

Trad	ing – Interest Rate Derivatives		Back-office - Options
Trad	ing – Equity and Index Derivatives	$\boxtimes$	Technology
Back Back	office – Futures	$\boxtimes$	Regulation
			MCeX

CIRCULAR February 2<sup>nd</sup>, 2009

#### **REQUEST FOR COMMENTS**

# **RE-LISTING OF THE 5-YEAR GOVERNMENT OF CANADA BOND FUTURES CONTRACT (CGF)**

The Rules and Policies Committee of Bourse de Montréal Inc. (the Bourse) has approved modifications to Rule Six of the Bourse's Rules as well as corresponding amendments to the relevant procedures. These modifications will allow for the re-introduction of futures contracts on 5-year Government of Canada bonds. The Bourse intends to re-list the CGF contract at the end of March 2009.

Comments on the implementation of the proposed re-listing must be submitted within 30 days following the date of publication of the present, at the latest on March 4, 2009. Please submit your comments to:

Ms. Joëlle Saint-Arnault Vice-President, Legal Affairs and Secretary Bourse de Montréal Inc. Tour de la Bourse P.O. Box 61, 800 Victoria Square Montréal, Quebec H4Z 1A9 E-mail: legal@m-x.ca

A copy of these comments shall also be forwarded to the Autorité to:

Ms. Anne-Marie Beaudoin Director – Secretariat of L'Autorité Autorité des marchés financiers 800 Victoria Square, 22<sup>nd</sup> Floor P.O. Box 246, Tour de la Bourse Montréal (Quebec) H4Z 1G3 E-mail: <u>consultation-en-cours@lautorite.qc.ca</u>

Circular no.: 016-2009

# Appendices

For your information, you will find in appendices an analysis document of the proposed re-listing, the proposed regulatory text as well as the amended procedures. The implementation date of the proposed re-listing will be determined by the Bourse, in accordance with the self-certification process as established in the Derivatives Act (2008, c.24).

# **Process for Changes to the Rules**

Bourse de Montréal Inc. is authorized to carry on business as an exchange and is recognized as a self-regulatory organization (SRO) by the Autorité des marchés financiers (the Autorité). The Board of Directors of the Bourse has delegated to the Rules and Policies Committee of the Bourse its powers to approve and amend its Rules. The Rules of the Bourse are submitted to the Autorité in accordance to the self-certification process as established in the Derivatives Act (2008, c.24).

In its SRO capacity, the Bourse assumes market regulation and supervision responsibilities of its approved participants. The responsibility for regulating the market and the approved participants of the Bourse comes under the Regulatory Division of the Bourse (the Division). The Division carries on its activities as a distinct business unit separate from the other activities of the Bourse.

The Division is under the authority of a Special Committee appointed by the Board of Directors of the Bourse. The Special Committee is empowered to recommend to the Board of Directors the approval or amendment of some aspects of the Rules of the Bourse governing approved participants, among which, the Rules relating to margin and capital requirements. The Board of Directors has delegated to the Rules and Policies Committee of the Bourse its powers to approve or amend these Rules with recommendation from the Special Committee. These changes are submitted to the Autorité for approval.



# RE-LISTING OF THE 5-YEAR GOVERNMENT OF CANADA BOND FUTURES CONTRACT - CGF

# AMENDMENTS TO ARTICLE 6808 AND ABROGATION OF ARTICLES 6809TO 6811 OF RULE SIX OF BOURSE DE MONTRÉAL INC.

Modifications to the Procedures for the Execution of Block Trades, the Procedures Applicable to the Execution and Reporting of Exchange for Physical (EFP), Exchange for Risk (EFR) and Substitution of OTC Derivative Instruments for Futures Contracts Transactions, and the Daily Settlement Price Procedures for Futures Contracts

# I. OVERVIEW

# A -- Proposed Regulatory Amendments

It is proposed to amend article 6808 C) and delete articles 6809, 6810 and 6811 of Rule Six of Bourse de Montréal Inc. (the Bourse) in order to remove the current daily price limit of three (3) points for all listed Government of Canada bond futures contracts including the 5-year Government of Canada Bond futures contract (CGF) which is the object of this request. The Bourse proposes these amendments to conform to:

- i) the practice of no daily price limits in the trading of Government of Canada bonds in the domestic cash market, and
- ii) the practice adopted by other international derivatives exchanges of not imposing any daily price limits for government bond futures contracts.

In addition, the Bourse proposes amending the following procedures:

- Procedures applicable to the Execution of Block Trades
- Procedures applicable for the Execution and Reporting of Exchange for Physical (EFP), Exchange for Risk (EFR) and Substitution of OTC Derivative Instruments for Futures Contracts Transactions (Procedures for EFP-EFR-SUB)
- Daily Settlement Price Procedures for Futures Contracts and Options on Futures Contracts

All these amendments to the Rules and Procedures will facilitate the re-listing and trading of the CGF on the Bourse's electronic trading platform. The Bourse intends to re-list the CGF in March 2009.

# **B**-- Rationale

Several factors support the rationale to re-activate the CGF bond futures contract by the Bourse:

- **Investor Interest:** Feedback from investors confirms market interest to re-activate the CGF bond futures contract at the Bourse. The 5-year segment of the Government of Canada (GoC) curve represents an important cross-road of various interests.
- Extend product coverage of the GoC curve: The CGF contract will extend the MX's product coverage of the GoC curve to include the 5-year segment. As a result the Bourse will be able to provide full product coverage across the GoC curve (2-, 5-, 10- and 30-yr GoC bond futures contracts).
- **Rapid growth in the Canada Mortgage Bond market:** The rapid growth of the market for Canada Mortgage Bonds (CMBs) over the last 5 years has increased the need to hedge the

issuance of 5-year CMBs. As a result, the market for CMBs has become widely recognized as a complementary market to the 5-year GoC segment of the yield curve - with 5-year CMBs highly correlated to 5-year GoC benchmark bonds ( $r^2 = 85\%$ ) - making the CGF bond futures contract an ideal instrument for hedging the issuance of CMBs.

	5-year GoCs	Canada Mortgage Bonds
5-year GoCs	1.00	0.85
Canada Mortgage Bonds	0.85	1.00

Correlation Matrix (R <sup>2</sup> ) – Correlation of weekly returns for the period of J	an 2008 to
Jan 2009	

Source: Bloomberg L.P.

- **Trading Opportunities:** The re-activation of the CGF contract will provide market participants with increased spread trading opportunities (curve trading) across the GoC yield curve (2-, 5-, 10- and 30-yr GoC bond futures contracts).
- Shift in volume towards the shorter-end of the yield curve: The credit crisis and the impact of de-leveraging by market participants has caused the trading volume of bond futures contract to shift to the shorter-end of the yield curve where duration risk is smaller. This can be observed at the CME/CBOT with the shift in volume from the long-end of the curve (10-year and 30-year U.S. Treasury Bond futures contracts) to the short-end of the curve (2-year and 5-year U.S. Treasury Note futures contracts) in 2008.

Bond Futures Contract	Average Daily Volume – 2008 (# of contracts)	% change vs 2007
2-yr U.S. T-Note	313 482	+16%
5-yr U.S. T-Note	656 946	+1%
10-yr U.S. T- Note	1 014 904	-27%
30-yr U.S. T- Bond	353 615	-17%

Source: CME Group

# II. DETAILED ANALYSIS

# A – The Market for the 5-year segment of the yield curve

# **Growth in trading activity in the cash market**

- The 5-year Government of Canada (GoC) segment of the curve accounts for 33% of the total GoC bond trading activity with an average daily turnover of C\$6.5 billion in 2008, the second most active segment of the yield curve.
- Trading activity has been growing at an annual rate of 4.5% since 2004 from an average daily turnover of C\$5.5 billion in 2004 to C\$6.5 billion in 2008.

• In addition, the 5-year segment is further enhanced by an active market for Canada Mortgage Bonds (CMBs). Trading activity of CMBs has been growing at an annual rate of 29% since 2004 from an average daily turnover of C\$930 million in 2004 to C\$2.6 billion in 2008.



Source: Bank of Canada and MX Research & Development

# **D** A liquid underlying cash market with large issuances and amount outstanding

- The 5-year GoC segment has a high concentration of new issues (C\$18 billion in 2008) and notional amount outstanding (C\$55 billion) as at January 1, 2009.
- Furthermore, CMBs (the 5-year segment) exhibit an even higher amount of new issues (C\$43.5 billion in 2008) and notional amount outstanding (C\$73 billion) as at January 1, 2009
- Therefore, the 5-year segment of the curve is the segment with the largest supply of bonds (GoC and CMBs combined in the 5-year segment) with C\$61.5 billion issued in 2008.



Source: Bank of Canada and MX Research & Development

• The 5-year segment of the curve that includes Government of Canada (C\$55 billion) and Federal Crown Corporation issuances of Canada Mortgage Bonds (C\$73 billion) accounts for 32% of the total nominal amount outstanding (C\$400 billion) of GoCs and CMBs, the second largest segment of the yield curve.



