

**Implied Treasury Spreads (Sep 2024)**

<b>Spread Name</b>	<b>Futures Contract Legs</b>	<b>Price Ratio*</b>	<b>Leg Quantity Ratio*</b>	<b>External Name*</b>	<b>Bloomberg Code^</b>
TYT	2-Year T-Note vs. 3-Year T-Note ***	1.6000	8:5	TYT 08-05 U4	TU3Y Comdty
TFY	2-Year T-Note vs. 5-Year T-Note **	2.0000	1:1	TFY 01-01 U4	TUFV Comdty
TUF	2-Year T-Note vs. 5-Year T-Note **	2.4000	6:5	TUF 06-05 U4	
TAF	2-Year T-Note vs. 5-Year T-Note **	3.0000	3:2	TAF 03-02 U4	
TUT	2-Year T-Note vs. 10-Year T-Note **	4.0000	2:1	TUT 02-01 U4	TUTY Comdty
TUX	2-Year T-Note vs. Ultra 10-Year T-Note **	5.0000	5:2	TUX 05-02 U4	TUUXY Comdty
TUB	2-Year T-Note vs. T-Bond **	8.0000	4:1	TUB 04-01 U4	TUUS Comdty
TUL	2-Year T-Note vs. Ultra T-Bond **	12.0000	6:1	TUL 06-01 U4	TUWN Comdty
TTW	2-Year T-Note** vs. 20-Year T-Bond	2.0000	1:1	TTW 01-01 U4	TUTWE Comdty
TWW	2-Year T-Note** vs. 20-Year T-Bond	10.0000	5:1	TWW 05-01 U4	
TOF	3-Year T-Note vs. 5-Year T-Note **	1.5000	3:4	TOF 03-04 U4	3YFV Comdty
TUN	3-Year T-Note vs. 10-Year T-Note **	2.0000	1:1	TUN 01-01 U4	3YTY Comdty
TYX	3-Year T-Note vs. Ultra 10-Year T-Note **	3.2000	8:5	TYX 08-05 U4	3YUXY Comdty
TOB	3-Year T-Note vs. T-Bond **	5.0000	5:2	TOB 05-02 U4	3YUS Comdty
TOU	3-Year T-Note vs. Ultra T-Bond **	7.0000	7:2	TOU 07-02 U4	3YWN Comdty
TRW	3-Year T-Note** vs. 20-Year T-Bond	2.0000	1:1	TRW 01-01 U4	3YTWE Comdty
THW	3-Year T-Note** vs. 20-Year T-Bond	6.0000	3:1	THW 03-01 U4	
FIT	5-Year T-Note vs. 10-Year T-Note	2.0000	2:1	FIT 02-01 U4	
FYN	5-Year T-Note vs. 10-Year T-Note	1.0000	1:1	FYN 01-01 U4	
FYT	5-Year T-Note vs. 10-Year T-Note	1.5000	3:2	FYT 03-02 U4	
FIX	5-Year T-Note vs. Ultra 10-Year T-Note	2.0000	2:1	FIX 02-01 U4	FVUXY Comdty
FOB	5-Year T-Note vs. T-Bond	3.0000	3:1	FOB 03-01 U4	FVUS Comdty
FOL	5-Year T-Note vs. Ultra T-Bond	5.0000	5:1	FOL 05-01 U4	FVWN Comdty
FTW	5-Year T-Note vs. 20-Year T-Bond	1.0000	1:1	FTW 01-01 U4	FVTWE Comdty
FYW	5-Year T-Note vs. 20-Year T-Bond	4.0000	4:1	FYW 04-01 U4	
NON	10-Year T-Note vs. Ultra 10-Year T-Note	1.0000	1:1	NON 01-01 U4	TYUXY Comdty
TEX	10-Year T-Note vs. Ultra 10-Year T-Note	1.4000	7:5	TEX 07-05 U4	
TOX	10-Year T-Note vs. Ultra 10-Year T-Note	1.5000	3:2	TOX 03-02 U4	
NBY	10-Year T-Note vs. T-Bond	1.0000	1:1	NBY 01-01 U4	TYUS Comdty
NOB	10-Year T-Note vs. T-Bond	2.0000	2:1	NOB 02-01 U4	
NIB	10-Year T-Note vs. T-Bond	3.0000	3:1	NIB 03-01 U4	
NOL	10-Year T-Note vs. Ultra T-Bond	3.0000	3:1	NOL 03-01 U4	TYWN Comdty
TYW	10-Year T-Note vs. 20-Year T-Bond	1.0000	1:1	TYW 01-01 U4	TYTWE Comdty
TOW	10-Year T-Note vs. 20-Year T-Bond	2.5000	5:2	TOW 05-02 U4	
NCB	Ultra 10-Year T-Note vs. T-Bond	1.5000	3:2	NCB 03-02 U4	UXYUS Comdty
NUB	Ultra 10-Year T-Note vs. Ultra T-Bond	2.0000	2:1	NUB 02-01 U4	UXYWN Comdty
NYW	Ultra 10-Year T-Note vs. 20-Year T-Bond	1.0000	1:1	NYW 01-01 U4	UXYTWE Comdty
NTW	Ultra 10-Year T-Note vs. 20-Year T-Bond	2.0000	2:1	NTW 02-01 U4	

