benchmark Interest Rates (press release). CFTC, June 27, 2012.

Wheatley, Martin. The Wheatley Review of LIBOR: Initial Discussion Paper. HM Treasury, 1 Horse Guards Road, London, August 2012.

Wheatley, Martin. The Wheatley Review of LIBOR: Final Report. HM Treasury, 1 Horse Guards Road, London, September 2012.

Financial Services Authority (FSA). Consultation Paper 12/36: The regulation and supervision of benchmarks. FSA, December 2012.