



**CIRCULAR**  
April 16, 2003

## **REQUEST FOR COMMENTS**

### **POSITIONS IN AND OFFSETS INVOLVING INTEREST RATE AND TOTAL PERFORMANCE SWAPS**

#### **AMENDMENTS TO ARTICLE 7226 AND ADDITION OF ARTICLE 7226A**

#### **Summary**

The Executive Committee of Bourse de Montréal Inc. (the "Bourse") approved amendments to article 7226 and the addition of a new article 7226A to the Rules of the Bourse concerning margin and capital requirements for positions in and offsets involving interest rate and total performance swap agreements. The objective of the proposed amendments is to establish formal margin and capital requirements for positions in and offsets involving total performance swap agreements that are consistent with the guidance issued by the Bourse in 1997 (circular no. 062-97 dated April 3, 1997) with respect to equity swap agreements, as well as rules for similar hedging instruments.

#### **Process for Changes to the Rules**

Bourse de Montréal Inc. is recognized as a self-regulatory organization (SRO) by the Commission des valeurs mobilières du Québec (the "Commission"). In accordance with this recognition, the Bourse carries on activities as an exchange and as a SRO in Québec. In its SRO capacity, the Bourse assumes market regulation and broker-dealer regulation responsibilities. The broker-dealers regulated by the Bourse are 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.

Circular no.: 049-2003

**Tour de la Bourse**  
C. P. 61, 800, square Victoria, Montréal (Québec) H4Z 1A9  
Téléphone : (514) 871-2424  
Sans frais au Canada et aux États-Unis : 1 800 361-5353  
Site Internet : [www.m-x.ca](http://www.m-x.ca)

**Tour de la Bourse**  
P. O. Box 61, 800 Victoria Square, Montréal, Québec H4Z 1A9  
Telephone: (514) 871-2424  
Toll-free within Canada and the U.S.A.: 1 800 361-5353  
Website: [www.m-x.ca](http://www.m-x.ca)

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 and Policies of the Bourse governing approved participants, among which, the Rules and Policies relating to margin and capital requirements. The Board of Directors has delegated to the Executive Committee of the Bourse its powers to approve or amend these Rules and Policies upon recommendation from the Special Committee. These changes are submitted to the Commission for approval.

Comments on the proposed amendments to article 7226 and on the addition of article 7226A must be submitted within 30 days following the date of publication of the present notice in the bulletin of the Commission. 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](mailto:legal@m-x.ca)*

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

*Ms. Denise Brosseau*  
*Secretary*  
*Commission des valeurs mobilières du Québec*  
*800 Victoria Square, 22<sup>nd</sup> Floor*  
*P.O. Box 246, Tour de la Bourse*  
*Montréal (Quebec) H4Z 1G3*  
*E-mail: [consultation-en-cours@cvmq.com](mailto:consultation-en-cours@cvmq.com)*

## **Appendices**

For your information, you will find in the appendices an analysis document of the proposed rule amendments as well as the proposed regulatory text. The implementation date of the proposed amendments will be determined, if applicable, with the other Canadian self-regulatory organizations following approval by the Commission des valeurs mobilières du Québec.



## POSITIONS IN AND OFFSETS INVOLVING INTEREST RATE AND TOTAL PERFORMANCE SWAPS

- AMENDMENTS TO ARTICLE 7226
- ADDITION OF NEW ARTICLE 7226A

### I OVERVIEW

#### A) Introduction

The use of financial swap agreements, particularly total performance swap agreements, has become one of the most popular ways for financial institutions, including approved participants and their clients, to hedge risk. However, with the exception of the present rules relating to interest rate swaps, there are no formal provisions in the regulations of Bourse de Montréal Inc. (the "Bourse") that set out the capital and margin requirements for swap agreements. The proposed amendments seek to establish formal capital and margin requirements for positions in and offsets involving total performance swap agreements that are consistent with the guidelines issued in 1997 with respect to equity swap agreements<sup>1</sup>, as well as rules for similar hedging instruments.

