



# Zero-Duration Muni Spread Future

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# MBIS Municipal Benchmark Curve: IOSCO Principles



The objective of the MBIS Municipal Benchmark Curve is to be an independent source of daily and intraday investment grade municipal bond market yields and market changes enabling it to be used as the basis for investable and hedging activities. To that end we have developed processes that:

- a. Leverage market data, and provide transparency through our services whenever possible (*we show our work*)
- b. The Benchmark has demonstrated high levels of consistency and correlation as it relates to Municipal secondary markets direction and price behavior

## **Why are the IOSCO Principles for Financial Benchmark Providers so important?**

**Following the LIBOR and other index manipulation scandals the International Organization of Securities Commissions (IOSCO) put in place Principles for Financial Benchmark Providers with the goal of ensuring independence and transparency**

**While at this time, these Principles are voluntary, MBIS has initiated a third party audit to ensure it's processes are aligned with the IOSCO Principles**

# MBIS Municipal Benchmark Curve at a Glance



- Key Properties of MBIS Benchmark:
- **IOSCO Principles:** The methodology and calculations process is aligned with IOSCO Principles for Financial Benchmark Providers
- **Bond Pricing:** The bond pricing used in the indices is directly from actual market activity and not from evaluation bond pricing sources
- **Automation:** Fully automated, the MBIS yield curves are calculated by algorithm not a “poling” process subject to interpretation and other market influences
- **Transparency:** the bond data used is published along with the yield curve, every bond and every market data point

# Muni:Treas Future Summary, Pricing, Settlement



SUMMARY: At its basic level, the Muni Spread Future contract measures a Taxable Equivalent Muni Spread Curve vs. a Taxable Treasury Curve. The purpose of this contract is to give traders and risk managers a vehicle to cover Spread Risk, IN ADDITION TO their already hedged duration risk using separate hedging vehicles. This contract cash settles quarterly to assure that all participants 'get out' at Fair Value.

$$\boxed{\begin{array}{c} \text{Muni Spread} \\ \text{FUTURES FAIR} \\ \text{VALUE} \end{array}} = \boxed{100} + \text{adj} \left[ \begin{array}{|c|c|c|} \hline \text{1yr Muni} & \text{2yr Muni} & \text{3yr Muni} \\ \hline \text{Price -} & \text{Price -} & \text{Price -} \\ \text{1yr} & \text{2yr} & \text{3yr} \\ \hline \text{Taxable} & \text{Taxable} & \text{Taxable} \\ \text{Price} & \text{Price} & \text{Price} \\ \hline \end{array} \dots \begin{array}{|c|c|c|c|} \hline \text{12yr Muni} & \text{15yr Muni} & \text{20yr Muni} & \text{30yr Muni} \\ \hline \text{Price -} & \text{Price -} & \text{Price -} & \text{Price -} \\ \text{12yr} & \text{15yr} & \text{20yr} & \text{30yr} \\ \hline \text{Taxable} & \text{Taxable} & \text{Taxable} & \text{Taxable} \\ \text{Price} & \text{Price} & \text{Price} & \text{Price} \\ \hline \end{array} \right] + \boxed{\text{Accrual Value}}$$

FAIR VALUE = PAR + (Muni Portfolio Discounted PV - Treasury Portfolio Discounted PV) + Accrual

Instantaneous rate shock (per \$100k notional):