BOB	T-Bond vs. Ultra T-Bond	2.0000	2:1	BOB 02-01 U4	
BUB	T-Bond vs. Ultra T-Bond	1.0000	1:1	BUB 01-01 U4	
BIB	T-Bond vs. Ultra T-Bond	1.5000	3:2	BIB 03-02 U4	
ZBW	T-Bond vs. 20-Year T-Bond	1.0000	1:1	ZBW 01-01 U4	USTWE Comdty
ZTW	T-Bond vs. 20-Year T-Bond	1.2500	5:4	ZTW 05-04 U4	
TWU	20-Year T-Bond vs. Ultra T-Bond	1.0000	1:1	TWU 01-01 U4	TWEWN Comdty
TWB	20-Year T-Bond vs. Ultra T-Bond	1.2000	6:5	TWB 06-05 U4	
MNUB	Micro Ultra 10-Year T-Note vs. Micro Ultra T-Bond	2.0000	2:1	MNUB 02-01 U4	

\* 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.

**Implied Treasury Spreads (Dec 2024)**

<b>Spread Name</b>	<b>Futures Contract Legs</b>	<b>Price Ratio*</b>	<b>Leg Quantity Ratio*</b>	<b>External Name*</b>	<b>Bloomberg Code^</b>
TYT	2-Year T-Note vs. 3-Year T-Note ***	1.6000	8:5	TYT 08-05 Z4	TU3Y Comdty
TFY	2-Year T-Note vs. 5-Year T-Note **	2.0000	1:1	TFY 01-01 Z4	TUFV Comdty
TUF	2-Year T-Note vs. 5-Year T-Note **	2.5000	5:4	TUF 05-04 Z4	
TAF	2-Year T-Note vs. 5-Year T-Note **	3.0000	3:2	TAF 03-02 Z4	
TUT	2-Year T-Note vs. 10-Year T-Note **	4.0000	2:1	TUT 02-01 Z4	TUTY Comdty
TUX	2-Year T-Note vs. Ultra 10-Year T-Note **	6.0000	3:1	TUX 03-01 Z4	TUUXY Comdty
TUB	2-Year T-Note vs. T-Bond **	8.0000	4:1	TUB 04-01 Z4	TUUS Comdty
TUL	2-Year T-Note vs. Ultra T-Bond **	12.0000	6:1	TUL 06-01 Z4	TUWN Comdty
TTW	2-Year T-Note** vs. 20-Year T-Bond	2.0000	1:1	TTW 01-01 Z4	TUTWE Comdty
TWW	2-Year T-Note** vs. 20-Year T-Bond	10.0000	5:1	TWW 05-01 Z4	
TOF	3-Year T-Note vs. 5-Year T-Note **	1.5000	3:4	TOF 03-04 Z4	3YFV Comdty
TUN	3-Year T-Note vs. 10-Year T-Note **	2.4000	6:5	TUN 06-05 Z4	3YTY Comdty
TYX	3-Year T-Note vs. Ultra 10-Year T-Note **	3.5000	7:4	TYX 07-04 Z4	3YUXY Comdty
TOB	3-Year T-Note vs. T-Bond **	5.0000	5:2	TOB 05-02 Z4	3YUS Comdty
TOU	3-Year T-Note vs. Ultra T-Bond **	8.0000	4:1	TOU 04-01 Z4	3YWN Comdty
TRW	3-Year T-Note** vs. 20-Year T-Bond	2.0000	1:1	TRW 01-01 Z4	3YTWE Comdty
THW	3-Year T-Note** vs. 20-Year T-Bond	6.0000	3:1	THW 03-01 Z4	