---

<sup>1</sup> In April 1997, the Bourse published Circular no.062-97 to provide guidance on the margining of positions in and offsets involving equity swap agreements. These guidelines were based on the existing requirements for interest rate swap agreements set out in article 7226 of the Rules of the Bourse.

#### B) Current Rules

As previously mentioned, the only actual rules relating to swaps in the regulations of the Bourse relate to interest rate swap agreements. The current rules are of limited use in determining the margin requirements for positions in and offsets involving total performance swaps. This is because there are significant differences between the risks associated with interest rate swap agreements and the risks associated with total performance swap agreements<sup>2</sup>.

#### C) The Issue

Without specific capital and margin rules for total performance swap agreements, it is becoming increasingly difficult to address the unique risks associated with these agreements. In the past the Bourse has addressed the capital and margin treatment of total performance swaps involving equity securities through the issuance of a circular. Since the use of total performance swaps is constantly increasing and the underlying securities to such swaps include a wide range of instruments/commodities other than equity securities, the codification of rules applicable to all types of total performance swaps is considered necessary.

#### D) Objective

The objective of the proposed amendments to article 7226 and the addition of article 7226A to the Rules of the Bourse is to establish capital and margin requirements for total performance swap agreements.

---

<sup>2</sup> Interest rate swap agreements only relate to the swapping of a fixed interest payment against a floating interest rate payment or vice versa. A total performance swap agreement involves swapping a payment based on the total performance (i.e., capital gains/losses, interest and dividends) of an asset against a floating interest rate payment.

### **E) Effect of Proposed Rules**

Adoption of the proposed amendments will result in the codification of the guidelines that had been issued with respect to the capital and margin requirements for total performance swaps. It is anticipated that the proposed rules will have no impact on market structure, competitiveness of approved participants versus non-approved participants and costs of compliance.

## **II DETAILED ANALYSIS**

### **A) Current Rules**

As mentioned previously, the only guidelines that had been issued to date with respect to total performance swaps were those set out in circular no. 062-97 of the Bourse with respect to equity total performance swaps. According to these guidelines, offsets can be taken between the equity swap component of a swap agreement and a position in the underlying security with no capital requirement, subject to certain conditions<sup>3</sup>. The current guidelines do not specifically address any “workout risk”<sup>4</sup> that may be associated with such offset strategies. They only permit offsets in instances where the underlying security qualifies for a lower margin rate and workout risk is considered to be minimal.

---

<sup>3</sup> Where an offset involves a long position in the equity swap component and a short position in the underlying security, the underlying security must currently be included on the “List of Securities Eligible to a Reduced Margin Rate” for the offset to be permitted.

<sup>4</sup> One of the risk considerations with respect to any offset strategy is “workout risk”. Workout risk is the risk (either buy-in risk or sell-out risk or both) associated with liquidating the positions involved in an offset strategy. In the case of swap offsets, the swap components are generally cash settled so there is no workout risk but the related underlying security positions are subject to either buy-in risk or sell-out risk.

### **B) Proposed Rules**

As mentioned previously, the main objective of the proposed amendments to article 7226 and the addition of article 7226A to the Rules of the Bourse is to establish capital and margin requirements for total performance swap agreements. However, some amendments have also been made to the existing rules for interest rate swaps. The following is a brief list of some of the most important proposed amendments:

#### **(a) Unhedged Total Performance Swap Components**

A proposed new rule, paragraph B) of article 7226, has been drafted to address the capital and margin requirements for unhedged total performance swap components. Since a total performance swap is an exchange of the performance of one asset against the performance of another one, the capital and margin requirements have been designed to address the risks associated with the payment streams being exchanged.

Minor wording changes have also been made to the existing requirements for unhedged interest rate swap components, as currently set out in paragraph 1) of article 7226 [proposed article 7226A].