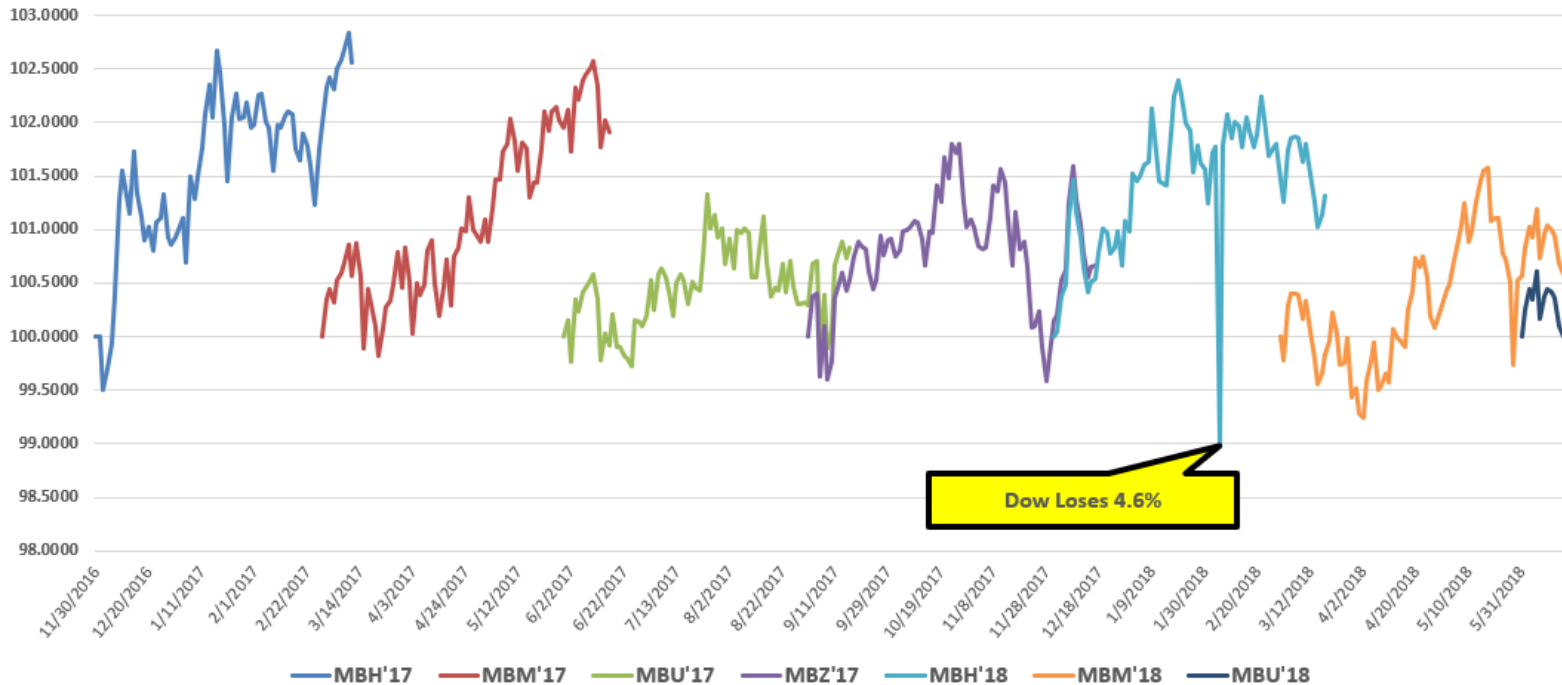
- IF Munis underperform Treasuries by 10bps, the future decreases in value by \$907.
- IF Munis outperform Treasuries by 10bps, the future increases in value by \$908.

SETTLEMENT = At the end of the last trading day at expiration, the Exchange sets fair value of the settlement price, based on closing prices of the MBIS Curve and the US Treasury Curve.

# Muni Future Fair Value Charts



Muni Treas Basis Futures: Fair Value 11/30/16 to 6/16/18



The proposed Muni:Treasury Basis Futures contract measures a Taxable Equivalent Muni Spread Curve vs. a Taxable Treasury Curve. The charts included give a representation of where each contract would have been priced at fair value along the duration of the curve. Each separate quarterly contract is represented by a different color to demonstrate where one contract expires (cash-settles) and the next contract begins.

# Daily Muni:Treas Basis Legs & Spread



Daily Muni:Treas Basis, Legs and Spread  
\$1mm = 10 Futures 8/31/2017-3/16/2018