FIT	5-Year T-Note vs. 10-Year T-Note	2.0000	2:1	FIT 02-01 Z4	
FYN	5-Year T-Note vs. 10-Year T-Note	1.0000	1:1	FYN 01-01 Z4	
FYT	5-Year T-Note vs. 10-Year T-Note	1.5000	3:2	FYT 03-02 Z4	
FIX	5-Year T-Note vs. Ultra 10-Year T-Note	2.0000	2:1	FIX 02-01 Z4	FVUXY Comdty
FOB	5-Year T-Note vs. T-Bond	3.0000	3:1	FOB 03-01 Z4	FVUS Comdty
FOL	5-Year T-Note vs. Ultra T-Bond	5.0000	5:1	FOL 05-01 Z4	FVWN Comdty
FTW	5-Year T-Note vs. 20-Year T-Bond	1.0000	1:1	FTW 01-01 Z4	FVTWE Comdty
FYW	5-Year T-Note vs. 20-Year T-Bond	4.0000	4:1	FYW 04-01 Z4	
NON	10-Year T-Note vs. Ultra 10-Year T-Note	1.0000	1:1	NON 01-01 Z4	TYUXY Comdty
TEX	10-Year T-Note vs. Ultra 10-Year T-Note	1.4000	7:5	TEX 07-05 Z4	
TOX	10-Year T-Note vs. Ultra 10-Year T-Note	1.5000	3:2	TOX 03-02 Z4	
NBY	10-Year T-Note vs. T-Bond	1.0000	1:1	NBY 01-01 Z4	TYUS Comdty
NOB	10-Year T-Note vs. T-Bond	2.0000	2:1	NOB 02-01 Z4	
NIB	10-Year T-Note vs. T-Bond	3.0000	3:1	NIB 03-01 Z4	
NOL	10-Year T-Note vs. Ultra T-Bond	3.5000	7:2	NOL 07-02 Z4	TYWN Comdty
TYW	10-Year T-Note vs. 20-Year T-Bond	1.0000	1:1	TYW 01-01 Z4	TYTWE Comdty
TOW	10-Year T-Note vs. 20-Year T-Bond	2.5000	5:2	TOW 05-02 Z4	
NCB	Ultra 10-Year T-Note vs. T-Bond	1.5000	3:2	NCB 03-02 Z4	UXYUS Comdty
NUB	Ultra 10-Year T-Note vs. Ultra T-Bond	2.5000	5:2	NUB 05-02 Z4	UXYWN Comdty
NYW	Ultra 10-Year T-Note vs. 20-Year T-Bond	1.0000	1:1	NYW 01-01 Z4	UXYTWE Comdty
NTW	Ultra 10-Year T-Note vs. 20-Year T-Bond	1.7500	7:4	NTW 07-04 Z4	

BOB	T-Bond vs. Ultra T-Bond	2.0000	2:1	BOB 02-01 Z4	
BUB	T-Bond vs. Ultra T-Bond	1.0000	1:1	BUB 01-01 Z4	
BIB	T-Bond vs. Ultra T-Bond	1.5000	3:2	BIB 03-02 Z4	
ZBW	T-Bond vs. 20-Year T-Bond	1.0000	1:1	ZBW 01-01 Z4	USTWE Comdty
ZTW	T-Bond vs. 20-Year T-Bond	1.2000	6:5	ZTW 06-05 Z4	
TWU	20-Year T-Bond vs. Ultra T-Bond	1.0000	1:1	TWU 01-01 Z4	TWEWN Comdty
TWB	20-Year T-Bond vs. Ultra T-Bond	1.4000	7:5	TWB 07-05 Z4	
MNUB	Micro Ultra 10-Year T-Note vs. Micro Ultra T-Bond	2.5000	5:2	MNUB 05-02 Z4	

\* 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.