#### **(b) Offsets Involving Total Performance Swap Components**

New provisions, paragraphs D) and E) of article 7226A, have been added to address the capital and margin requirements for offsets involving total performance swap components. These provisions have been drafted in order to permit offsets with no capital requirement where workout risk is mitigated and to require that capital be provided for offsets where the workout risk

has not been mitigated. The offsets strategies proposed are as follows:

- (i) long total performance swap component versus short total performance swap component where performance is based on the same underlying security [paragraph D) of article 7226A];
- (ii) short total performance swap component versus long underlying security or basket of securities [paragraph E) i) of article 7226A];
- (iii) long total performance swap component versus short underlying security or basket of securities [paragraph E) ii) of article 7226A].

In the case of the first offset listed above (long swap component versus short swap component), workout risk is not a concern since both swap components are cash settled. The proposal thus allows for the netting of the capital requirements calculated for each component. This is consistent with the requirements set out in paragraph 2) of article 7226 as it now exists for interest rate swap agreements.

In the case of the last two offsets listed above (long or short swap component versus short or long underlying security position) whether or not there is a capital requirement is dependent upon whether any workout risk associated with the offset is mitigated. The proposal considers workout risk to be mitigated when either:

- (i) the total performance swap agreement includes a realization clause which allows the approved participant to close out the swap agreement using the realization value for the underlying security position; or

- (ii) there are features inherent in the underlying security or the market on which the security trades, which make the realization value of the long position in the underlying security or basket of securities determinable at the time the total performance swap agreement is to expire and this value will be used as the closeout price for the swap.

As a result, where it can be determined that workout risk has been mitigated, these offsets may be entered into without attracting any capital requirement. However, if workout risk is present in a particular offset strategy, it is proposed that the capital required be 20 percent of the normal capital required in the underlying security position.

A summary of the proposed strategies and related capital requirements is included in the attachment #1.

### **C) Issues and Alternatives Considered**

No other alternatives to the rules being proposed were seriously considered. Alternative approaches such as the use of a value at risk model were not determined to be suitable due to their complexity and the fact that these models do not generally consider the unique offset risk factors such as workout risk.

### **D) Comparison with Similar Provisions**

#### **Canada**

In Canada, the guidelines issued by the Office of the Superintendent of Financial Institutions (“OSFI”) with respect to derivatives focus on credit risk rather than market risk. As a result, OSFI does not have specific capital requirements for the presence of workout risk for swap hedge positions maintained in the books of the financial institutions it regulates. Rather, a potential credit

exposure is calculated and provided for based on the relative credit worthiness of the counterparty.

### **United Kingdom**

In the United Kingdom, the Financial Service Authority (the “FSA”) relies on the Position Risk Requirement calculation in determining the necessary capital to be provided for financial institutions derivative positions. The FSA Rules offer alternative approaches for determining the capital requirement for a particular total performance swap. For example, in the case of an equity total performance swap, the FSA Rules allow to include the equity leg of the swap in the determination of the Equity Method Position Risk Requirement (“PRR”) or the Equity Derivatives Method PRR. The interest rate would be included in the calculation of the Interest Rate Method PRR. In determining the PRR under any above methods, the FSA Rules allow to use the nominal amount of the swap leg for netting purposes.

### **United States**

In the United States, the Securities and Exchange Commission (the “SEC”) adopted rules and rule amendments in January 1999 under the Securities Exchange Act of 1934 to regulate the OTC derivatives dealers. Registration as a dealer in such category is optional and one of the objectives of these amendments was to improve the efficiency and competitiveness of U.S. securities firms active in global OTC derivatives markets. Under these rules an OTC derivatives dealer is subject to higher minimum capital requirements than a fully regulated broker-dealer, however, it may be authorized by the SEC to use Value-at-Risk (“VaR”) models to calculate capital charges for market risk and to take alternatives charges for credit risk than those otherwise prescribed. Further, the OTC derivatives dealer’s VaR model must meet certain qualitative and

quantitative requirements imposed by the SEC before the dealer can use such model(s) to calculate the regulatory capital requirements.

### **E) Public Interest Objective**

This proposal is designed to establish capital and margin requirements for total performance swap agreements that are consistent with previously issued guidelines with respect to equity swap agreements as well as with rules for similar hedging instruments. As a result, the proposed amendments are considered to be in the public interest.