Source: Bank of Canada and MX Research & Development

# **B** -- Various Potential Users of the CGF

Investors most likely to use the 5-year Government of Canada Bond futures contracts (CGF) are:

- Bond traders: to manage book exposure, duration and for basis trading.
- Proprietary traders / Hedge funds: for inter-market spread trading (vs comparable international contracts such as 5-year Euro Notes, 5-year US Treasury Notes), for curve trading (2/ 5/ 10/ 30- yr).
- Asset / Liability managers: to manage book exposure (asset liability).
- Bond Portfolio managers: for asset allocation, to manage duration.
- Banks, Trust companies, Credit unions, and other financial institutions approved to make loans insured by CMHC (Canada Mortgage Home Corporation): to manage mortgage exposure.
- Pension funds and Treasuries (Corporate / Government): to manage existing debt, as anticipatory hedge, (new issues, bond buyback or interest cost reduction).
- Swap traders: to manage book exposure, as anticipatory hedge (lock-in rates in anticipation of future swap volume).
- Speculators: for directional and curve trading.

# **C – CGF Product Features**

# **Contract Type**

Physical delivery is the preferred method of most international listed bond contracts to settle a futures contract. The physical delivery imposes a discipline on participants that cash settlement does not do to the same extent. As there are a sufficient number and dollar amount outstanding of deliverable GoC bonds in the underlying cash market to support a bond futures contract which includes both 5 and 10-yr GoC bond issues in the basket of deliverables, the physical delivery method of settlement has been selected in addition to the following reasons:

- Rollover: The roll from the nearest expiring contract to the next listed contract is more orderly for a contract that calls for physical delivery. A physical delivery contract better facilitates "fair value" rollover as users find it easier in pricing the next contract month.
- Trading opportunities: Deliverable bond contracts create a number of trading opportunities due to short-term fluctuations in the cash / futures basis. The ability to profit from such fluctuations creates numerous arbitrage trading strategies.
- Greater impact on physical bond market volume: Hedging, portfolio rebalancing and cash and carry strategies can create greater activity in the underlying cash bond market.

• Harmonization with existing Bourse de Montréal and international bond futures contracts: Harmonizing the delivery settlement method with existing bond futures products creates interproduct spread opportunities to take advantages of yield curve shifts. Such opportunities would also benefit arbitrage traders who use spreading techniques against similar contracts such as the 5-year U.S. Treasury Note and 5-year Euro Bobl.

# □ Notional Coupon

- The notional coupon of the CGF was initially set at 9% when the product was launched in 1995 and subsequently changed to 6% in 2000 to conform to the practice adopted by the CBOT, EUREX and SFE derivatives exchanges to harmonize the notional coupon of bond futures contracts at 6% across the product line at that time.
- Implications on the cheapest-to-deliver bond: A 6% notional coupon relative to actual 5-year GoC bond market yields below 6% favors shorter duration bonds as the cheapest-to-deliver bond.

# **Delivery Terms**

- Admissible GoC bond issues in the basket of deliverables: Inclusion of both 5 and 10-year GoC bond issues provides a sufficiently large deliverable basket in terms of dollar amount outstanding.
- Admissible Canada Mortgage Bonds issued by Canada Housing Trust (CHT): Inclusion of Canada Mortgage Bonds will add a new dimension to trading the CGF contract by increasing basket liquidity and optionality play between bonds.
- Remaining time to maturity (time window): A longer remaining time to maturity of 3<sup>1</sup>/<sub>2</sub> to 5<sup>1</sup>/<sub>4</sub> years (time window of 1 year and 9 months) is selected to permit admissible bonds to stay longer in the basket of deliverables in order to provide the maximum number of bonds and dollar amount outstanding (basket liquidity).

# **D** -- Comparison with Other Markets

The following table summarizes the specifications of the Bourse's CGF bond futures contract versus the two major exchanges that offer a similar contract.

	MONTRÉAL EXCHANGE	CME Group- CBOT	EUREX
Underlying	5-year Government of Canada (GoC) Bonds5-year U.S. Treasury Notes		5-year Euro Bobl - Federal bonds issued by the Federal Republic of Germany or the Swiss Confederation
Contract Size	C\$ 100 000	US\$ 100 000	€100 000
Notional Coupon	6%	6%	6%
Settlement Type	Physical settlement	Physical settlement	Physical settlement
Deliverable Standards	3.5 to 5.25 yrs 5-yr & 10-yr GoC bonds	4 yrs 2 months to 5 yrs 3 months 5-yr U.S. Treasury Notes	4.5 to 5.5 yrs 5-yr & 10-yr Euro Bobl bonds

# INTERNATIONAL BENCHMARKING: 5-YEAR GOVERNMENT BOND FUTURES CONTRACTS

Exchange for Physicals	Currently limited to only Government of Canada bonds	(Exchange Rule 538: Exchange for Related Positions) Fixed income instruments with risk characteristics and maturities that parallel the instrument underlying the futures contract are acceptable. Such instruments include, but are not necessarily limited to, money market instruments, Treasuries, Agencies, investment grade corporates, forward rate agreements (FRAs), mortgage instruments including collateralized	All debt securities, which show a price correlation to the exchanged futures contract so that the futures contract describes an appropriate hedge instrument for cash transactions, may be part of an EFP trade.
Block Trade Threshold	N/A	mortgage obligations (CMOs) and interest rate swaps and swaptions. 5 000 contracts	3 000 contracts
Level           Daily Price           Limit	Currently 3 points per contract above or below the province day's	None	None
Average Daily Volume - 2008	the previous day's settlement price N/A	656 946 contracts	610 594 contracts

Source: CME Group and EUREX Web sites / MX Research & Development

# III. SUMMARY OF THE PROPOSED AMENDMENTS

The current Rules of the Bourse allow for the listing of futures contracts on 5-year Government of Canada bonds. As a result, additions to Rules Six and Fifteen of the Bourse are not necessary to allow for the listing of futures contracts on 5-year Government of Canada bond futures.

However, the Bourse proposes, to amend article 6808 C) and delete Articles 6809, 6810 and 6811 to Rule Six with regards to daily price limits for Government of Canada bond futures contracts for the purpose of removing the current daily price limit of three (3) points for all Government of Canada Bond futures contracts.

Considering the existing practices on the markets as a basis for comparison, the Bourse proposes these amendments to conform to:

- i) the practice of no daily price limits in the trading of Government of Canada bonds in the domestic cash market, and
- ii) the practice adopted by other international derivatives exchanges of not imposing any daily price limits for government bond futures contracts.

In addition, the Bourse proposes to amend related procedures to allow for the re-introduction of futures contracts on 5-year Government of Canada bonds. Modifications to procedures have also been done with the purpose of: 1) generalizing and standardising the EFP-EFR-SUB Procedures and 2) expanding the list of acceptable fixed income financial instruments for the purpose of EFP transactions for the CGF and all other interest rate futures contracts listed at the Bourse to standardize with international practices. The modified procedures are:

- i) Procedures for the Execution of Block Trades
- Procedures Applicable for the Execution and Reporting of Exchange for Physical (EFP), Exchange for Risk (EFR) and Substitution of OTC Derivative Instruments for Futures Contracts Transactions
- iii) Daily Settlement Price Procedures for futures contracts and Options on Futures Contracts

# A – Article 6808 C) of Rule Six

It is proposed to amend article 6808 C) of Rule Six of the Bourse in order to change the daily price limit for Government of Canada bond futures contracts. The current three (3) point up or down limit (compared to the previous day's settlement price) has been changed to no daily price limit.

# B – Articles 6809, 6810 and 6811 of Rule Six

It is proposed to delete articles 6809, 6810 and 6811 to Rule Six of the Bourse in order to remove any restrictions on price limits for Government of Canada bond futures contracts.

# **C** - Procedures Applicable to the Execution of Block Trades

The Bourse proposes that the Procedures Applicable to the Execution of Block Trades be amended so that the prescribed exposure time delay and the minimum quantity threshold, that must be respected to execute a block trade on the CGF futures contract, be established in accordance with article 6380 of the Bourse's Rules. The prescribed time delay for the CGF futures contract will be :

i) within 15 minutes for a minimum quantity threshold equal to or greater than 500 contracts.

# **D** - Procedures Applicable for the Execution and Reporting of Exchange for Physical (EFP), Exchange for Risk (EFR) and Substitution of OTC Derivative Instruments for Futures Contracts Transactions

The Bourse also proposes to amend the Procedures Applicable for the Execution and Reporting of Exchange for Physical (EFP), Exchange for Risk (EFR) and Substitution of OTC Derivative Instruments for Futures Contracts Transactions (Procedures for EFP-EFR-SUB), by:

1) generalizing in order to group futures contracts which may be the object of the EFP and EFR transactions:

Currently the EFP-EFR-SUB Procedures detail the individual futures contracts for which EFP and EFR operations may be applicable. The modifications to the EFP-EFR-SUB Procedures propose grouping of contracts by category (ex: "Interest rate futures contracts" group of instruments). As a consequence of this generalization, the CGF will be automatically considered included throughout the procedure. Additionally, the currently EFP inadmissible Three-month Canadian Bankers' Acceptance Futures contract (BAX) and the 30-day Overnight Repo Rate futures contract (ONX) will also be automatically included for the purpose of EFP transactions (which was the Bourse's original intent) as per the current international practices for comparable products. 2) extending the list of permissible fixed income instruments for the purpose of EFP operations.

