

IMPLIED TREASURY AND SWAP SPREADS--BASED ON DECEMBER 2011 FUTURES CONTRACTS

Spread Name	Futures Contract Legs	Price Ratio*	Leg Quantity Ratio*	External Name*
TYT	2-Year T- Note vs. 3-Year T-Note	1.5001	3:2	TYT 03-02 Z1
TUF	2-Year T- Note vs. 5-Year T-Note	2.0001**	1:1	TUF 01-01 Z1**
TUT	2-Year T-Note vs. 10-Year T-Note	3.5001**	7:4	TUT 07-04 Z1**
TUB	2-Year T-Note vs. 30-Year T-Bond	6.0001**	3:1	TUB 03-01 Z1 **
TUL	2-Year T-Note vs. Ultra T-Bond	10.0001**	5:1	TUL 05-01 Z1**
TOF	3-Year T- Note vs. 5-Year T-Note	1.5001**	3:4	TOF 03-04 Z1 **
TUN	3-Year T-Note vs. 10-Year T-Note	2.0001**	1:1	TUN 01-01 Z1**
TOB	3-Year T-Note vs. T-Bond	4.0001**	2:1	TOB 02-01 Z1 **
TOU	3-Year T-Note vs. Ultra T-Bond	6.0001**	3:1	TOU 03-01 Z1 **
FYT	5-Year T-Note vs. 10-Year T-Note	1.5001	3:2	FYT 03-02 Z1
FOB	5-Year T-Note vs. T-Bond	2.5001	5:2	FOB 05-02 Z1
FOL	5-Year T-Note vs. Ultra T-Bond	4.0001	4:1	FOL 04-01 Z1
FOS	5-Year T-Note vs. 5-Year Interest Rate Swap	1.0000	1:1	FOS 01-01 Z1
NOS	10-Year T-Note vs. 7-Year Interest Rate Swap	1.0000	1:1	NOS 01-01 Z1
TOS	10-Year T-Note vs. 10-Year Interest Rate Swap	1.0000	1:1	TOS 01-01 Z1
NOB	10-Year T-Note vs. T-Bond	1.6668	5:3	NOB 05-03 Z1
NOL	10-Year T-Note vs. Ultra T-Bond	3.0001	3:1	NOL 03-01 Z1
BOB	T-Bond vs. Ultra T-Bond	1.5001	3:2	BOB 03-02 Z1
BOI	T-Bond vs. 30-Year Interest Rate Swap	1.3332	4:3	BOI 04-03 Z1
UOS	Ultra T-Bond vs. 30-Year Interest Rate Swap	1.0000	1:1	UOS 01-01 Z1

*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.