

U.S. Treasury Futures “Pace of the Roll” Daily Tracker Tools

Introduction

Beginning with the September 2009-December 2009 quarterly roll period, CME Group will offer daily updates on roll activity taking place in the U.S. Treasury futures complex. During the 30-day period prior to the last trading day in the expiring front month quarterly futures contract, CME Group will post “pace of the roll” charts for the 2-Year, 5-Year, 10-Year, and 30-Year Treasury futures contracts. These charts will graphically illustrate the daily progression of open interest in CME Group’s key benchmark Treasury futures contracts. This “pace of the roll” tool is designed to help market participants analyze their Treasury futures roll strategy. These charts will be updated and available on a daily basis during the roll period.

Legend for “Percent of Open Interest” Charts for Front and Deferred Month Contracts

- The **BLACK** line represents the current roll from the expiring front month quarterly Treasury futures contract to the deferred month quarterly Treasury futures contract.
- The **GREEN** line denotes the historical average roll of the previous twenty (20) rolls from the expiring front month quarterly Treasury futures contract to the deferred month quarterly Treasury futures contract.
- The **LIGHT BLUE** channel shows the previous twenty (20) rolls from the expiring front month quarterly Treasury futures contract to the deferred month quarterly Treasury futures contract.

Legend for “Open Interest Level” Chart for Front Month Contract

- The **BLACK** line depicts the current open interest level of the expiring front month quarterly Treasury futures contract.
- The **GREEN** line depicts the historical average open interest level of the expiring front month quarterly Treasury futures contract for the previous twenty (20) rolls.
- The **LIGHT BLUE** channel denotes the open interest levels of the expiring front month quarterly Treasury futures contract for the previous twenty (20) rolls.

What is the Treasury futures roll?

The Treasury futures roll represents the shift in open interest from the expiring front month quarterly futures contract to the deferred quarterly futures contract (e.g., from the September futures expiry to the December futures expiry). During the roll, market participants offset existing market positions in the front month contract while re-establishing new positions in the deferred month contract.

How is the Treasury futures roll completed?

Rolling Treasury futures involves replacing an existing market position in the expiring front month futures contract with a new position in the deferred month futures contract. Market participants have two options to accomplish the Treasury futures roll.

The first option involves two separate market transactions. This method requires market participants to unwind existing open positions in the front month Treasury futures contract with one transaction while re-establishing new open positions in the deferred month Treasury futures contract in a second transaction. Since this option requires market participants to “leg” each side of the Treasury futures roll, this method doubles the execution risk of rolling and potentially exposes participants to market risks before the second transaction is completed. For these reasons, most market participants avoid rolling positions in two separate transactions.

As a second option, market participants can transfer open interest from the front month Treasury futures contract to the deferred month Treasury futures contract by trading calendar spreads. A calendar spread is single transaction that combines a simultaneous purchase and sale of two futures contracts with different expirations. For example, a market participant who is “short” the expiring front month Treasury futures contract can re-establish a short position in the deferred month Treasury futures contract during the roll by buying the calendar spread (i.e., buying the expiring front month contract while simultaneously selling the deferred month contract). Alternatively, a market participant who is “long” the expiring front month Treasury futures contract can re-establish a long position in the deferred month Treasury futures contract during the roll by selling the calendar spread (i.e., selling the expiring front month contract while simultaneously buying the deferred month futures contract). Calendar spreads are the preferred method for rolling Treasury futures since this strategy mitigates execution and market risks.

When does the Treasury futures roll occur?

The Treasury futures roll occurs on a quarterly basis that coincides with the March, June, September, and December delivery cycle of the Treasury futures contracts. Historically, the roll has occurred over a two-week period that is centered on the first delivery day of the expiring front month futures contract.

For 2-Year, 3-Year, and 5-Year Note futures, the roll typically begins 16 to 28 trading days prior to the last trading day in the expiring front month futures contract. The last trading day for the expiring front month 2-Year, 3-Year, and 5-Year Note futures contracts occurs on the last business day of the expiration month.

For 10-Year Note and 30-Year Bond futures, the roll usually begins 12 to 16 trading days prior to the last trading day in the expiring front month futures contract. The last trading day for the expiring front month 10-Year Note and Bond futures contracts occurs on the seventh to last business day of the expiration month.

(Note: 3-Year Note futures will be added to the Pace of Roll daily tracker tool for later roll periods.)

Why is the Treasury futures roll important?

For open interest holders who prefer to carry core positions in Treasury futures over time, the Treasury futures roll is important for two reasons.

First, the Treasury futures roll indicates the optimal liquidity period to roll a futures position forward from the expiring front month futures contract to the deferred month futures contract. Since most market participants wish to avoid the physical delivery process that is associated with Treasury futures, the roll provides participants with the liquidity they require to maintain core open positions without the encumbrances of cash market delivery.

Second, the Treasury futures roll signals the optimal liquidity period to roll a futures position in the event of a mispricing in the calendar spread between the expiring front month contract and the deferred month contract.

- For basis traders, trading mispriced calendar spreads can help establish richer or cheaper basis trades in deferred month contracts. If the calendar spread is priced below fair value, long basis traders can buy the spread and roll their short futures positions from the expiring front month contract to the deferred month contract. If the calendar spread is priced above fair value, short basis traders can sell the spread and shift their long futures positions to the deferred month contract.
- For hedgers, trading mispriced calendar spreads can mitigate the cost of running a hedge in deferred months. If the calendar spread is cheap, hedgers can buy the spread and roll their short positions from the expiring front month contract to the deferred month contract. If the calendar spread is rich, hedgers can sell the spread and shift their long positions to the deferred month contract.