At the present time, the acceptable fixed income cash components for the purpose of an EFP transaction for bond futures contracts are limited to only maturities of Government of Canada fixed income bonds. Considering the existing practice on other international exchanges (CBOT and Eurex) as a basis for comparison, the Bourse proposes to extend the list (by including other financial instruments), of permissible fixed income instruments acceptable for the cash component of an EFP transaction for fixed income futures contracts,.

Such instruments that have a reasonable price correlation would include, but would not be limited to, money market instruments including asset-backed commercial paper, Government of Canada and Federal Crown Corporation fixed income instruments, provincials, investment grade corporates including Maple bonds, asset-backed instruments and mortgage instruments including mortgage-backed securities. Fixed income instruments denominated in the currency of a G7 member country that are reasonably correlated to the futures contract being exchanged would also be acceptable. For example, Canada Mortgage Bonds (a Federal Crown Corporation fixed income instrument) would be acceptable for the cash component of an EFP transaction against CGF bond futures contracts.

The Bourse also added a mention in the Procedures for EFP-EFR-SUB that it may request Approved participants involved in an EFP, EFR or SUB to demonstrate that the related cash position and futures position is reasonably correlated.

Both of the above proposed modifications are consistent with common international practices. As a consequence of suggested modifications, the proposed expanded list of permissible fixed income instruments, acceptable for the cash component of an EFP transaction, would apply to all interest rate futures contracts as a distinct group and the current list of permissible equity based instruments would apply to all stock index futures contracts as another distinct group

In addition, for the purpose of EFR operations, the Bourse proposes to eliminate the section entitled "Bonds used in an EFR transaction must have the following characteristics" found in Appendix 1 of the Procedures for EFP-EFR-SUB. This section is not relevant with regards to physical bonds being a permissible over-the-counter (OTC) financial instrument for the purpose of an EFR transaction for futures contract. This section was erroneously inserted when the amendment was previously filed with the AMF.

The Bourse also added a mention in the Procedures for EFP-EFR-SUB that it may request Approved participants involved in an EFP, EFR or SUB to demonstrate that the related cash position and futures position is reasonably correlated.

# **Daily Settlement Price Procedures of Futures Contracts and Options on Futures Contracts**

The Bourse proposes to amend the Daily Settlement Price Procedures for Futures Contracts and Options on Futures Contracts (DSPP) so that the requirements related to the daily settlement prices of the futures contracts on the CGF be in accordance with article 6390 of the Bourse's Rules.

Based on the requirements of article 6390 and of the DSPP, the futures contract on the CGF has been integrated in the "Government of Canada Bond futures contracts" section (section 4.3 of the DSPP) and all references to named individual bond futures contracts have been deleted throughout the procedure. As the Bourse's Government of Canada bond futures product line has expanded and given that the aforementioned Procedure is standardized for this instrument group, the DSPP has been adjusted accordingly. A more generic terminology has been used in the DSPP to include all futures contracts on Government of Canada bonds.

# **F** - Terms and conditions for margin requirements

The Rules of the Bourse do not specify any amounts regarding margins applicable to futures contracts listed on the Bourse. These margins are revised periodically (at least once a month) by the Bourse based on the margin intervals calculated by CDCC and transmitted to approved participants by means of circular. The futures contracts on the CGF will be subject to the same updates as the one applicable to all Government of Canada bond futures contracts.

# G - Terms and conditions for position limits

The terms and conditions for the position limit of Government of Canada bond futures contracts are found in Article 15608 of Rule Fifteen. The position limit for each designated Government of Canada bond futures contract is the greater of 4 000 contracts, or 20% of the average open interest during the three (3) preceding calendar months. Since we are re-listing the CGF contract and there will be no open interest on the day the CGF begins trading, the position limit for the futures contracts on the CGF will be 4 000 contracts. The position limits are revised periodically by the Bourse and transmitted to approved participants by means of circular. The futures contracts on the CGF will be subject to the same updates as the one applicable to all Government of Canada bond futures contracts.

# Terms and conditions for reporting limit

The terms and conditions for the position reporting level for futures contracts on Government of Canada bond futures contracts are found in Article 15609 of Rule Fifteen. The position reporting level for each designated Government of Canada bond futures contract is 250 contracts. Therefore, approved participants must report, no later than three business days following the last business day of each week, any gross long or short position in excess of 250 contracts for the CGF.

# IV. OBJECTIVE OF THE PROPOSED AMENDMENTS AND CONSEQUENCES

# A -- Objectives

The objectives of the proposed amendment to article 6608 C) of Rule Six, and the proposed deletion of articles 6809, 6810 and 6811 of Rule Six as well as the proposed amendments to the related Procedures of the Bourse are to:

- i) Allow the re-introduction of futures contracts on 5-year Government of Canada bonds (CGF);
- ii) Remove the daily price limit of 3 points for all Government of Canada bond futures contracts; and
- iii) Expand the list of acceptable financial instruments for the purpose of an EFP transaction for the CGF and all other interest rate futures contracts listed at the Bourse.

# **B** -- Consequence of proposed rule and procedure amendments

The proposed amendments to Rules will allow the Bourse to remove the daily price limit of 3 points for all Government of Canada bond futures contracts. The proposed amendments of the related procedures will allow the Bourse to re-introduce futures contracts on 5-year Government of Canada bonds (CGF) to respond to market demand. In addition, broadening and generalizing the requirements of the procedures pertaining to the EFP and EFR operations will harmonize Canadian practices with international standards.

# **C** -- **Public** interest

The specifications and amendments to the Rules of the Bourse and the Procedures of the Bourse are proposed in order to make the use of futures contracts on 5-year Government of Canada bonds accessible and efficient for the market participants who have expressed their support and need for such contracts for the purpose of their trading or portfolio management strategies. The expansion of the liquidity pool of interest rate derivatives by offering to end users additional instruments, such as the CGF, is of public interest for the overall Canadian capital market as is harmonization of practices with international standards which will further eliminate barriers to entry of newcomers into our market resulting in increased trading activity.

# **D** -- Documents attached

- Rule Six: amendments to article 6808 C)
- Rule Six: deletion of articles 6809, 6810 and 6811
- Procedures Applicable to the Execution of Block Trades
- Procedures Applicable for the Execution and Reporting of Exchange for Physical (EFP), Exchange for Risk (EFR) and Substitution of OTC Derivative Instruments for Futures Contracts Transactions
- Daily Settlement Price Procedures of Futures Contracts and Options on Futures Contracts
- Specifications of 5-year Government of Canada bond futures contract (CGF)
- Specifications of 2-year Government of Canada bond futures contract (CGZ)
- Specifications of 10-year Government of Canada bond futures contract (CGB)
- Specifications of 30-year Government of Canada bond futures contract (LGB)

# V. PROCESS

The proposed amendments to Rules Six were approved by the Rules and Policies Committee of the Bourse and are submitted to the Autorité des marchés financiers (AMF) for approval and to the public for a 30-day consultation period. The modifications are also transmitted to the Ontario Securities Commission (OSC) for information.

# VI. SOURCES

CME Group / CBOT Web site: 5-year U.S. Treasury Note futures contract specifications: <u>http://cmegroup.com/trading/interest-rates/us-treasury/5-year-us-treasury-note\_contract\_specifications.html</u>

EUREX Web site: 5-year Euro Bobl bond futures contract specifications: <a href="http://www.eurexchange.com/trading/products/INT/FIX/FGBM\_en.html">http://www.eurexchange.com/trading/products/INT/FIX/FGBM\_en.html</a>

Bond Market Trading and Government of Canada Domestic Marketable Bonds Outstanding: <u>http://epe.lac-bac.gc.ca/100/201/301/bank\_can\_banking\_fin\_stats-ef/2008/2008-12.pdf</u> Table F12 <u>http://www.bank-banque-canada.ca/en/goc/goc\_tbill\_bond\_os\_2008\_12\_31.html?style1=print</u>

#### 6808 Price Limits / Trading halts

(24.01.86, 22.04.88, 08.09.89, 16.04.92, 19.01.95, 07.09.99, 31.01.01, 14.06.02, 03.05.04, 24.07.06, 30.05.08)

The Bourse shall establish for each contract a maximum price limit with respect to the previous days settlement price and there shall be no trading above or below that limit except as provided below. Unless otherwise determined by the Bourse, the daily price limits shall be as follows:

- a) 30-day overnight repo rate futures: NIL
- b) 1-month and 3-month Canadian bankers' acceptance futures: NIL
- c) Government of Canada Bond futures: <u>NIL</u>

Trading is prohibited during any day at a price higher or lower by more than 3 points, than:

i) the settlement price for such futures contract on the previous business day; or

- ii) the average of the opening range or the first trade, during the first day of trading in a futures contract; or
- iii) the price established by the Bourse in an inactive contract.
- d) Futures contract on the S&P/TSX 60 Stock Index and futures contract on S&P/TSX sectorial stock indices:
  - i) Trading halts

Trading halts on the futures contract on the S&P/TSX Stock Indices shall be coordinated with the trading halt mechanism of the underlying stocks. In accordance with Policy T-3 of the Bourse entitled "Circuit Breaker", a trading halt of the futures contract shall be triggered only in conjunction with the triggering of circuit breakers set in coordination with the New York Stock Exchange and The Toronto Stock Exchange.

ii) Resumption of Trading

In the event that trading in the securities market resumes after a trading halt, trading in the S&P/TSX Index futures contracts shall resume only after a percentage (as determined by the Bourse from time to time) of the stocks underlying the S&P/TSX Indices have re-opened.

