NOTICE TO MEMBERS

N° 064-19

May 22, 2019

REQUEST FOR COMMENTS

AMENDMENT TO RULE C-14 OF THE CANADIAN DERIVATIVES CLEARING CORPORATION TO MODIFY THE DELIVERY STANDARDS OF THE FIVE-YEAR GOVERNMENT OF CANADA BOND FUTURE CONTRACTS (CGF)

On May 2, 2019, the Board of Directors of Canadian Derivatives Clearing Corporation ("CDCC") approved certain amendments to Rule C-14 of CDCC's Rules. Those amendments are concomitant with Bourse de Montréal Inc.'s proposal to modify the delivery standards of the CGF contract. CDCC's Rules, which also contain the delivery standards of the CGF, need to be modified in order to reflect these proposed changes.

Please find enclosed an analysis document as well as the proposed amendments.

Process for Changes to the Rules

CDCC is recognized as a clearing house under section 12 of the *Derivatives Act* (Québec) by the Autorité des marchés financiers ("AMF") and as a recognized clearing agency under section 21.2 of the *Securities Act* (Ontario) by the Ontario Securities Commission ("OSC").

The Board of Directors of CDCC has the power to approve the adoption or amendment of the Rules of CDCC. Amendments are submitted to the AMF in accordance with the self-certification process and to the OSC in accordance with the process provided in the Recognition Order.

Comments on the proposed amendments must be submitted before **June 21, 2019**. Please submit your comments to:

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Canadian Derivatives Clearing Corporation
1800-1190 av. des Canadiens-de-Montréal, P.O. Box 37
Montreal, Quebec H3B 0G7
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A copy of these comments shall also be forwarded to the AMF and to the OSC to:

Mrs. Anne-Marie Beaudoin
Corporate Secretary
Autorité des marchés financiers
Tour de la Bourse, P.O. Box 246
800 Victoria Square, 22nd Floor
Montréal, Québec H4Z 1G3
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For any question or clarification, Clearing Members may contact Alexandre Normandeau at 514-787-6623 or at alexandre.normandeau@tmx.com.

Jay Rajarathinam
President

AMENDMENTS TO RULE C-14 OF THE CANADIAN DERIVATIVES CLEARING CORPORATION TO MODIFY THE DELIVERY STANDARDS OF THE FIVE-YEAR GOVERNMENT OF CANADA BOND FUTURE CONTRACTS (CGF)

TABLE OF CONTENTS

I. DESCRIPTION

Bourse de Montréal Inc. (the “Bourse”) proposes to modify the delivery standards of the Five-Year Government of Canada Bond Futures (“CGF”) to change the remaining maturity range of deliverable bonds from 4.25-5.25 years to 4.5-5.5 years and to reduce the minimum amount outstanding of deliverable bonds from C$3.5B to C$3B. Therefore, the rules of the Canadian Derivatives Clearing Corporation (“CDCC”), which also contain the delivery standards of the CGF, need to be modified in order to reflect these proposed changes.

II. PROPOSED AMENDMENTS

The proposed amendments to Rule C-14 of CDCC’s Rules are attached. Specifically, in alignment with the proposed changes of the Bourse’s rules, CDCC proposes to replace the current remaining maturity range of 4.25-5.25 years of the CGF contract with a remaining maturity range of 4.5-5.5 years and to reduce the minimum amount outstanding for deliverable bonds from C$3.5B to C$3B.

III. ANALYSIS

a. Background

The Bourse proposes to update its rules pertaining to CGF delivery standards as it considers that a well-functioning CGF market is desirable for the growth of its products and wants to ensure that its contract design is in line with the needs of market participants. CDCC refers to the attached extracts of the Bourse’s detailed analysis pertaining to this modification to the CGF delivery standards for additional background information on the proposed amendments.

b. Objectives

CDCC’s Rules need to be aligned with the changes proposed by the Bourse. The objective set by the Bourse is to ensure that the 5-year benchmark bond in the cash market is the cheapest-to-deliver bond of the CGF contract as often as possible (in particular for the June and December contract expiry). The Bourse believes that the proposed modifications will increase the utility and the effectiveness of the CGF contract for hedgers and speculators, and better serve the needs of market participants, which should result in greater market efficiency.