### Implied Eris Spreads (Sep 2024)

Spread Name	Futures Contract Legs	Price Ratio*	Leg Quantity Ratio*	External Name*	Bloomberg Code^
EAT	1-Year vs. 2-Year Eris SOFR Swap Futures	1.0000	1:1	EAT 01-01 U24	YIAYIT Comdty
EIC	1-Year vs. 3-Year Eris SOFR Swap Futures	1.0000	1:1	EIC 01-01 U24	YIAYIC Comdty
ETC	2-Year vs. 3-Year Eris SOFR Swap Futures	1.0000	1:1	ETC 01-01 U24	YITYIC Comdty
ETW	2-Year vs. 5-Year Eris SOFR Swap Futures	2.5000	5:2	ETW 05-02 U24	YITYIW Comdty
EID	3-Year vs. 4-Year Eris SOFR Swap Futures	1.0000	1:1	EID 01-01 U24	YICYID Comdty
ECW	3-Year vs. 5-Year Eris SOFR Swap Futures	1.6667	5:3	ECW 05-03 U24	YICYIW Comdty
EDW	4-Year vs. 5-Year Eris SOFR Swap Futures	1.0000	1:1	EDW 01-01 U24	YIDYIW Comdty
EIB	5-Year vs. 7-Year Eris SOFR Swap Futures	1.5000	3:2	EIB 03-02 U24	YIWIYB Comdty
EIY	5-Year vs. 10-Year Eris SOFR Swap Futures	2.0000	2:1	EIY 02-01 U24	YIWIYI Comdty
EBY	7-Year vs. 10-Year Eris SOFR Swap Futures	1.5000	3:2	EBY 03-02 U24	YIBYIW Comdty

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^ Active contract code.

All spreads based on \$100k contract values

### Implied Eris Spreads (Dec 2024)

Spread Name	Futures Contract Legs	Price Ratio*	Leg Quantity Ratio*	External Name*	Bloomberg Code^
EAT	1-Year vs. 2-Year Eris SOFR Swap Futures	1.0000	1:1	EAT 01-01 Z24	YIAYIT Comdty
EIC	1-Year vs. 3-Year Eris SOFR Swap Futures	1.0000	1:1	EIC 01-01 Z24	YIAYIC Comdty
ETC	2-Year vs. 3-Year Eris SOFR Swap Futures	1.0000	1:1	ETC 01-01 Z24	YITYIC Comdty
ETW	2-Year vs. 5-Year Eris SOFR Swap Futures	2.5000	5:2	ETW 05-02 Z24	YITYIW Comdty
EID	3-Year vs. 4-Year Eris SOFR Swap Futures	1.0000	1:1	EID 01-01 Z24	YICYID Comdty
ECW	3-Year vs. 5-Year Eris SOFR Swap Futures	1.6667	5:3	ECW 05-03 Z24	YICYIW Comdty
EDW	4-Year vs. 5-Year Eris SOFR Swap Futures	1.0000	1:1	EDW 01-01 Z24	YIDYIW Comdty
EIB	5-Year vs. 7-Year Eris SOFR Swap Futures	1.5000	3:2	EIB 03-02 Z24	YIWIYB Comdty
EIY	5-Year vs. 10-Year Eris SOFR Swap Futures	2.0000	2:1	EIY 02-01 Z24	YIWIYI Comdty
EBY	7-Year vs. 10-Year Eris SOFR Swap Futures	1.5000	3:2	EBY 03-02 Z24	YIBYIW Comdty

\* Leg quantity and price ratios are subject to change. New ratios are highlighted, fixed ratios are gray.

^ Active contract code.