- e) Canadian share futures contract
  - i) Trading halts

Trading halts on Canadian share futures contract shall be coordinated with the trading halt mechanism of the underlying stocks. In accordance with Policy T-3 of the Bourse entitled "Circuit Breaker", a trading halt of the futures contract shall be triggered in conjunction with the triggering of circuit breakers set in coordination with the New York Stock Exchange and The Toronto Stock Exchange.

f) International share futures contract

In the event that a recognized exchange suspends trading in the underlying share of a share futures contract, then the Bourse may determine a course of action in relation to the share futures contract, including, but not limited to, the suspension or halting in the trading of the contract.

g) Futures contract on carbon dioxide equivalent (CO<sub>2</sub>e) units with physical and cash settlement

NIL

# **6809** Variable Limits - Government of Canada Bond Futures (08.09.89, 07.09.99, 03.05.04; abr. 00.00.00)

If three or more contract months within a contract year (or all contracts in a contract year if there are less than three open contracts) close on the limit bid for one business day or on the limit offers for one business day, then the limit will be raised to 150 percent of the original level for all contract months and remain there for three successive business days.

If three or more contract months in a given contract year (or all contracts in a contract year if there are less than three open contracts) close on the limit bid on the last business day of the expanded limit period or on the limit offer on the last business day of the expanded limit period or on the limit offer on the last business day of the expanded limit period, then the limits will remain at 150 percent of the original level for another three day period.

The limits will remain at 150 percent of the original level for successive periods of three business days until three or more contracts in a contract year (or all contracts in a contract year if there are less than three open contracts) do not close at the limit on the last day of the period. If on the last day of a three business day period, the three or more contract months (or all contracts in a contract year if there are less than three open contracts) do not close on the limit bid or limit offers, then the limits would revert to their original level.

### **6810** Current Month Exclusions (Government of Canada Bond futures) (08.09.89, 07.09.99, 03.05.04, <u>abr. 00.00.00</u>)

The provisions of articles 6808 and 6809 shall not apply to trading in current month contracts on and after the fifth business day prior to the first day of the current month.

In any case where limits do not apply to trading in the current month and there are only three contract months open in a given contract year, one of which is the spot month, the provisions of articles 6808 and 6809 shall apply to the remaining two months.

#### 6811 Definitions : Limit Bid Limit Offers (08.09.89, abr. 00.00.00)

The terms "close on the limit bid" or "close on the limit offer" as used in article 6809 are defined as follows:

— Limit Bid: Restricted to a situation in which the market closes at an upward price limit on an unfilled bid. When a close is reported as a range of different prices, the last price quoted must be a limit bid.

Limit Offer: Restricted to a situation in which the market closes at a downward price limit on an unfilled offer. When a close is reported as a range of different prices, the last price quoted must be a limit ask.



# PROCEDURES FOR THE EXECUTION OF BLOCK TRADES

- a) Once a block trade has been arranged, in accordance with the predetermined minimum quantity threshold level as determined and published by the Bourse, details of the block trade must be reported to the Bourse by contacting a market official of the Bourse's Market Monitoring Department at 1-888-693-6366 or at (514) 871-7871 within the period of time prescribed by the Bourse.
- b) Approved participants for both the seller and buyer must complete and submit the Block Trade Reporting Form (Attachment I) or such other notification as prescribed by the Bourse to a market official of the Bourse's Market Monitoring Department for validation.
- c) A market official will check the validity of the block trade details submitted by the approved participant(s).
- d) Confirmation by a market official of a block trade transaction will not preclude the Bourse from initiating disciplinary procedures in the event that the transaction is subsequently found to have been made other than in compliance with the rules.
- e) Once the block trade has been validated, the following information with respect to the block trade will be disseminated by the Bourse:
  - i) date and time of transaction;
  - ii) security(ies) or derivative instrument(s) and contract month(s);
  - iii) price of each contract month(s) and strike price(s) (as applicable); and
  - iv) volume of each contract month.
- f) Upon request by the Bourse the approved participant who arranges a block trade must provide satisfactory evidence that the block trade has been arranged in accordance with the Rules of the Bourse. Failure to provide satisfactory evidence of compliance with these Rules may result in the initiation of disciplinary action.

In accordance with article 6380 of the Rules of Bourse de Montréal Inc. (the "Bourse"), the following are the eligible securities and derivative instruments, the relevant prescribed time delays and the minimum quantity thresholds for the execution of block trades.

ELIGIBLE SECURITIES AND DERIVATIVE INSTRUMENTS	PRESCRIBED TIME DELAY	MINIMUM QUANTITY THRESHOLD	
	(As soon as practicable and in any event within the following time delay)		
Thirty-day Overnight "Repo" Rate Futures Contracts (ONX):	15 minutes	1,000 contracts	
Ten-year Government of Canada Bond Futures Contracts (CGB):	15 minutes	2,000 contracts	
Two-year Government of Canada Bond	15 minutes	500 contracts	

Futures Contracts (CGZ):		
Thirty-year Government of Canada Bond Futures Contracts (LGB)	15 minutes	500 contracts
Five-year Government of Canada Bond Futures Contracts (LCGBF)	<u>15 minutes</u>	500 contracts
Options on Three – month Canadian Bankers Acceptance Futures Contracts (OBX)	15 minutes	2,000 contracts



# ATTACHMENT I

# **Block Trade Reporting Form**

Approved participants must complete all sections of this form legibly and accurately.

This form is to be completed and faxed to Market Monitoring at (514) 871-3592.

A market official can be reached at 1-888-693-6366 or at (514) 871-7871.

#### TIME AND DATE OF TRADE:

EXECUTING PARTICIPANT NAME AND TRADING ID (BUY):

CLEARING FIRM NAME AND ID (BUY):

EXECUTING PARTICIPANT NAME AND TRADING ID (SELL):

CLEARING FIRM NAME AND ID (SELL):

**CONTACT PHONE NUMBER:** 

CONTACT FAX NUMBER OR E-MAIL ADDRESS:

Derivative Instruments	Future Contract/ Call/ Put	Contract Month	Option Strike Price (if applicable)	Number of Contracts	Price	Strategy Type* (if applicable)

For Montréal Exchange Staff Only:

Time and Date of receipt:

Montréal Exchange authorized signature:



The details on this form are accepted by the Montréal Exchange strictly on the understanding that the Montréal Exchange accepts no responsibility nor liability for the accuracy or completeness of the details as provided by the approved participant.

<sup>\*</sup> Each leg of a strategy trade should be listed separately.



### PROCEDURE FOR THE EXECUTION AND REPORTING OF EXCHANGE FOR PHYSICAL (EFP), EXCHANGE FOR RISK (EFR) AND SUBSTITUTION OF OTC DERIVATIVE INSTRUMENTS FOR FUTURES CONTRACTS TRANSACTIONS

The purpose of the following procedure is to explain as fully as possible: a) the requirements of article 6815 of the Rules of Bourse de Montréal Inc. (the Bourse) relating to the execution of transactions involving the exchange of futures contracts for a corresponding cash position (Exchange for Physical (EFP)) and of transactions involving the exchange of futures contracts for a corresponding over-the-counter derivative instrument (Exchange for Risk (EFR)); and b) of article 6815A of the Rules of the Bourse relating to the execution of transactions involving the substitution of an over-the-counter derivative instrument for futures contracts. Approved participants must ensure that all of their employees who are involved in the execution of this type of transactions are fully aware of this procedure. Any violation of the requirements set forth in articles 6815 and 6815A of the Rules of the Bourse and in this procedure could result in disciplinary action being taken by the Bourse.

# **Exchanges for Physicals (EFP)**

An EFP is a transaction whereby two parties enter into an agreement in which one party purchases a cash market position and simultaneously sells a corresponding futures contract position and the other party sells the cash market position and simultaneously purchases the corresponding futures contract position.