c. Comparative Analysis

Given the nature of the proposed amendments, CDCC is of the view that a comparative analysis is not required.

d. Analysis of Impacts

i. Impacts on Market

The proposed modifications are based on a consultation conducted by the Bourse with market participants and end-user clients in order to increase CGF’s effectiveness as a trading and hedging instrument. The feedback the Bourse is receiving from the industry is that a better alignment between the CGF and the underlying cash bond market will help grow the acceptance of the futures contract.

ii. Impacts on Technology

The proposed changes should have no impact on the technological systems of CDCC, Clearing Members or other market participants.

iii. Impacts on trading functions

Not applicable.

iv. Public Interest

CDCC is of the view that the proposed amendments are not contrary to the public interest.

IV. PROCESS

The proposed amendments, including this analysis, must be approved by CDCC’s board of directors and submitted to the Autorité des marchés financiers, in accordance with the regulatory self-certification process, and to the Ontario Securities Commission in accordance with the rules stated in Appendix “A” of Schedule “C” of CDCC Recognition Order dated April 8, 2014 (as amended from time to time). The proposed amendments and analysis will also be submitted to the Bank of Canada in accordance with the Regulatory Oversight Agreement. Subject to public comments, the proposed amendments will take effect during Q3 2019.

V. ATTACHED DOCUMENTS

Appendix 1: Extracts of Bourse de Montréal Inc.’s detailed analysis pertaining to the modifications to the CGF delivery standards
Appendix 2: Proposed amendments to Rule C-14 of CDCC’s Rules

Appendix 1

Extracts of Bourse de Montréal Inc.'s detailed analysis pertaining to the modifications to the CGF delivery standards

" **II. ANALYSIS**

a. Background

Benchmark bonds are usually the most liquid bonds in the over-the-counter ("OTC") bond market. Because of this liquidity pool concentration, they represent the primary tool for participants wishing to manage and adjust their fixed income portfolios during a given day. Following these transactions in benchmark bonds, a number of clients and brokers transfer this exposure into more efficient futures contracts via the Exchange for Physical ("EFP") facility of the Bourse. Therefore, an efficient interaction between the benchmark bonds and their associated GoC bond futures contracts is desirable to help clients and brokers in their portfolio and balance sheet management. However, EFP transactions (often referred to as "basis trade" or "cash and carry trade") are predominantly quoted against the cheapest-to-deliver ("CTD") bond, since it is the bond most likely to be delivered during the delivery month. If the benchmark bond is not the same as the CTD bond, participants can roll (or convert) their benchmark bond exposure into the CTD bond, enabling easier EFP trades thereafter. However, market participants' feedback is that this conversion between the benchmark bond and the CTD bond is not convenient to execute in the 5-year segment of the yield curve, potentially explained by the fact that the CGF is not liquid enough at the moment. This benchmark bond to CTD conversion trade also represents an additional step (cost) for clients. Thus, the longer the benchmark bond remains the CTD bond, the easier it is for participants to interact with the Bourse's CGF contract to manage fixed income portfolios.

In 2013, the Bourse implemented a similar modification to the CGF delivery standards, reducing the remaining maturity range of deliverable bonds from 3.5-5.25 years to a maturity of 4.25-5.25 years. While this change did improve the attractiveness of the CGF contract by increasing the duration of the CTD bond and reducing the tracking error relative to the on-the-run five-year GoC bond, the CTD bond is still not the five-year GoC benchmark bond for about half the year, a situation participants would like to see corrected.

Regarding the minimum amount outstanding of deliverable bonds, the last eight 5-year bond auctions held by the Bank of Canada ("BoC") had an amount issued of C$3B per auction. This represents a reduction from the amount issued at 5-year bond auctions in 2016 and 2017, where the average was C$3.8B per auction. Given that a mature 5-year bond has a total amount outstanding between C$12B toC$18[1], and that each five-year bond usually gets auctioned four times before reaching maturity, that C$3B amount issued at each auction is in line with the lower bound of the total amount outstanding target. However, given that the current minimum amount outstanding of deliverable bonds is C$3.5B, it now takes more time (at least two auctions) for a bond to be eligible for delivery.

