

IMPLIED TREASURY AND SWAP SPREADS--BASED ON JUNE 2013 FUTURES CONTRACTS

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 M3
TUF	2-Year T- Note vs. 5-Year T-Note	2.0000**	1:1	TUF 01-01 M3**
TUT	2-Year T-Note vs. 10-Year T-Note	4.0000**	2:1	TUT 02-01 M3**
TUB	2-Year T-Note vs. T-Bond	8.0000**	4:1	TUB 04-01 M3**
TUL	2-Year T-Note vs. Ultra T-Bond	12.0000**	6:1	TUL 06-01 M3**
TOF	3-Year T- Note vs. 5-Year T-Note	1.5556**	7:9	TOF 07-09 M3**
TUN	3-Year T-Note vs. 10-Year T-Note	2.3333**	7:6	TUN 07-06 M3**
TOB	3-Year T-Note vs. T-Bond	4.6667**	7:3	TOB 07-03 M3**
TOU	3-Year T-Note vs. Ultra T-Bond	8.0000**	4:1	TOU 04-01 M3**
FYT	5-Year T-Note vs. 10-Year T-Note	1.5000	3:2	FYT 03-02 M3
FOB	5-Year T-Note vs. T-Bond	3.0000	3:1	FOB 03-01 M3
FOL	5-Year T-Note vs. Ultra T-Bond	5.0000	5:1	FOL 05-01 M3
FOS	5-Year T-Note vs. 5-Year Interest Rate Swap	1.0000	1:1	FOS 01-01 M3
NOS	10-Year T-Note vs. 7-Year Interest Rate Swap	0.8750	7:8	NOS 07-08 M3
TOS	10-Year T-Note vs. 10-Year Interest Rate Swap	1.2000	6:5	TOS 06-05 M3
NBY	10-Year T-Note vs. T-Bond	1.6667	5:3	NBY 05-03 M3
NOB	10-Year T-Note vs. T-Bond	2.0000	2:1	NOB 02-01 M3
NOL	10-Year T-Note vs. Ultra T-Bond	3.0000	3:1	NOL 03-01 M3
BOB	T-Bond vs. Ultra T-Bond	1.5000	3:2	BOB 03-02 M3
BOI	T-Bond vs. 30-Year Interest Rate Swap	1.3331	4:3	BOI 04-03 M3
UOS	Ultra T-Bond vs. 30-Year Interest Rate Swap	0.8331	5:6	UOS 05-06 M3

*Leg quantity and price ratios are subject to change

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