The Bourse currently permits EFP transactions on the following futures contracts instruments:

# **Interest rate futures contracts**

<u>Stock</u>

<u>Five-Year Government of Canada Bond futures (CGF)Index futures contracts</u> <u>S&P/TSX\_Thirty30\_-Year\_Government\_of\_Canada\_Bond\_Futures\_contract\_(LGB), Ten-Year</u> <u>Government of Canada Bond\_Futures contract (CGB), Two\_-Year\_Government\_of\_Canada\_Bond</u> <u>Futures contract (CGZ) and Five -Year\_Government of Canada Bond\_Futures contract (CGF),</u>S&P <u>Canada 60 Index\_Futures contract (SXF), sectorial index\_futures contracts (SXA, SXB, SXH\_and</u> <u>SXY) and fF</u>utures <u>contracts\_contracts on\_on c</u>carbon dioxide equivalent (CO<sub>2</sub>e) units (<u>MCX)</u>.

#### Exchange for Risk (EFR)

An EFR is a transaction whereby two parties enter into an agreement in which one party purchases an over-the-counter derivative instrument and simultaneously sells a corresponding futures contract and the other party sells the over-the-counter derivative instrument and simultaneously purchases the corresponding futures contract.

The Bourse currently permits EFR transactions on the following futures contracts instruments:

<u>Interest rate futures contracts</u> <u>Stock-and volatility-Index futures contracts</u> <u>Futures contracts on carbon dioxide equivalent (CO<sub>2</sub>e) units (MCX).</u>

<u>Five-Year Government of Canada Bond futures contract (CGF)S&P/TSX\_Government of</u> Canada Bond futures contracts (LGB, CGB, CGF and CGZ), short-term interest rate futures

# contracts (BAX and ONX), stock index futures contracts (SXF, SXA, SXB, SXH and SXY) and futures contracts on carbon dioxide equivalent (CO<sub>2</sub>e) units.

#### Substitution of an OTC derivative instrument for futures contracts (Substitution)

A Substitution is a transaction whereby two parties enter into an agreement to substitute an over-thecounter derivatives position for a corresponding futures contract position. The party who is the buyer of the over-the-counter derivative instrument substitutes this position and buys the corresponding futures contract and the other party who is the seller of the over-the-counter derivative instrument substitutes this position and sells the corresponding futures contract.

The Bourse currently permits Substitution transactions on futures contracts on carbon dioxide equivalent (CO<sub>2</sub>e) units.

#### Pricing the Cash component of an EFP or the Risk component of an EFR or of a Substitution

The cash component of an EFP or the risk component of an EFR or of a Substitution is priced at such level that is mutually agreed upon by the two parties to the transaction.

The futures contract leg of an EFP, an EFR or a Substitution must be priced at a fair and reasonable level in light of factors such as, but not limited to, the size of such an EFP, EFR or Substitution transaction, the currently traded prices and bid and ask prices in the same contract at the relevant time, the volatility and liquidity of the relevant market and the general market conditions prevailing at the time the EFP, EFR or Substitution transaction is executed.

The cash component of an EFP or the risk component of an EFR or of a Substitution transaction must be the futures contract underlying interest, a by-product of this underlying interest or a similar product that is reasonably correlated to the futures contract being exchanged. Approved participants who are parties to an EFP, EFR or Substitution transaction may be required to demonstrate that the cash market component of such an EFP or the risk component of such an EFR or Substitution and the futures contract position are sufficiently correlated to make the transaction acceptable to the Bourse.

Also, the number of futures contracts exchanged must be approximately equivalent to the quantity or value of the cash market position being exchanged in an EFP transaction or of the risk component being exchanged in the case of an EFR or substituted in the case of a Substitution. Approved participants that are parties to an EFP, EFR or Substitution transaction may be required to demonstrate such equivalency.

#### Acceptable EFP, EFR and Substitution Transactions

In order to have an EFP, EFR or Substitution transaction accepted by the Bourse, the transaction must satisfy the following conditions:

- There must be separate but integrally related futures contracts and cash (in the case of an EFP) or risk component (in the case of an EFR or Substitution) transactions.
- The exchange or substitution transaction must be done between two separate accounts that must satisfy at least one of the following criteria:
  - accounts have different beneficial ownership;
  - accounts have the same beneficial ownership but are under separate control; or
  - accounts are under a common control but involve separate legal entities which may or may not have the same beneficial ownership.

If the parties to an EFP, EFR or Substitution transaction involve the same legal entity, same beneficial owner or separate legal entities under common control, the approved participant (or the parties themselves) must be able to demonstrate that the EFP, EFR or Substitution transaction is a legitimate arm's length transaction.

- The cash market instrument leg of the EFP or the risk component leg of an EFR transaction must provide for a transfer of ownership of the cash market instrument of an EFP or of the over-the-counter derivative instrument of the EFR to the buyer of this instrument and the delivery of this instrument must take place within a reasonable period of time (in accordance with cash market or over-the-counter practice).
- The relation between the prices of the futures contract and of the cash instrument leg of the EFP or the risk component leg of the EFR or Substitution transaction and the relevant prices in either market must be established.
- If he does not have actual possession of the cash instrument, in the case of an EFP transaction, or of the over-the-counter derivative instrument, in the case of an EFR transaction, before the execution of the transaction, the seller of this cash instrument or over-the-counter derivative instrument must be able to demonstrate his ability to satisfy his delivery obligation.

# Acceptable Cash Components for the purpose of an EFP Transaction

In order to have an EFP transaction accepted by the Bourse, the cash component of the transaction must satisfy the following conditions:

- •For <u>all interest rate futures contracts (LGB, CGB and CGZ</u>): fixed income instruments that are reasonably correlated have a reasonable price correlation to the futures contract being exchanged. Such instruments include, but are not necessarily limited to, money market instruments including asset backed commercial paper, Government of Canada's and Federal Crown Corporation fixed income instruments, provincials, investment grade corporates and mortgage instruments including collateralized mortgage obligations (CMOs). Fixed income instruments denominated in the currency of a G7 member country that satisfy these conditions are also acceptable. all maturities of Government of Canada fixed income bonds that are reasonably correlated to the futures contract being exchanged. Approved participants involved in an EFP transaction may be required to demonstrate that the related cash bond position and the futures contract position are reasonably correlated.
- •\_\_\_\_
- For stock index futures contracts (SXF and sectorial indexes): stock baskets must be reasonably correlated to the underlying index with a correlation coefficient (R<sup>2</sup>) of 0.90 or more. Furthermore, these stock baskets must represent a weight of at least 50% of the underlying index or must include at least 50% of the securities of the underlying index. The notional value of the basket must be fairly equal to the value of the futures contract component of the exchange transaction. Exchange-traded funds (iShares<sup>TM</sup>) are also acceptable, provided they mirror the index futures contract against which the EFP transaction is made.
- For futures contracts on carbon dioxide equivalent ( $CO_2e$ ) units: The eligible Canadian  $CO_2e$  units are regulated emitters' credits, and / or offset credits

# Permissible Over-the-Counter Derivative Instruments for the purpose of an EFR Transaction

A list of permissible over-the-counter derivative instruments for the purpose of effecting an EFR transaction is included in Appendix I.

# Permissible Over-the-Counter Derivative Instruments for the purpose of a Substitution Transaction

• For futures contracts on carbon dioxide equivalent (CO<sub>2</sub>e) units: Over-the-counter derivative instruments on carbon dioxide equivalent units that are reasonably correlated (with a correlation coefficient (R<sup>2</sup>) of 0.80 or more) to the futures contract being substituted. Approved participants involved in a Substitution transaction may be required to demonstrate that the related over-the-counter derivative instrument and the futures contract position are reasonably correlated.

As a guideline, the time period used to calculate the correlation coefficient must be based on daily price data for a period of at least six (6) months or, if weekly price data are used, for a period of at least one (1) year.

<u>The Bourse may request that Approved participants involved in an EFP, EFR or a Substitution</u> <u>transaction demonstrate that the related cash position and futures position is reasonably</u> <u>correlated.</u>

# **Reporting an EFP, EFR or Substitution transaction to the Bourse**

EFP, EFR and Substitution transactions must be reported to the Bourse's Market Monitoring Department for approval and subsequent input into the Montréal Automated System (SAM). Approved participants for both the seller and buyer must complete and submit to the Market Monitoring Department the EFP / EFR / Substitution reporting form prescribed by the Bourse. This form is available on the Web sites of the Bourse at <u>http://www.m-x.ca/efp\_formulaire\_en.php</u> and at <u>http://www.mcex.ca/trading\_transactionReportForm</u> in the case of futures contracts on carbon dioxide equivalent (CO<sub>2</sub>e) units. If the EFP, EFR or Substitution transaction is executed before the closing of the trading session of the futures contract involved in the transaction, the EFP / EFR / Substitution reporting form must be submitted immediately upon the execution of the transaction. If the EFP, EFR or Substitution transaction is made after the closing of the trading session, the EFP / EFR / Substitution reporting form must be submitted no later than 10:00 a.m. (Montréal time) on the next trading day.

If the EFP / EFR / Substitution reporting form is not accurately filled out with all the relevant information required by the Market Monitoring Department of the Bourse, the transaction will not be approved neither recorded in SAM and the approved participant will have to resubmit a new EFP / EFR / Substitution reporting form correctly completed.

