

Implied Treasury & MAC Swap Spreads

Spread Name	Futures Contract Legs	Price Ratio*	Leg Quantity Ratio*	External Name*
TYT	2-Year T-Note vs. 3-Year T-Note ***	1.5000	3:2	TYT 03-02 U3
TFY	2-Year T-Note vs. 5-Year T-Note **	2.0000	1:1	TFY 01-01 U3
TUF	2-Year T-Note vs. 5-Year T-Note **	2.5000	5:4	TUF 05-04 U3
TAF	2-Year T-Note vs. 5-Year T-Note **	3.0000	3:2	TAF 03-02 U3
TUT	2-Year T-Note vs. 10-Year T-Note **	4.0000	2:1	TUT 02-01 U3
TUX	2-Year T-Note vs. Ultra 10-Year T-Note **	6.0000	3:1	TUX 03-01 U3
TUB	2-Year T-Note vs. T-Bond **	8.0000	4:1	TUB 04-01 U3
TUL	2-Year T-Note vs. Ultra T-Bond **	14.0000	7:1	TUL 07-01 U3
TTW	2-Year T-Note** vs. 20-Year T-Bond	2.0000	1:1	TTW 01-01 U3
TWW	2-Year T-Note** vs. 20-Year T-Bond	10.0000	5:1	TWW 05-01 U3
TOF	3-Year T-Note vs. 5-Year T-Note **	1.5000	3:4	TOF 03-04 U3
TUN	3-Year T-Note vs. 10-Year T-Note **	2.4000	6:5	TUN 06-05 U3
TYX	3-Year T-Note vs. Ultra 10-Year T-Note **	4.0000	2:1	TYX 02-01 U3
TOB	3-Year T-Note vs. T-Bond **	6.0000	3:1	TOB 03-01 U3
TOU	3-Year T-Note vs. Ultra T-Bond **	8.0000	4:1	TOU 04-01 U3
TRW	3-Year T-Note** vs. 20-Year T-Bond	2.0000	1:1	TRW 01-01 U3
THW	3-Year T-Note** vs. 20-Year T-Bond	6.0000	3:1	THW 03-01 U3
FIT	5-Year T-Note vs. 10-Year T-Note	2.0000	2:1	FIT 02-01 U3
FYN	5-Year T-Note vs. 10-Year T-Note	1.0000	1:1	FYN 01-01 U3
FYT	5-Year T-Note vs. 10-Year T-Note	1.5000	3:2	FYT 03-02 U3
FIX	5-Year T-Note vs. Ultra 10-Year T-Note	2.0000	2:1	FIX 02-01 U3
FOB	5-Year T-Note vs. T-Bond	4.0000	4:1	FOB 04-01 U3
FOL	5-Year T-Note vs. Ultra T-Bond	5.0000	5:1	FOL 05-01 U3
FTW	5-Year T-Note vs. 20-Year T-Bond	1.0000	1:1	FTW 01-01 U3
FYW	5-Year T-Note vs. 20-Year T-Bond	4.0000	4:1	FYW 04-01 U3
NON	10-Year T-Note vs. Ultra 10-Year T-Note	1.0000	1:1	NON 01-01 U3
TEX	10-Year T-Note vs. Ultra 10-Year T-Note	2.0000	2:1	TEX 02-01 U3
TOX	10-Year T-Note vs. Ultra 10-Year T-Note	1.5000	3:2	TOX 03-02 U3
NBY	10-Year T-Note vs. T-Bond	1.0000	1:1	NBY 01-01 U3
NOB	10-Year T-Note vs. T-Bond	2.0000	2:1	NOB 02-01 U3
NIB	10-Year T-Note vs. T-Bond	3.0000	3:1	NIB 03-01 U3
NOL	10-Year T-Note vs. Ultra T-Bond	4.0000	4:1	NOL 04-01 U3
TYW	10-Year T-Note vs. 20-Year T-Bond	1.0000	1:1	TYW 01-01 U3
TOW	10-Year T-Note vs. 20-Year T-Bond	3.0000	3:1	TOW 03-01 U3
NCB	Ultra 10-Year T-Note vs. T-Bond	1.5000	3:2	NCB 03-02 U3
NUB	Ultra 10-Year T-Note vs. Ultra T-Bond	2.5000	5:2	NUB 05-02 U3
NYW	Ultra 10-Year T-Note vs. 20-Year T-Bond	1.0000	1:1	NYW 01-01 U3
NTW	Ultra 10-Year T-Note vs. 20-Year T-Bond	2.0000	2:1	NTW 02-01 U3

BOB	T-Bond vs. Ultra T-Bond	2.0000	2:1	BOB 02-01 U3
BUB	T-Bond vs. Ultra T-Bond	1.0000	1:1	BUB 01-01 U3
BIB	T-Bond vs. Ultra T-Bond	1.5000	3:2	BIB 03-02 U3
ZBW	T-Bond vs. 20-Year T-Bond	1.0000	1:1	ZBW 01-01 U3
ZTW	T-Bond vs. 20-Year T-Bond	1.2000	6:5	ZTW 06-05 U3
TWU	20-Year T-Bond vs. Ultra T-Bond	1.0000	1:1	TWU 01-01 U3
TWB	20-Year T-Bond vs. Ultra T-Bond	1.2500	5:4	TWB 05-04 U3
FNU	5-Year MAC Swap vs. 10-Year MAC Swap	2.0000	2:1	FNU 02-01 U3

* Leg quantity and price ratios are subject to change. New ratios are highlighted, fixed ratios are gray.
 ** Price ratios involving 2-Year & 3-Year T-Notes are doubled to account for larger notional size (\$200K) in the price changes.
 *** However, the ratio of the TYT is not doubled because the contracts have the same notional size.