## **III COMMENTARIES**

### **A) Effectiveness**

As stated above, the purpose of this proposal is to establish capital and margin requirements for total performance swap agreements that are consistent with previously issued guidelines with respect to equity swap agreements as well as with rules for similar hedging instruments.

It is believed that the proposed amendments will be effective in this regard.

## **IV REFERENCES**

- Rule Seven of Bourse de Montréal Inc.;
- Circular no. 062-97 of Bourse de Montréal Inc.;
- OSFI Capital Adequacy Requirements, No. A – Part I, January 2001;
- Interest Rate Swaps and Bank Regulation, Andrew H. Chen, Southern Methodist University;
- United Kingdom Financial Services Authority, Interim Prudential Sourcebook: Investment businesses, June 2000:
  - Rule 10-81, Types of positions to be included in the equity method

## **ANNEXE A**

5

- Rule 10-91, Types of positions to be included in the equity derivatives method
- Rule 10-100, Types of positions to be included in the interest rate method.

Attachment #1 (analysis doc.)

<b>PROPOSED OFFSET MATRIX FOR TOTAL PERFORMANCE SWAPS</b>			
	<b>Short swap performance leg where it can be demonstrated that workout risk has been mitigated</b>	<b>Short swap performance leg</b>	<b>Short underlying security</b>
<b>Long swap performance leg where it can be demonstrated that workout risk has been mitigated</b>	Offsetting positions – workout risk is not an issue since both performance legs are cash settled, therefore no margin required.	Offsetting positions – workout risk is not an issue since both performance legs are cash settled, therefore no margin required.	No capital required as workout risk associated with the offset strategy, in this case buy-in risk, has been mitigated.  [proposed article 7226A E) (ii) c)]
<b>Long swap performance leg</b>	Offsetting positions – workout risk is not an issue since both performance legs are cash settled, therefore no margin required.	Offsetting positions – workout risk is not an issue since both performance legs are cash settled, therefore no margin required.	20% of normal capital required for the long position in underlying security to cover buy-in risk.  [proposed article 7226A E) (ii) d)]
<b>Long underlying security</b>	No capital required as workout risk associated with the offset strategy, in this case sell-out risk, has been mitigated.  [proposed article 7226A E) (i) c)]	20% of normal capital required for the long position in underlying security to cover sell-out risk.  [proposed article 7226A E) (i) d)]	Offsetting positions in same security – no margin required.
<p>Note: To demonstrate that workout risk has been mitigated the total performance swap agreement must either contain a “realization clause” or there must be features inherent in the underlying security or the market on which the underlying security trades that ensure that the realization value of the underlying security position is determinable at the time the total performance swap agreement is to expire.</p>			



## Section 7201 - 7250

## Margins

7226 Margin on ~~Interest Rate Swaps~~  
(01.05.92, 01.04.93, 00.00.03)

~~————~~ The margin requirements for interest rate swaps are as follows:

~~±~~A) Interest Rate Swaps

For the purposes of the present article, a “fixed interest rate” is an interest rate, which is not reset at least every 90 days and a “floating interest rate” is an interest rate, which is not a fixed interest rate. On interest rate swap agreements where payments are calculated with reference to a notional amount, the obligation to pay and the entitlement to receive must each be margined as separate ~~positions~~ components as follows:

- ai) ~~where the payment is calculated according to a fixed rate, the margin must be the rate specified in article 7204 - Group I, plus 25% of such specified rate, applicable to securities described therein with a principal amount equal to the notional amount of the swap and having the same term to maturity as the outstanding term of the swap, applied to the notional amount. For the purposes of this article, a fixed rate is a rate which is not reset at least every 90 days~~ where a component is a payment calculated according to a fixed interest rate, the margin required must be the margin rate specified in article 7204 - Group I for a security with the same term to maturity as the outstanding term of the swap, multiplied by 125% and in turn multiplied by the notional amount of the swap;
- bi) ~~where the payment is calculated according to a floating rate, the margin must be the rate specified in article 7204 - Group I applicable to securities described therein with a principal amount equal to the notional amount of the swap and having the same term to maturity as the period for which the rate is reset, applied to the notional amount. For the purposes of this article, a floating rate is a rate which is not a fixed rate~~ where a component is a payment calculated according to a floating interest rate, the margin required must be the margin rate specified in article 7204 - Group I for a security with the same term to maturity as the remaining term to the swap reset date, multiplied by the notional amount of the swap.