Once correctly completed EFP / EFR / Substitution reporting forms have been received, the Market Monitoring Department will validate the transaction. The Bourse has the discretion to refuse an EFP, EFR or Substitution transaction if it deems that it is not in compliance with the requirements, as the case may be, of articles 6815 or 6815A of the Rules of the Bourse or of this procedure. In case of refusal, the Market Monitoring Department will ensure that the approved participant(s) involved in the EFP, EFR or Substitution transaction are promptly informed of such refusal and of the reasons for it.

Once an EFP, an EFR or Substitution transaction has been validated and has been entered into SAM by the Market Monitoring Department, the following information with respect to this transaction will be

disseminated by the Bourse on its Web sites at <u>http://www.m-x.ca/dailycrosses\_en.php</u> or at <u>http://www.mcex.ca/trading\_transactionReport</u> in the case of case of futures contracts on carbon dioxide equivalent ( $CO_2e$ ) units:

- Date and time of transaction
- product description (code);
- Contract month(s);
- Volume of the transaction; and
- Transaction price

Trade validation and market dissemination by the Bourse of an EFP, EFR or Substitution transaction will not preclude the Bourse from initiating any investigation and, as the case may be, disciplinary procedures in the event that the transaction is subsequently found to have been made other than in accordance with the requirements of articles 6815 and 6815A of the Rules of the Bourse or of this procedure.

# Audit Trail Requirements for EFP, EFR and Substitution Transactions

Approved participants who enter into an EFP, EFR or Substitution transaction must maintain all documents relevant to the futures contracts and corresponding cash market or over-the-counter derivative instruments transactions and must be able to promptly provide copies of such documents to the Regulatory Division of the Bourse upon request. Documents that may be requested include, but are not limited to, the following:

- Futures contracts order tickets;
- Futures contracts account statements;
- Documentation customarily generated in accordance with the cash market, over-the-counter or other relevant market practices such as cash account statements, trade confirmation statements, ISDA<sup>®</sup> Master Agreements or other documents of title;
- Third party documentation to support proof of payment or allowing to verify that the ownership title of the related cash market position or, as the case may be, of the related over-the-counter derivative instrument position was transferred from the seller to the buyer. This may include, but is not limited to canceled checks, bank statements; cash account statements and cash instruments clearing corporation documents (e.g.: CDS Depository and Clearing Services Inc.).

All futures contracts order tickets must clearly indicate the time of execution of the EFP, EFR or Substitution transactions.

APPENDIX 1
Exchange for Risk: List of permissible OTC derivative instruments

	Bond Futures Contracts	Short-Term Interest Rate Futures Contracts	Stock Index Futures/ Single Stock Futures	Commodities Futures
Vanilla Interest Rate Swaps				
Equity and Index Swaps			$\checkmark$	
Commodities Swaps or Forwards				$\checkmark$
Forward Rate Agreements - FRAs				
OTC Options and Options Strategies	$\checkmark$		$\checkmark$	

The following outlines the characteristics of OTC derivative instruments that would be acceptable for EFR transaction purposes.

#### Swaps:

#### **Interest rate**

- standard plain vanilla OTC swap;
- > written under the terms of an ISDA<sup>®</sup> Master Agreement;
- > providing for regular fixed rate payments against regular floating rate payments;
- > All swap payments must be denominated in the currency of a G7 member country;
- > The OTC interest rate swap must be reasonably correlated with an  $R^2 = 0.90$  or greater so that the futures contract is a suitable instrument for hedging the OTC derivative instrument transactions. As a guideline, the time period used to calculate the correlation must be based on daily price data for a period of at least six (6) months or, if weekly price data are used, for a period of at least one (1) year.

# **Equities and indices**

- standard plain vanilla OTC swap;
- > written under the terms of an ISDA<sup>®</sup> Master Agreement;
- providing for regular fixed rate payments or regular floating rate payments against the positive or negative performance of a basket of securities or a stock index;
- > All swap payments must be denominated in the currency of a G7 member country;
- > The OTC equity or index swap must be reasonably correlated with an  $R^2 = 0.90$  or greater so that the futures contract is a suitable instrument for hedging the OTC derivative instrument transaction. As a guideline, the time period used to calculate the correlation must be based on daily price data for a period of at least six (6) months or, if weekly price data are used, for a period of at least one (1) year.

# Swaps or Forwards on Commodities:

- > written under the terms of an ISDA<sup>®</sup> Master Agreement;
- > The OTC commodities swap or forward must be reasonably correlated with an  $R^2 = 0.80$  or greater so that the futures contract is a suitable instrument for hedging the OTC derivative instrument transaction. As a guideline, the time period used to calculate the correlation must be

based on daily price data for a period of at least six (6) months or, if weekly price data are used, for a period of at least one (1) year.

#### Forward Rate Agreements (FRAs):

- ▹ conventional FRA;
- > written under the terms of an ISDA<sup>®</sup> Master Agreement;
- > predetermined interest rate;
- agreed start/end date;
- > have a defined interest (repo) rate.

#### **OTC Options and OTC Option Strategies:**

- Any individual or combination of OTC equity or stock index option positions can form the risk transaction component of an EFR transaction against any of the Bourse's stock index or single stock futures contracts.
- Any individual or combination of OTC bond, interest rate swap or FRA options (e.g. caps, floors, collars) can form the risk component of an EFR transaction against any of the Bourse's interest rate futures contracts

#### Bonds used in an EFR transaction must have the following characteristics:

#### →fixed coupon rate;

>bullet maturity issue (a coupon paying bond with no repayment of principal until maturity);

>no embedded optionality or early redemption features;

→an ISIN code;

>fixed principal amount;

>denominated in the currency of a G7 member country.

#### Stock baskets used in an EFR transaction must have the following characteristics:

- > be reasonably correlated to the index underlying the futures contract with an  $R^2 = 0.90$  or greater and the time period used to calculate the correlation must be based on daily price data for a period of at least six (6) months or, if weekly price data is used, for a period of at least one (1) year;
- represent at least 50% of the weight of the index underlying the futures contract or include at least 50% of the stocks comprised in the index underlying the futures contract;
- have a notional value equivalent to the value of the futures contract component of the EFR transaction;
- > exchange-traded funds (ETFs) are acceptable provided that they mirror stock index products traded on the Bourse.



# DAILY SETTLEMENT PRICE PROCEDURES FOR FUTURES CONTRACTS AND OPTIONS ON FUTURES CONTRACTS

# 1 RULE

Article 6390 of the Rules of Bourse de Montréal Inc. (the Bourse) stipulates that:

"The daily settlement price or the closing quotation are determined according to the procedures established by the Bourse for each derivative instrument."

# 2 SUMMARY

# 2.1 FUTURES CONTRACT AND OPTIONS ON FUTURES CONTRACT DAILY SETTLEMENT PRICES

- These markets use an average price during the last minutes of trading to establish a single settlement price. These calculations are executed manually by market officials or, as the case may be, by an automated algorithm using pre-established guidelines for each product.
- The prices at which block trades, Exchange for Physical (EFP), Exchange for Risk (EFR) or Substitution transactions are arranged shall not be used to establish the open, high, low or daily settlement price.

# **3 OBJECTIVES**

The objectives of establishing daily settlement prices are:

- Ensure a fair and orderly market close and pricing for approved participants so that they can properly mark-to-market their positions for margin calculations and back office processing, including the clearing and settlement of their transactions ;
- Ensure that the Canadian Derivatives Clearing Corporation (CDCC) and all market participants are informed of the settlement prices.

# 4 **DESCRIPTION**

# 4.1 THREE-MONTH CANADIAN BANKERS' ACCEPTANCE FUTURES CONTRACTS (BAX)

The daily settlement price procedure for the Three – Month Canadian Bankers' Acceptance Futures contract (BAX) is executed by a fully automated pricing algorithm which utilizes the parameters described in sections 4.1.1, 4.1.2 and 4.1.3 to ensure accuracy in the process.

#### 4.1.1 IDENTIFICATION OF THE FRONT QUARTERLY CONTRACT MONTH

The automated daily settlement pricing algorithm identifies the front quarterly contract month from the first two quarterly contract months. The front quarterly contract month is the one, among the first two quarterly contract months, that has the largest open interest.

# 4.1.2 ALGORITHM UTILIZED FOR THE DETERMINATION OF THE DAILY SETTLEMENT PRICE OF THE FRONT QUARTERLY CONTRACT MONTH

Once the front quarterly contract month has been identified, the automated daily settlement price algorithm will determine the settlement price of the front quarterly contract month according to the following priorities: first, it will use the last three minute weighted average price of cumulated trades amounting to at least 50 contracts on that contract month; if no such average price is available, it will then use the last 30 minute weighted average price of cumulated trades amounting to at least 50 contracts on that contract month and if no such average price is yet available, then the least variation between the bid or offer price and the previous day settlement price will be used.