All spreads based on \$100k contract values

### Implied Eris/Treasury Spreads (Sep 2024)

Spread Name	Futures Contract Legs	Price Ratio*	Leg Quantity Ratio*	External Name*	Bloomberg Code^
ETU	2-Year Eris SOFR Swap Futures vs. 2-Year T-Note Futures	1.0000	2:1	ETU 02-01 U24-U4	YITTU Comdty
ETU	2-Year Eris SOFR Swap Futures vs. 2-Year T-Note Futures	1.0000	2:1	ETU 02-01 U24-Z4	
ETU	2-Year Eris SOFR Swap Futures vs. 2-Year T-Note Futures	1.0000	2:1	ETU 02-01 Z24-U4	
EWV	5-Year Eris SOFR Swap Futures vs. 5-Year T-Note Futures	1.0000	1:1	EWV 01-01 U24-U4	YIWFV Comdty
EWV	5-Year Eris SOFR Swap Futures vs. 5-Year T-Note Futures	1.0000	1:1	EWV 01-01 U24-Z4	
EWV	5-Year Eris SOFR Swap Futures vs. 5-Year T-Note Futures	1.0000	1:1	EWV 01-01 Z24-U4	
EBN	7-Year Eris SOFR Swap Futures vs. 10-Year T-Note Futures	1.0000	1:1	EBN 01-01 U24-U4	YIBTY Comdty
EBN	7-Year Eris SOFR Swap Futures vs. 10-Year T-Note Futures	1.0000	1:1	EBN 01-01 U24-Z4	
EBN	7-Year Eris SOFR Swap Futures vs. 10-Year T-Note Futures	1.0000	1:1	EBN 01-01 Z24-U4	
EYT	10-Year Eris SOFR Swap Futures vs. Ultra 10-Year T-Note Futures	1.0000	1:1	EYT 01-01 U24-U4	YIYUXT Comdty
EYT	10-Year Eris SOFR Swap Futures vs. Ultra 10-Year T-Note Futures	1.0000	1:1	EYT 01-01 U24-Z4	
EYT	10-Year Eris SOFR Swap Futures vs. Ultra 10-Year T-Note Futures	1.0000	1:1	EYT 01-01 Z24-U4	

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^ Active contract code.

All spreads based on \$100k contract values

### Implied Eris/Treasury Spreads (Dec 2024)

Spread Name	Futures Contract Legs	Price Ratio*	Leg Quantity Ratio*	External Name*	Bloomberg Code^
ETU	2-Year Eris SOFR Swap Futures vs. 2-Year T-Note Futures	1.0000	2:1	ETU 02-01 Z24-Z4	YITTU Comdty
ETU	2-Year Eris SOFR Swap Futures vs. 2-Year T-Note Futures	1.0000	2:1	ETU 02-01 Z24-H5	
ETU	2-Year Eris SOFR Swap Futures vs. 2-Year T-Note Futures	1.0000	2:1	ETU 02-01 H25-Z4	
EWV	5-Year Eris SOFR Swap Futures vs. 5-Year T-Note Futures	1.0000	1:1	EWV 01-01 Z24-Z4	YIWFV Comdty
EWV	5-Year Eris SOFR Swap Futures vs. 5-Year T-Note Futures	1.0000	1:1	EWV 01-01 Z24-H5	
EWV	5-Year Eris SOFR Swap Futures vs. 5-Year T-Note Futures	1.0000	1:1	EWV 01-01 H25-Z4	
EBN	7-Year Eris SOFR Swap Futures vs. 10-Year T-Note Futures	1.0000	1:1	EBN 01-01 Z24-Z4	YIBTY Comdty
EBN	7-Year Eris SOFR Swap Futures vs. 10-Year T-Note Futures	1.0000	1:1	EBN 01-01 Z24-H5	
EBN	7-Year Eris SOFR Swap Futures vs. 10-Year T-Note Futures	1.0000	1:1	EBN 01-01 H25-Z4	
EYT	10-Year Eris SOFR Swap Futures vs. Ultra 10-Year T-Note Futures	1.0000	1:1	EYT 01-01 Z24-Z4	YIYUXT Comdty
EYT	10-Year Eris SOFR Swap Futures vs. Ultra 10-Year T-Note Futures	1.0000	1:1	EYT 01-01 Z24-H5	
EYT	10-Year Eris SOFR Swap Futures vs. Ultra 10-Year T-Note Futures	1.0000	1:1	EYT 01-01 H25-Z4	

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^ Active contract code.