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[1] See Debt Management Strategy for 2019-2020: https://www.budget.gc.ca/2019/docs/plan/anx-04-en.html#Debt-Management-Strategy-for-2019%E2%80%9320

b. Description and Analysis of Market Impacts

The Bourse proposes to modify article 12.212 of the rules to change the basket of deliverable bonds from a remaining maturity range of 4.25-5.25 years to 4.5-5.5 years, and to change the minimum amount outstanding of deliverable bonds from C$3.5B to C$3B for the CGF contract. The table 1 below summarizes the modification contemplated:

Table 1: Current and proposed CGF maturity range and minimum amount outstanding requirements for deliverable bonds

Current CGF maturity range requirement	Proposed CGF maturity range requirement
Government of Canada bonds which have a remaining time to maturity of between 4.25 years and 5.25 years as of the first day of the delivery month, calculated by rounding down to the nearest whole month period	Government of Canada bonds which have a remaining time to maturity of between 4.5 years and 5.5 years as of the first day of the delivery month, calculated by rounding down to the nearest whole month period
Current CGF amount outstanding requirement	Proposed CGF amount outstanding requirement
Government of Canada bonds which have an outstanding amount of C$3.5 billion nominal value[2].	Government of Canada bonds which have an outstanding amount of C$3 billion nominal value[3].

The proposed modifications are based on a consultation with market participants and end-user clients, in order to increase its effectiveness as a trading and hedging instrument. The feedback the Bourse is receiving from the industry is that a better alignment between the CGF and the underlying cash bond market will help grow the acceptance of the futures contract.

GoC 5-year issuance pattern

Each spring, the BoC publishes its debt management strategy for the upcoming year. Here is the projected 5-year bond issuances for 2019-2020, a pattern that has been relatively stable in the last few years. The impacts of the proposed modifications discussed thereafter are based on these conditions:

- Eight auctions per year (Jan, Feb, Apr, May, July, Aug, Oct, Nov)
- Two new 5-year bonds issued per year (March and September maturity)
- Target size for each 5-year bond is C$12-18B.

Given this debt issuance pattern and strategy, the 5-year benchmark bond changes two times per year (mid-February and mid-August). For the front month contract, the benchmark bond is not the CTD for about half the year, including the entire active trading period of the June and December expiries.

[2] net of all potential purchases by the Government of Canada up until the end of the period during which the Bond issue is deliverable.

[3] See note 2.

Impacts of the proposed change to the remaining maturity range on the delivery basket

The impacts of changing the remaining maturity range of deliverable bonds from 4.25-5.25 years to 4.5-5.5 years only relates to the June and December contract expiry. Specifically for those contracts, the modifications would imply[4]:

- One less deliverable bond in the delivery basket, reducing the deliverable amount outstanding from a minimum of C$30B to C$18B for these expiries.
- A reduction of position limit for the first contract month, from a maximum of 15,000 contracts to 9,000 contracts for the first contract month.
- The five year benchmark bond would be the CTD bond for the entire "active" trading period of the contract.

Tables 2-5 below summarizes the impacts of the proposed modifications to the remaining maturity range on the deliverable baskets and on the CTD bond. As illustrated, all four contract expiries would now have two bonds in their respective delivery basket.

Table 2: Current CGF delivery basket

Expiry Month	# of eligible bonds	remaining maturity (as of the 1st day of the delivery month)	Amount outstanding (in C$ billions)
March and September	2	4.5Y and 5Y	C$24B - 30B$
June and December	3	4.25Y, 4.75Y and 5.25Y	C$30B-36B

Table 3: Proposed CGF delivery basket

Expiry Month	# of eligible bonds	remaining maturity (as of the 1st day of the delivery month)	Amount outstanding (in C$ billions)
March and September	2	4.5Y and 5Y	C$24B - C$30B
June and December	2	4.75Y and 5.25Y	C$18B - C$21B

Table 4: Current CGF delivery basket - Period of time when 5-year benchmark bond is or is not the same as the CTD

CGF expiry	Jan				Feb				Mar				Apr				May				June			
March	Y	Y	Y	Y	Y	Y	N	N	N	N	N													
June								N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
September																				Y	Y	Y	Y	Y
December																								

CGF expiry	July				Aug				Sep				Oct				Nov				Dec			
March																				Y	Y	Y	Y	Y
June																								
September	Y	Y	Y	Y	Y	Y	N	N	N	N	N													
December								N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	

Legend	
	Contract active period
	Roll period
	Delivery period

Y: Benchmark bond is the CTD
N: Benchmark bond is not the CTD

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[4] Based on debt issuance projections, derived from the amount issued at most recent 5-year bond auctions and from the GoC 5-year issuance pattern strategy section described above.