The counterparty to the interest rate swap agreement must be considered as being the ~~member's customer~~ approved participant's client. No margin is required in respect of an interest rate swap entered into by ~~with a customer client~~ which is an acceptable institution; ~~for customers which are acceptable counterparties, the margin requirements must be the market value deficiency calculated in respect of the transaction on an item-by-item basis~~ The margin requirement for clients which are acceptable counterparties, must be any market value deficiency calculated relating to the interest rate swap agreement. The margin requirement for clients which are other counterparties must be any loan value deficiency calculated relating to the interest rate swap agreement, determined by using the same margin requirements for each swap component as calculated in clauses (i) and (ii) above.

B) Total Performance Swaps

~~————~~ On total performance swap agreements, the obligation to make a payment and the entitlement to receive it must each be margined as separate components as follows:

- i) where a component is a payment calculated based on the performance of a stipulated underlying security or basket of securities, with reference to a notional amount, the margin requirement must be

the normal margin required for the underlying security or basket of securities relating to this component, based on the market value of the underlying security or basket of securities;

- ii) where a component is a payment calculated according to a floating interest rate, the margin required must be the margin rate specified in article 7204 -Group I for a security with the same term to maturity as the remaining term to the swap reset date, multiplied by the notional amount of the swap.

The counterparty to the total performance swap agreement must be considered as being the approved participant's client. No margin is required in respect of a total performance swap entered into with a client which is an acceptable institution. The margin requirement for clients which are acceptable counterparties must be any market value deficiency calculated relating to the total performance swap agreement. The margin requirement for clients which are other counterparties must be any loan value deficiency calculated relating to the total performance swap agreement, determined by using the same margin requirements for each swap component as calculated in clauses i) and ii) above.

### **27226A) Swap Positions Offsets**

For the purposes of the present article, a "fixed interest rate" is an interest rate which is not reset at least every 90 days, a "floating interest rate" is an interest rate, which is not a fixed interest rate and "realization clause" is an optional clause within a total performance swap agreement which allows the approved participant to close out the swap agreement at the realization price (either the buy-in or sell-out price) of the security position involved in the offset.

#### **A) Interest Rate Swap Versus Interest Rate Swap Offset**

Where an ~~member~~ approved participant

- ai) is a party to an interest rate swap agreement requiring it to pay (or entitling it to receive) Canadian dollar or United States dollar fixed (or floating) interest rate ~~payments~~ amounts calculated with reference to a notional amount, and
- bi) is a party to another ~~off setting~~ offsetting interest rate swap agreement ~~entitling the member to~~ receive (or requiring it to pay) fixed (or floating) interest rate ~~payments~~ amounts calculated with reference to the same notional amount, ~~and denominated in the same currency and ii) with the same or a different term to maturity, but for which the same rate of margin applies as the obligation referred to in a)~~ within the same maturity band for margin purposes as the interest rate swap referred to in i).

the margin required in respect of the positions in ~~a i)~~ and ~~b ii)~~ may be netted, provided that margin on fixed interest rate component payment (or receipt) positions may only be offset against margin on ~~other~~ fixed interest rate component receipt (or payment) positions, and margin on floating ~~rate~~ interest rate component payment (or receipt) positions may only be offset against margin on other floating interest rate component receipt (or payment) positions.

