

Trade Marker at Close (TMAC)

AVAILABLE ACROSS FOUR MAJOR EQUITY INDEX BENCHMARKS

Capture Equity Index futures closing prices with greater certainty using TMAC, which utilizes the respective index futures fixing at 4:00 p.m. ET daily as the marker against which all trades are priced. TMAC allows market participants to trade futures at a spread to this marker and is available on the E-mini S&P 500, Nasdaq-100, Russell 2000, and Dow Jones Industrial Average futures.

How TMAC works for Equity Index futures

The TMAC mechanism allows clients to mitigate execution risk during the settlement period. Clients can execute at the marker price, even outside of U.S. hours. TMAC trades off a "base price" of zero (equal to the daily futures fixing price), and the clearing price equals the daily fixing price of the underlying futures contract month plus or minus the TMAC transaction price.

Key features

Transact at/near settlement price in advance

Execute at any point of the trading day, including non-U.S. hours, at a spread to the marker price. Mitigate uncertainty related to futures settlement or exercise and assignment of E-mini options on futures.

Manage ETF risks

Effectively manage risk around creation or redemption at the net asset value (NAV) price of related index ETFs at any time of the day.

Enjoy multiple ways to trade

Choose the trade execution method that suits your needs: Trade via CME Globex central limit order book or by privately negotiating block trades with a preferred counterparty.

Comparing TMAC to Trading at Settlement (TAS) and Basis Trade at Index Close (BTIC)

TMAC VS. TAS

TMAC is a spread to the established marker price established at the U.S. close which has its own rounding convention, e.g., nearest 0.01, whereas TAS trades are a spread to the daily settlement price of the underlying futures contract, which are rounded to the nearest tick price increment.

While TAS contracts are available on many CME Group commodity products, TMAC contracts instead provide risk management capability around daily settlement for E-mini Equity Index futures.

For example, if on July 20, the 30-second VWAP of the September E-mini S&P 500 index futures contract was 4377.13 (rounded to the nearest 0.01), for a TMAC trade at a spread of +0.05, the futures contract will be priced at $4377.13 + 0.05 = 4377.18$. Note that the daily settlement price of the contract would be 4377.25.

TMAC VS. BTIC

TMAC transactions are priced at a spread to the futures marker price established at the close of the U.S. market at 4:00 p.m. ET. BTIC transactions, in comparison are priced at a spread, or basis, to the corresponding underlying index's official closing value.

Contract specifications

	E-MINI S&P 500 FUTURES TMAC	E-MINI NASDAQ-100 FUTURES TMAC	E-MINI RUSSELL 2000 FUTURES TMAC	E-MINI DJIA FUTURES TMAC
CME PRODUCT CODES	Futures: ES TMAC: ESX	Futures: NQ TMAC: NQX	Futures: RTY TMAC: RTX	Futures: YM TMAC: YMX
UNDERLYING CONTRACT SIZE	1 E-mini S&P 500 futures contract	1 E-mini Nasdaq-100 futures contract	1 E-mini Russell 2000 futures contract	1 E-mini DJIA futures contract
MINIMUM PRICE FLUCTUATION	.05 = \$2.50 per contract	.05 = \$1.00 per contract	.05 = \$2.50 per contract	1 = \$5.00 per contract
TRADING HOURS	CME Globex: Sunday – Friday 6:00 p.m. – 4:00 p.m. ET CME ClearPort: Sunday 6:00 p.m. – Friday 6:45 p.m. ET with no reporting Monday – Thursday from 6:45 p.m. – 7:00 p.m. ET. TMAC submission for the next day's settlement price is available after 7:00 p.m. ET.			
TERMINATION OF TRADING	For an expiring futures contract, TMAC trading shall terminate at 4:00 p.m. ET on the business day immediately preceding the last trade date for such futures contract. For clarity, TMAC transactions in expiring futures contracts may not be initiated on the last trade date on such expiring futures.			
LISTED CONTRACTS	Nearest quarterly contract in the Mar, Jun, Sep, Dec cycle.			

TMAC vendor codes

	E-MINI S&P 500 FUTURES TMAC	E-MINI NASDAQ-100 FUTURES TMAC	E-MINI RUSSELL 2000 FUTURES TMAC	E-MINI DJIA FUTURES TMAC
CME GLOBEX	ESX	NQX	RTX	YMX
BLOOMBERG	KFSA Index	DQSA Index	RTEA Index	YMIA Index
CQG	ESX	NQX	RTX	YMX
REFINITIV	ESX	NQX	RXT	YMX

To get the latest updates on TMAC, visit cmegroup.com/TMAC

cmegroup.com

Neither futures trading nor swaps trading are suitable for all investors, and each involves the risk of loss. Swaps trading should only be undertaken by investors who are Eligible Contract Participants (ECPs) within the meaning of Section 1a(18) of the Commodity Exchange Act. Futures and swaps each are leveraged investments and, because only a percentage of a contract's value is required to trade, it is possible to lose more than the amount of money deposited for either a futures or swaps position. Therefore, traders should only use funds that they can afford to lose without affecting their

lifestyles and only a portion of those funds should be devoted to any one trade because traders cannot expect to profit on every trade.

CME Group, the Globe Logo, CME, Globex, E-Mini, CME Direct, CME DataMine and Chicago Mercantile Exchange are trademarks of Chicago Mercantile Exchange Inc. CBOT is a trademark of the Board of Trade of the City of Chicago, Inc. NYMEX is a trademark of New York Mercantile Exchange, Inc. COMEX is a trademark of Commodity Exchange, Inc. All other trademarks are the property of their respective owners.

The information within this communication has been compiled by CME Group for general purposes only. CME Group assumes no responsibility for any errors or omissions. CME Group does not represent that any material or information contained in this communication is appropriate for use or permitted in any jurisdiction or country where such use or distribution would be contrary to any applicable law or regulation.

Additionally, all examples in this communication are hypothetical situations, used for explanation purposes only, and should not be considered investment advice or the results of actual market experience. All matters pertaining to rules and specifications herein are made subject to and superseded by official CME, CBOT, NYMEX and COMEX rules. Current rules should be consulted in all cases concerning contract specifications.