Table 5: Proposed CGF delivery basket - Period of time when 5-year benchmark bond is or is not the same as the CTD

CGF expiry	Jan				Feb				Mar				Apr				May				June				July				Aug				Sep				Oct				Nov				Dec			
March	Y	Y	Y	Y	Y	Y	N	N	N	N	N																																	Y	Y	Y	Y	Y
June								Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y																									
September																				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N													
December																																Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	

Impacts of the proposed change to the minimum amount outstanding on the delivery basket

The rationale for reducing the minimum amount outstanding for a GoC bond to be eligible for inclusion in the deliverable basket from C$3.5 billion to C$3 billion is to bring it in-line with the nominal amount issued for auctioned 5-year bonds (see table 6 below). That way, a new 5-year bond issue would become eligible in the delivery basket as of its first auction, like it was the case in 2016 and 2017. This change is similar to the one the Bourse did for its two-year GoC bond futures in 2006, when it reduced the minimum amount outstanding requirement from C$3.5B to C$2.4B[5]. Given the remaining maturity range change discussed earlier, having a new bond eligible for delivery quicker in the basket would also reduce the risk of having only one bond in the June and December delivery basket should the BoC decide to change its maturity date pattern for the 5-year segment of the yield curve.

Table 6: Most recent auctioned 5-year GoC bonds

5-year GoC bond (maturity date)	Coupon	# of auction	Issue Size (per auction)
March 1, 2024	2.250	4	C$ 3B
September 1, 2023	2.000	4	C$ 3B
March 1, 2023	1.750	4	3 of C$ 3.7B, 1 of C$ 3.9B
September 1, 2022	1.000	4	C$ 3.9B
March 1, 2022	.500	4	2 of C$ 3.7B and 2 of C$3.8B
September 1, 2021	.750	4	2 of C$ 3.7B and 2 of C$3.8B

Source: Bank of Canada

Impacts of the proposed modifications on position limits

The position limits for the Bourse's GoC bond futures are based on the amount outstanding of the deliverable baskets. Removing one matured bond from the June and December basket will reduce the position limits (all expiries combined and first contract month) for the June and December contracts, as illustrated in table 7 below. On the other part, having a new 5-year bond become eligible for delivery quicker will increase the amount outstanding for delivery and thus, mitigating the impact of the proposed maturity range change. Note that position limits (all expiries combined) are published at the beginning of each month and that first contract month position limits are published just prior to the beginning of each delivery month (March, June, September and December).

[5] https://www.m-x.ca/f_circulaires_en/136-06_en.pdf

Table 7: CGF position limit impacts (all expiries combined) - Example for 50,000 contracts of open interest with current remaining maturity range and proposed remaining maturity range: Reduction of 35%-40% depending on the month, for six months out of twelve.

CGF Postion limits (all expiry combined) for an Open Interest of 50,000 contracts (Remaining maturity range of 4.25-5.25 years)												
CGF expiry	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
March	23k	26k										35k
June			29k	29k	29k							
September						35k	23k	26k				
December									29k	29k	29k	
CGF Postion limits (all expiry combined) for an Open Interest of 50,000 contracts (Remaining maturity range of 4.5-5.5 years)												
CGF expiry	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
March	23k	26k										**23k**
June			29k	**17k**	**20k**							
September						**23k**	23k	26k				
December									29k	**17k**	**20k**	

Table 8: CGF position limit impact (first contract month): Reduction from 15k to 9k for the month of June and December.

	Contract expiry cycle	Deliverables Amount Outstanding of first contract month (entering the first notice day)	CGF position limit (first delivery month)
Current CGF delivery standards	March and September	C$ 24B	12,000
	June and December	C$ 30B	15,000
Proposed CGF delivery standards impact	**June and December**	**C$ 18B**	**9,000**

The Bourse is comfortable with these position limits impacts, as it is in line with its current position limits methodology. Market participants surveyed are aware of this impact and this should not represent an impediment for them to trade the contract and hold the positions desired for their different strategies. The position limits (all expiries combined) still represent a minimum of 35% of the open interest (at the 50,000 open interest level), which is sufficient to cover clients' needs based on feedback from key market participants. The impact on the first contract month is also limited as only a small fraction of the CGF open interest is expected go into delivery."