#### **B) Fixed Interest Rate Swap Component and ~~Security~~ Securities Position Offset:**

Where an ~~member~~ approved participant

- ai) is a party to an interest rate swap agreement ~~providing for the member to make or receive~~ requiring it to pay (or entitling it to receive) Canadian dollar or United States dollar ~~payments~~ fixed interest rate

amounts calculated with reference to a notional amount ~~at a rate which is fixed for the term of the obligation,~~ and

- ~~b) holds a long (or short) position in securities described in article 7204 - Group I with a principal amount equal to and denominated in the same currency as the notional amount of the interest rate swap and ~~having the same or different term to maturity (but for which the same rate of margin applies as the position in a) as the outstanding term of the swap~~ with a term to maturity that is within the same maturity band for margin purposes as the interest rate swap~~

the margin required in respect of the positions in ~~a) and b)~~ may be netted.

#### 4C) Floating Interest Rate Swap Component and ~~Security~~ Securities Position Offset

Where an ~~member~~ approved participant

- ~~a) is a party to an interest rate swap agreement providing for the member to make or receive~~ requiring it to pay (or entitling it to receive) Canadian dollar or United States dollar payments ~~floating interest rate amounts calculated with reference to a notional amount at a rate which is not fixed for the term of the obligation,~~ and
- ~~b) holds a long (or short) position in securities described in articles 7204 - Group I or 7205, maturing within one year with a principal amount equal to and denominated in the same currency as the notional amount of the swap,~~

the margin required in respect of the positions in ~~a) and b)~~ may be netted.

#### D) Total Performance Swap versus Total Performance Swap offset

Where an approved participant

- i) is a party to a total performance swap agreement requiring it to pay (or entitling it to receive) Canadian dollar or United States dollar amounts calculated based on the performance of a stipulated underlying security or basket of securities, with reference to a notional amount; and
- ii) is a party to another total performance swap agreement entitling it to receive (or requiring it to pay) amounts calculated based on the performance of the same underlying security or basket of securities, with reference to the same notional amount and denominated in the same currency;

the margin required in respect of the position in i) and ii) may be netted, provided that margin on performance component payment (or receipt) positions may only be offset against margin on performance component receipt (or payment) positions, and margin on floating interest rate component payment (or receipt) positions may only be offset against margin on other floating interest rate component receipt (or payment) positions.

#### E) Total Performance Swap Component and Securities Position Offset

- i) Short Performance Swap Component and Long Underlying Security or Basket of Securities

Where an approved participant

a) is a party to a total performance swap agreement requiring it to pay amounts calculated based on the performance of a stipulated underlying security or basket of securities, with reference to a notional amount; and

b) holds long an equivalent quantity of the same underlying security or basket of securities;

the capital required in respect of the position described in a) and b) must be either:

c) nil, where it can be demonstrated that sell-out risk relating to the offset has been mitigated:

I) through the inclusion of a realization clause in the total performance swap agreement, which allows the approved participant to close out the swap agreement using the sell-out price(s) for the long position in the underlying security or basket of securities; or

II) since, due to the features inherent in the long position in the underlying security or basket of securities or the market on which the security or basket of securities trades, the realization value of the long position in the underlying security or basket of securities is determinable at the time the total performance swap agreement is to expire and this value will be used as the closeout price for the swap;

or

d) 20% of the normal capital required on the long position in the underlying security or basket of securities where sell-out risk relating to the offset has not been mitigated.

ii) Long Performance Swap Component and Short Underlying Security or Basket of Securities

Where an approved participant

a) is a party to a total performance swap agreement entitling it to receive amounts calculated based on the performance of a stipulated underlying security or basket of securities, with reference to a notional amount; and

b) holds short an equivalent quantity of the same underlying security or basket of securities;

the capital required in respect of the positions described in a) and b) must be:

c) nil, where it can be demonstrated that buy-risk relating to the offset has been mitigated:

I) through the inclusion of a realization clause in the total performance swap agreement, which allows the approved participant to close out the swap agreement using the buy-in price(s) for the short position in the underlying security or basket of securities; or

II) since, due to the features inherent in the short position in the underlying security or basket of securities or the market on which the security or basket of securities trades, the realization value of the short position in the underlying security or basket of securities is determinable at the time the total performance swap agreement is to expire and this value will be used as the closeout price for the swap.

or

d) 20% of the normal capital required on the short position in the underlying security or basket of securities where buy-in risk relating to the offset has not been mitigated.