Once the daily settlement price for the front quarterly contract month has been established, it will be verified against the booked orders and if there is a better outright bid or offer, the latter will take precedence over the daily settlement price calculated as described in the paragraph above.

# 4.1.3 PROCEDURE FOR THE DETERMINATION OF THE DAILY SETTLEMENT PRICE OF THE REMAINING BAX CONTRACT MONTHS

Upon completion of the aforementioned steps, the automated daily pricing algorithm will then establish the settlement prices for all other BAX contract months sequentially. The daily settlement prices of all other BAX contract months will be based first on the last three minute outright market and strategy combination traded weighted average or, if no weighted average price can be determined in this manner, the least variation between the bid and offer for booked orders.

# 4.2 S&P CANADA 60INDEX FUTURES CONTRACTS (SXF)

The settlement price shall be the weighted average of all trades during the closing range. The closing range is defined as the last minute of the trading session for all contract months.

# 4.2.1 MAIN PROCEDURE

# Booked Orders

If there is an unfilled order with a higher bid or lower offer in an outright month, this bid or offer will override the settlement price obtained from the weighted average. The order must have been posted for 20 seconds or longer prior to the close and its size must be for a total of 10 contracts or more.

# • Last Trade

If there are no trades in the last minute of trading, then the last trade will be taken into account while still respecting posted bids and offers in the market.

# 4.2.2 FIRST ANCILLARY PROCEDURE

When two contract months and the spread are trading (quarterly calendar roll), the ancillary procedure of this section will apply.

- The front month must be settled first (the establishment of the front month is based on the month with the greatest open interest).
- The spread between the two contract months must be settled next by taking into account the last minute average trading price and by examining the trades executed during the previous 10 minutes.
- The settlement price for the back month or far month is obtained by the difference between the front month settlement price and the value of the spread.

# 4.2.3 SECOND ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.2.1 and the ancillary procedure in 4.2.2, the following ancillary procedure will apply.

Market officials will post a settlement price that will reflect the same differential that was applied on the previous day settlement. The settlement price will be adjusted accordingly to respect that contract's previous settlement price.

Market officials will register in the "daily settlement price record" the criteria considered for determining the settlement price.

# 4.2.4 THIRD ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.2.1 and the ancillary procedures in 4.2.2 and in 4.2.3, the following ancillary procedure will apply.

In this situation, market officials will establish the settlement price based on available market information. They may also disregard any event (trade, bid or offer) which occurs near the end of the regular trading session and which is not compatible with a given settlement price.

Market officials will register in the "daily settlement price record" the criteria considered for determining the settlement price.

# 4.3 - TEN-YEAR GOVERNMENT OF CANADA BOND FUTURES CONTRACTS (CGB)

# 4.3.1 MAIN PROCEDURE

The settlement price shall be the weighted average of all trades during the closing range. The closing range is defined as the last minute of the trading session for all contract months.

# Booked Orders

If there is an unfilled order with a higher bid or lower offer in an outright month, this bid or offer will override the settlement price obtained from the weighted average. This order must have been posted for 20 seconds or longer prior to the close and its size must be for 10 contracts or more.

# Last Trade

If there are no trades in the last minute of trading, then the last trade will be taken into account while still respecting posted bids and offers in the market.

# 4.3.2 FIRST ANCILLARY PROCEDURE

When two contracts months and the spread are trading (quarterly calendar roll), the following ancillary procedure will apply.

- The front month must be settled first (the establishment of the front month is based on the month with the greatest open interest).
- The spread between the two contract months must be settled next by taking into account the last minute average trading price and by examining the trades executed during the previous 10 minutes.
- The settlement price for the back month or far month is obtained by the difference between the front month settlement price and the value of the spread.

# 4.3.3 SECOND ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.3.1 and the ancillary procedure in 4.3.2, the following ancillary procedure will apply.

Market officials will post a settlement price that will reflect the same differential that was applied on the previous business day. The settlement price will be adjusted accordingly to respect that contract's previous settlement price.

# 4.3.4 THIRD ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.3.1 and the ancillary procedures in 4.3.2 and 4.3.3, the following ancillary procedure will apply.

In this situation, market officials will establish the settlement price based on available market information. They may also disregard any event (trade, bid or offer) which occurs near the end of the regular trading session and which is not compatible with a given settlement price.

Market officials will register in the "daily settlement price record" the criteria considered for determining the settlement price.

#### 4.4THIRTY-YEAR GOVERNMENT OF CANADA BOND FUTURES CONTRACTS (LGB)

#### 4.4.1 MAIN PROCEDURE

The settlement price shall be the weighted average of all trades during the closing range. The closing range is defined as the last minute of the trading session for all contract months.

#### Booked Orders

If there is an unfilled order with a higher bid or lower offer in an outright month, this bid or offer will override the settlement price obtained from the weighted average. This order must have been posted for 20 seconds or longer prior to the close and its size must be for 10 contracts or more.

#### •Last Trade

If there are no trades in the last minute of trading, then the last trade will be taken into account while still respecting posted bids and offers in the market.

#### 4.4.2 FIRST ANCILLARY PROCEDURE

When two contracts months and the spread are trading (quarterly calendar roll), the following ancillary procedure will apply.

- •The front month must be settled first (the establishment of the front month is based on the month with the greatest open interest).
- •The spread between the two contract months must be settled next by taking into account the last minute average trading price and by examining the trades executed during the previous 10 minutes.
- •The settlement price for the back month or far month is obtained by the difference between the front month settlement price and the value of the spread.

# 4.4.3 SECOND ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.4.1 and the ancillary procedure in 4.4.2, the following ancillary procedure will apply.

Market officials will post a settlement price that will reflect the same differential that was applied on the previous business day. The settlement price will be adjusted accordingly to respect that contract's previous settlement price.

# 4.4.4 THIRD ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.4.1 and the ancillary procedures in 4.4.2 and 4.4.3, the following ancillary procedure will apply.

In this situation, market officials will establish the settlement price based on available market information. They may also disregard any event (trade, bid or offer) which

occurs near the end of the regular trading session and which is not compatible with a given settlement price.

Market officials will register in the "daily settlement price record" the criteria considered for determining the settlement price.

# **<u>4.54.4</u>** OPTIONS ON THREE – MONTH CANADIAN BANKERS' ACCEPTANCE FUTURES CONTRACTS (OBX)

### **<u>4.5.14.4.1</u>** MAIN PROCEDURE

#### 4.5.1.14.4.1.1 Weighted Average

The settlement price shall be the weighted average of the prices traded in the closing range (last minute of trading). If there is at the close, a higher bid or lower offer than the settlement price so obtained, that bid or offer shall be the settlement price.

# 4.5.1.24.4.1.2 Last Trades

If no trade occurs during the closing range, the market officials will consider transactions executed during the last 30 minutes of trading. Also, to be considered, the bids and offers shall be for a minimum of 25 contracts and shall have been posted at least one minute before the close to be considered.

If no trade occurs in the closing range (or in the last 30 minutes of trading), the settlement price shall be the theoretical price calculated by the Bourse (as described in section 4.5.2). If there is at the close a higher bid or lower offer than the settlement price so obtained, that bid or offer shall be the settlement price.

#### **.5.24.4.2** ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.5.1, the following ancillary procedure will apply.

The settlement price shall be determined by inserting the following parameters into a standard option pricing model (Black & Scholes):

#### **Price of the underlying:**

• The Bourse will capture the settlement price of the underlying BAX futures contract. This will be the price of the underlying.

#### Interest rate:

• The interest rate used will be the rate implied by the settlement price of the BAX futures contract nearest to expiration.

# Volatility:

• The Bourse will use the implied volatility (per contract month, for puts and calls) obtained from the acting Market Maker. The same volatility will be applied for both calls and puts.

The strike price of the options' series and the time to expiration are the other parameters that will be inserted into the model.

In determining the closing price, the Bourse shall take into account the information provided by the spread market, for example; if the SEP 9200 straddle is 98 bid, the total of the closing prices of these two series should not be inferior to 98.

# 4.64.5 **30-DAY OVERNIGHT REPO RATE FUTURES CONTRACTS (ONX)**

# 4.6.14.5.1 MAIN PROCEDURE

The settlement price shall be the weighted average of all trades during the closing range. The closing range is defined as the last three minutes of the trading session for all contract months.

# **<u>4.6.1.14.5.1.1</u>**Weighted Average of closing range trades

The weighted average will be derived from trades that occurred in the outright months during the closing range. The total volume traded in each outright month must be for 25 or more contracts.

# 4.6.1.24.5.1.2 Booked Orders

If there is an unfilled order with a higher bid price or lower offer price in a month, this bid or offer will override the settlement price obtained from the weighted average. This order must have been posted for 15 seconds or longer prior to the close and its size must be for a total of 25 or more contracts in each of the months.

# 4.6.1.34.5.1.3 Remaining Balances of Booked Orders Partially Executed at the close

In the case of a booked order as stipulated in paragraph 4.6.1.2 above, which would be only partially executed, the trades during the closing period as well as the remaining balance of booked orders will be considered to establish the settlement price.