Appendix 2

[See attached]

PART C – FUTURES

RULE C-14

5-YEAR CANADA BOND FUTURES

The Sections of this Rule C-14 are applicable only to Futures where the Underlying Interest is Government of Canada bonds as defined in Section C-1402, herein referred to as "5-year Canada Bond Futures".

SECTION C-1401
DEFINITIONS

Notwithstanding Section A-102 for the purposes of 5-year Canada Bond Futures the following terms are as defined:

"**Assignment File**" – means the computer file constructed to enable Tenders to be assigned on a first-in-first-out basis pursuant to Section C-1405.

"**Underlying Interest**" – means Government of Canada Bonds which meet the criteria established in Section C-1402 of this Rule.

SECTION C-1402
DELIVERY STANDARDS

(1) The delivery unit for 5-year Canada Bond Futures shall be Government of Canada Bonds which do not mature and are not callable for a minimum of 4 years ~~three~~ six months and no more than 5 years ~~three~~ six months from the first calendar day of the Delivery Month, having a coupon rate of 6%, an aggregate face value at maturity of $100,000, ~~–~~an outstanding face value, net of all potential purchases by the Government of Canada up until the end of the delivery period of the corresponding Delivery Month, of at least $3~~.5~~ billion, are issued and delivered on or before the 15th calendar day preceding the first tender date corresponding to the Delivery Month of the contract, and which have been originally issued at 5-year Government of Canada bond auctions. All bonds in a delivery unit must be of the same issue.

(2) Substitution - at the option of the Clearing Member holding the Short Position, bonds with coupon rates other than 6% are deliverable, at a discount for bonds with coupons less than 6%, and at a premium for bonds with coupons more than 6%. The amount of premium or discount for each different deliverable issue shall be determined on the basis of yield equivalency with a 6% bond selling at par. The price at which a bond having a particular maturity and coupon rate will yield 6% shall be determined according to bond tables prepared by the Exchange on which the Future trades. The Settlement Amount of such

delivery unit shall be $1,000 multiplied by the product of such price and the Settlement Price of that series of 5-year Canada Bond Futures. Interest accrued on the bonds shall be charged to the Clearing Member taking delivery.

(3) The Exchange on which the Future trades shall publish a list of deliverable issues prior to each Delivery Month. The time to maturity of a given issue is calculated in complete one month increments (rounded down to the entire one month period) from the first calendar day of the Delivery Month. New issues of Government of Canada bonds which satisfy the standards of this Section shall be added to the deliverable list as they are issued by the Government of Canada. In the event that, at any regular issue or auction, the Government of Canada reopens an existing issue which has an original maturity of more than 5 years nine months but would otherwise meet the standards of this Rule, thus rendering the existing issue indistinguishable from the newly issued one, then the older issue is deemed to meet the standards of this Rule and would be deliverable if the reopening of such an existing issue has a total minimum face value amount of $3~~.5~~ billion during the last 12 month period preceding the first tender date of the contract month. The Exchange shall have the right to exclude any new issue from deliverable status or to further limit outstanding issues from deliverable status, whether or not they otherwise satisfy the standards of this Section.

(4) In the event the Corporation determines that there exists a shortage of deliverable Government of Canada Bond issues it may designate as deliverable on a 5-year Canada Bond Futures such other Government of Canada issues as it deems suitable, and may specify any adjustments in the settlement amount that it considers appropriate and equitable.

[…]

PART C – FUTURES

RULE C-14

5-YEAR CANADA BOND FUTURES

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SECTION C-1402
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prepared by the Exchange on which the Future trades. The Settlement Amount of such delivery unit shall be $1,000 multiplied by the product of such price and the Settlement Price of that series of 5-year Canada Bond Futures. Interest accrued on the bonds shall be charged to the Clearing Member taking delivery.

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(4) In the event the Corporation determines that there exists a shortage of deliverable Government of Canada Bond issues it may designate as deliverable on a 5-year Canada Bond Futures such other Government of Canada issues as it deems suitable, and may specify any adjustments in the settlement amount that it considers appropriate and equitable.