



Cboe Global Indices

# **Special Opening Quotation Mathematics**

## **METHODOLOGY**

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# 1 Introduction

This document covers the mathematics of Special Opening Quotations (SOQs) for equity indices calculated by Cboe Global Indices, LLC (“CGI”) and used by derivatives markets that list options and futures overlying those indices. The calculations are presented principally as equations, which have largely been excluded from the individual Index methodologies.

For greater detail on the construction and rules of specific Indices, please refer to the methodology documents published at [Cboe Indices](#). This mathematics document should be read in conjunction with associated index methodologies.

## 2 Special Opening Quotation

Each Special Opening Quotation (SOQ) is calculated daily using its respective Underlying Index’s methodology as set out in Section 2.2 (Index Information), except that the price for each constituent is the price at which the constituent first trades upon the opening of the primary listing exchange<sup>1</sup>. The SOQ is calculated each business day, after the first trade for all constituents has occurred.

If a constituent does not open for trading on a given business day, the previous business day’s closing price (adjusted for any corporate actions as specified in the Underlying Index methodology, as relevant) will be used in the SOQ calculation.

### 2.1 Calculation

The SOQ is calculated using the below formula:

$$IndexSOQ_t = \frac{\sum_{i=1}^N P_{i,o} \times S_{i,t} \times FF_{i,t} \times WCF_{i,t}}{D_t}$$

**where**

$IndexSOQ_t$	The Index’s Special Opening Quotation on day $t$
$N$	The number of Constituents in the Index
$P_{i,o}$	The open price of Constituent $i$ on day $t$
$S_{i,t}$	The number of shares of Constituent $i$ on day $t$
$FF_{i,t}$	The free-float factor of Constituent $i$ on day $t$
$WCF_{i,t}$	The weighting cap factor of Constituent $i$ on day $t$
$D_t$	The Divisor of the Index on day $t$

<sup>1</sup> The primary listing exchange means the national securities exchange on which the constituent is listed. If the constituent is listed on more than one national securities exchange, the primary listing exchange means the exchange on which the constituent has been listed the longest.

## 2.2 Index Information

SOQ Ticker	SOQ Description	Underlying Index Ticker	Underlying Index Methodology
CBTXS	Cboe Bitcoin U.S. ETF Index AM Settlement Value	CBTX	Cboe Bitcoin U.S. ETF Index
MBTXS	Cboe Mini Bitcoin U.S. ETF Index AM Settlement Value	MBTX	Cboe Mini Bitcoin U.S. ETF Index
MGSET	Cboe Magnificent 10 Index AM Settlement Value	MGTN	Cboe Magnificent 10 Index

## Appendix 1 – Changes

Major changes to this document since October 8, 2025 are as follows:

Change Summary	Effective Date	Previous Language	Updated Language
-	-	-	-

## Appendix 2 – Document Information

Version Number	1.0
Last Revised Date	October 8, 2025

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