

# **CIBC Multifactor U.S. Equity Index (CAD-Hedged) Methodology**

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# **Table of Contents**

## **Introduction**

### **1 Index Overview**

**1.1** Index Details

**1.2** Initial Value

**1.3** Distribution

**1.4** Prices and Calculation Frequency

**1.5** Publication

**1.6** Licensing

### **2 Index Construction Methodology**

**2.1** Selection of the Index Components

**2.2** Ordinary adjustment

### **3 Index Calculation and On-going Maintenance**

**3.1** Index Formula

**3.2** Accuracy

**3.3** Calculation of the Index in the event of a market disruption

### **4 Amendments and Exceptions to this Methodology**

### **5 Definitions**

## **Introduction**

This document is to be used as a guideline with regard to the composition, calculation, and management of the CIBC Multifactor U.S. Equity Index (CAD-Hedged) (the “Index”). Any changes made to the guideline are initiated by the Committee specified in section 4. The CIBC Multifactor U.S. Equity Index (CAD-Hedged) is calculated and published by Solactive AG (the Index Calculator).

## **1 Index Overview**

The CIBC Multifactor U.S. Equity Index (CAD-Hedged) tracks the performance of the CIBC Multifactor U.S. Equity Index and hedges the currency exposure to Canadian Dollars on a monthly basis via FX forward contracts.

The Index is calculated and distributed by the Index Calculator.

The Index is calculated and published in CAD.

### **1.1 Index Details**

The net total return version of the Index is distributed under ISIN DE000SLA7TM3; the WKN is SLA7TM. The Index is published in Reuters under the code .CIBCMUHN. and in Bloomberg under the ticker CIBCMUHN Index.

### **1.2 Initial Value**

The Index is calculated since January 4, 2019. Back tested historical data is available from August 30, 2013 where the index is based on with a value of 100.

### **1.3 Distribution**

The Index is published via the price marketing services of Boerse Stuttgart AG and is distributed to all affiliated vendors. Each vendor decides on an individual basis as to whether the vendor will distribute/display the CIBC Multifactor U.S. Equity Index (CAD-Hedged) via the vendor’s information systems.

### **1.4 Prices and Calculation Frequency**

The value of the index is calculated on each Trading Day based on the prices on the respective Exchanges on which the Index Components are listed. The most recent prices of all Index Components are used. Prices of Index Components not listed in the Index Currency are translated using spot foreign exchange rates quoted by Reuters. Should there be no current price available on Reuters, the most recent price or the Trading Price on Reuters for the preceding Trading Day is used in the calculation.

The Index is calculated once every Trading Day at 4:50pm, EST. In the event that data cannot be provided to Reuters or to the pricing services of Boerse Stuttgart AG the Index cannot be distributed.

Any incorrect calculation is adjusted on a retrospective basis.

### **1.5 Publication**

All specifications and information relevant for calculating the Index are made available on the webpage of the Index Calculator (<http://www.solactive.com>)

### **1.6 Licensing**

Licenses, if any, to use the Index as the underlying value/index for index funds, ETFs, or derivative instruments are issued to stock exchanges, banks, financial services providers, and investment houses by CIBC World Markets Inc.

## **2 Index Construction Methodology**

### **2.1 Selection of the Index Components**

The initial composition of the Index as well as any ongoing adjustment is based on the calculation formula outlined in section 3

### **2.2 Ordinary Adjustment**

The composition of the Index is adjusted monthly on the Adjustment Day.

The first adjustment will be made in January, 2000 based on the Prices of the Index Components on the Adjustment Day and the Trading Day immediately preceding the Adjustment Day.

### 3 Index Calculation and On-going Maintenance

The Index Calculator (Solactive AG or any other appropriately appointed successor in this function) is responsible for calculating index levels based on the methodology specified in this document.

#### 3.1 Index formula

The Index Value on a Trading Day at the relevant time is calculated with the following formula:

$$HI_t = HI_{RT} \cdot \left( 1 + \left( \frac{UI_t}{UI_{RT}} - 1 \right) + HIM_t \right)$$

with:

$HI_t$  = Hedged Index on Trading Day t

$HI_{RT}$  = Hedged Index on the Adjustment Day RT immediately preceding Trading Day t

$UI_t$  = Underlying Index on Trading Day t

$UI_{RT}$  = Underlying Index on the Adjustment Day RT immediately preceding Trading Day t

$HIM_t$  = Hedge Impact on Trading Day t, calculated according to the following formula:

$$HIM_t = AF_{RT} \cdot S_{RT-1}^m \cdot \left( \frac{1}{F_{RT}^m} - \frac{1}{IF_t^m} \right)$$

with:

$AF_{RT}$  = Adjustment Factor on Trading Day t, calculated according to the following formula:

$$AF_{RT} = \frac{HI_{RT-1}}{HI_{RT}}$$

with:

$HI_{RT-1}$  = Hedged Index on the Trading Day immediately preceding Adjustment Day RT

$S_{RT-1}^m$  = CAD/USD mid spot rate on the Trading Day immediately preceding Adjustment Day RT

$F_{RT}^m$  = CAD/USD 1 month forward mid rate on the Adjustment Day RT

$IF_t^m$  = CAD/USD 1 month interpolated forward mid rate on Trading Day t, calculated as

$$IF_t^m = S_t^m + (F_t^m - S_t^m) \cdot \frac{D-d}{D}$$

with:

$S_t^m$  = CAD/USD mid spot rate on Trading Day t

$F_t^m$  = CAD/USD 1 month forward mid rate on Trading Day t

$D$  = number of calendar days between the last and the next Adjustment Day

$d$  = number of calendar days between the last Adjustment Day and Trading Day t

### **3.2 Accuracy**

The value of the Index will be rounded to 2 decimal places.

Foreign exchange rates will be rounded to six decimal places.

### **3.3 Calculation of the Index in the event of a Market Disruption Event**

The Index is not calculated in the event of a Market Disruption Event. If the Market Disruption Event continues over a period of eight Trading Days, then the Committee will determine the necessary action (including but not limited to taking into account the market conditions prevailing at this point in time, the last quoted Prices for each of the Index Components as well as any other conditions that it deems relevant for calculating the Index value) such that the affected securities resulting from the Market Disruption Event are no longer causing such disruption to occur.

## **4 Amendments and Exceptions to this Methodology**

The Index Committee, comprised of CIBC World Markets Inc. employees, is responsible for decisions regarding the composition of the Index as well as any amendments to the rules (in this document referred to as the "Committee" or the "Index Committee").

This document is updated to reflect any changes approved by the Index Committee.

## **Definitions**

**“Index Component”** is each FX component currently included in the Index.

A **“Trading Day”** is a day on which New York Stock Exchange is open for trading.

The **“Index Calculator”** is Solactive AG or any other appropriately appointed successor in this function.

The **“Index Currency”** is CAD.

The **“Underlying Index”** is the CIBC Multifactor U.S. Equity Index

**“Adjustment Day”** is the last Trading Day of each month.

A **“Market Disruption Event”** occurs if

1. the underlying index is not published on a Trading Day
2. the respective FX rates are not published on a Trading Day