Example 1: If there is a booked order for 25 ONX contracts at 97.92 and 15 of those contracts are executed, the 10 remaining contracts, if they are still present on the market at the same price, will be considered to establish the required minimum of 25 contracts.

Example 2: If there is a trade of 15 ONX contracts during the closing period at 97.92 and there is a booked order bid for 10 ONX contracts at 97.91

(respecting the required time limit), the bid will be considered in addition to the trades in the closing period to establish a settlement price.

#### 4.6.1.44.5.1.4 Strips and Spreads

All trades and unfilled booked orders for strips and spreads related to any expiry months will be ignored.

# 4.6.24.5.2 FIRST ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.6.1, the following ancillary procedure will apply.

#### 4.6.2.14.5.2.1 Weighted Average of trades on strategies

The settlement price shall be the weighted average of the trades on the strategies traded during the last five minutes provided the volume for the strategy taken into account was of 25 or more contracts.

#### 4.6.2.24.5.2.2 Booked Orders

If there is an unfilled order with a higher bid or lower offer, this bid or offer will override the settlement obtained from the weighted average described in 4.6.2.1. It has to have been posted for three minutes or longer prior to the close and the size must be for 25 or more contracts.

#### 4.6.34.5.3 SECOND ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.6.1 and the ancillary procedure in 4.6.2, the following ancillary procedure will apply.

#### 4.6.3.14.5.3.1 Differential with the previous contract month's settlement price

The settlement price will be defined by a price that reflects an appropriate differential with the settlement price of the previous contract month always starting with the contract month closest to expiry.

#### 4.6.3.24.5.3.2 Conflicts between spreads

If two spreads are in conflict, the calendar spread closest to expiry will have priority.

#### 4.6.44.5.4 THIRD ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.6.1 and the ancillary procedures in 4.6.2 and 4.6.3, the following ancillary procedure will apply.

In this situation, market officials will establish the settlement price based on the available market information. They may also disregard any event (trade, bid or offer) which occurs near the end of the regular trading session and which is not compatible with a given settlement price.

Market officials will register in the "daily settlement price record" the criteria considered for determining the settlement price.

#### 4.7TWO-YEAR GOVERNMENT OF CANADA BOND FUTURES CONTRACT (CGZ)

#### 4.7.1 MAIN PROCEDURE

The settlement price shall be the weighted average of all trades during the closing range. The closing range is defined as the last three minutes of the trading session for all contracts months.

# Booked Orders

If there is an unfilled order with a higher bid or lower offer in an outright month, this bid or offer will override the settlement price obtained from the weighted average. This order must have been posted for 30 seconds or longer prior to the close and its size must be for 20 contracts or more.

#### Remaining Balances of Booked Orders

In the case of a booked order as stipulated in the above paragraph which would only be partially executed during the closing period and if no other trade has occurred during the closing period, the remaining unexecuted balance of this order will be considered to establish the closing price.

In the absence of an average price during the closing range, the reference period will be extended to the last 10 minutes of the trading session.

#### 4.7.2 FIRST ANCILLARY PROCEDURE

When two contracts months and the spread are trading (quarterly calendar roll), the following ancillary procedure will apply.

The front month must be settled first (the establishment of the front month is based on the month with the greatest open interest).

The spread between the two contracts months must be settled next by taking into account the last three minutes average trading price and by examining the trades executed during the previous 10 minutes.

#### Booked Orders

If there is an unfilled order with a higher bid or lower offer in an outright month, this bid or offer will override the settlement price obtained from the weighted average. This order must have been posted for 30 seconds or longer prior to the close and its size must be for 20 contracts or more.

#### Remaining Balances of Booked Orders

In the case of a booked order as stipulated in the above paragraph which would only be partially executed during the closing period and if no other trade has occurred during the closing period, the remaining unexecuted balance of this order will be considered to establish the closing price.

The settlement price for the back month is obtained by the difference between the front month settlement price and the value of the spread.

#### 4.7.3 SECOND ANCILLARY PROCEDURE

In the absence of any trade during the last 10 minutes of the trading session, the following ancillary procedure will apply.

The settlement price for the front month will be the median of the market posted at the closing of the market. Bids and offers have to have been posted for 30 seconds or longer prior to the close and the size of each such bids and offers must be for 20 contracts or more.

The value of the spread will be either the settlement price of the previous trading day or the weighted average of all trades during the closing range as defined above in the first ancillary procedure.

The settlement price for the back month is obtained by the difference between the front month settlement price and the value of the spread.

#### 4.7.4 THIRD ANCILLARY PROCEDURE

In the absence of the elements required to apply the previous procedures, the following ancillary procedure will apply.

In this situation, market officials will establish the settlement price based on available market information. They may also disregard any event (trade, bid or offer) which occur near the end of the regular trading session and which is not compatible with a given settlement price.

Usually, the settlement price for the back month is always adjusted depending on the settlement prices obtained for the front month and the spread.

#### **4.84.6** FUTURES CONTRACT ON CARBON DIOXIDE EQUIVALENT (CO<sub>2</sub>e) UNITS

# 4.8.14.6.1 MAIN PROCEDURE

The settlement price shall be the weighted average of all traded prices during the closing range. The closing range is defined as the last fifteen minutes of the trading session for all contract expiries.

# Booked Orders

If there is an unfilled order with a higher bid or lower offer in a particular contract expiry, this bid or offer will override the settlement price obtained from the weighted average. This order must have been posted for 20 seconds or longer prior to the close and its size must be for 10 contracts or more.

# Last Trade

If there are no trades in the last fifteen minutes of trading, then the last trade will be taken into account while still respecting posted bids and offers in the market.

# 4.8.24.6.2 FIRST ANCILLARY PROCEDURE

When two contracts expiries and the spread are trading (calendar roll), the following ancillary procedure will apply.

- The contract having the earliest expiry must be settled first.
- The spread between the two contracts must be settled next by taking into account the last fifteen minutes average trading price and by examining the trades executed during the previous 30 minutes.
- The settlement price for the far-dated contracts corresponds to the difference between the settlement price of the contract having the earliest expiry and the value of the spread.

# **4.8.34.6.3** SECOND ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.8.1 and the ancillary procedure in 4.8.2, the following ancillary procedure will apply.

Market officials will post a settlement price that will reflect the same differential that was applied on the previous trading day. The settlement price will be adjusted accordingly to respect that contract's previous settlement price.

# **4.8.44.6.4** THIRD ANCILLARY PROCEDURE

In the absence of the items required to apply the main procedure in 4.8.1 and the ancillary procedures in 4.8.2 and 4.8.3, the following ancillary procedure will apply.

In this situation, market officials will establish the settlement price based on available market information. They may also disregard any event (a trade, a bid or an offer) which occurs near the end of the regular trading session and which is not compatible with a given settlement price.

Market officials will register in the "daily settlement price record" the criteria considered for determining the settlement price.

Trading Unit	C\$100,000 nominal value Government of Canada Bond with 6% notiona coupon
Contract Months	March, June, September and December.
Contract Months	March, June, September and December.
Price Quotation	Par is on the basis of 100 points, with one point equal to C\$1,000.
Last Trading Day	Trading ceases at 1:00 p.m. (ET) on the seventh business day preceding the last business day of the delivery month.
Contract Type	Physical delivery of eligible Government of Canada Bonds.
Delivery Notices	Delivery notices should be submitted before 5:30 p.m. or before such time so by the clearing corporation on any business day, between the third business day preceding the first business day of the delivery month, and the third business day preceding the last business day of the delivery month inclusive
Delivery Date	Delivery shall be made on the third business day following the submission o the delivery notice by the member holding a seller's position or on any other day as determined by the clearing corporation. Delivery shall be completed r later than the last business day of the delivery month.
Minimum Price Fluctuation	0.01 = C\$ 10 per contract.
Reporting Level	250 contracts.
Position Limits	Information on position limits can be obtained from Bourse de Montr Inc. as they are subject to periodic changes.
Minimum Margin Requirements	Information on Minimum Margin Requirements can be obtained from the Bourse as they are subject to periodic changes.
Delivery Standards	Government of Canada Bonds which:
	<ul> <li>i) have a remaining time to maturity of between 3 years 6 month and 5 years 3 months as of the first day of the delivery month, calculated by rounding down to the nearest whole month perio ii) have an outstanding amount of at least C\$3.5 billion nominal value;</li> <li>iii) are originally issued at five-year or ten-year Government of Canada bond auctions;</li> <li>iv) are issued and delivered on or before the 15th day preceding the first delivery notice day month of the contract.</li> </ul>
Daily Price Limit	<u>None</u> Three points per contract above or below the previous da settlement price.
Trading Hours	<ul> <li>Early session: 6:00 a.m. to 8:05 a.m. (ET)</li> <li>Regular session: 8:20 a.m. to 3:00 p.m. (ET).</li> <li>Curb trading session: The curb trading session begins once settlement prices have been determined and ends at 4:00 p.m. (ET)</li> </ul>
Clearing Corporation	Canadian Derivatives Clearing Corporation (CDCC).