All spreads based on \$100k contract values



TBA/Treasury Spreads (November 2024)					
Spread Name	Futures Contract Legs	Price Ratio*	Leg Quantity Ratio*	External Name*	Bloomberg Code^
UPN	30-Year UMBS TBA - 2.0% Coupon vs. 10-Year T-Note	0.9000	9:10	UPN 09-10 X4-Z4	JYATY Comdty
UQN	30-Year UMBS TBA - 2.5% Coupon vs. 10-Year T-Note	0.9000	9:10	UQN 09-10 X4-Z4	JYBTY Comdty
URN	30-Year UMBS TBA - 3.0% Coupon vs. 10-Year T-Note	0.9000	9:10	URN 09-10 X4-Z4	JYCTY Comdty
UTN	30-Year UMBS TBA - 3.5% Coupon vs. 10-Year T-Note	1.1250	9:8	UTN 09-08 X4-Z4	JYDTY Comdty
UUN	30-Year UMBS TBA - 4.0% Coupon vs. 10-Year T-Note	1.2500	5:4	UUN 05-04 X4-Z4	JYETY Comdty
NTU	30-Year UMBS TBA - 4.5% Coupon vs. 10-Year T-Note	1.5000	3:2	NTU 03-02 X4-Z4	JYITY Comdty
THN	30-Year UMBS TBA - 5.0% Coupon vs. 10-Year T-Note	2.0000	2:1	THN 02-01 X4-Z4	JYPTY Comdty
UVN	30-Year UMBS TBA - 5.5% Coupon vs. 10-Year T-Note	2.5000	5:2	UVN 05-02 X4-Z4	JYTTY Comdty
UWN	30-Year UMBS TBA - 6.0% Coupon vs. 10-Year T-Note	3.0000	3:1	UWN 03-01 X4-Z4	JYWTY Comdty
UYN	30-Year UMBS TBA - 6.5% Coupon vs. 10-Year T-Note	4.0000	4:1	UYN 04-01 X4-Z4	JYLYTY Comdty
UPT	30-Year UMBS TBA - 2.0% Coupon vs. 10-Year T-Note	1.0000	1:1	UPT 01-01 X4-Z4	
UQY	30-Year UMBS TBA - 2.5% Coupon vs. 10-Year T-Note	1.0000	1:1	UQY 01-01 X4-Z4	
URY	30-Year UMBS TBA - 3.0% Coupon vs. 10-Year T-Note	1.0000	1:1	URY 01-01 X4-Z4	
UTY	30-Year UMBS TBA - 3.5% Coupon vs. 10-Year T-Note	1.0000	1:1	UTY 01-01 X4-Z4	
UUY	30-Year UMBS TBA - 4.0% Coupon vs. 10-Year T-Note	1.0000	1:1	UUY 01-01 X4-Z4	
YTU	30-Year UMBS TBA - 4.5% Coupon vs. 10-Year T-Note	1.0000	1:1	YTU 01-01 X4-Z4	
THY	30-Year UMBS TBA - 5.0% Coupon vs. 10-Year T-Note	1.0000	1:1	THY 01-01 X4-Z4	
UVY	30-Year UMBS TBA - 5.5% Coupon vs. 10-Year T-Note	1.0000	1:1	UVY 01-01 X4-Z4	
UWY	30-Year UMBS TBA - 6.0% Coupon vs. 10-Year T-Note	1.0000	1:1	UWY 01-01 X4-Z4	
UYU	30-Year UMBS TBA - 6.5% Coupon vs. 10-Year T-Note	1.0000	1:1	UYU 01-01 X4-Z4	
UPF	30-Year UMBS TBA - 2.0% Coupon vs. 5-Year T-Note	1.0000	1:1	UPF 01-01 X4-Z4	
UQF	30-Year UMBS TBA - 2.5% Coupon vs. 5-Year T-Note	1.0000	1:1	UQF 01-01 X4-Z4	
URF	30-Year UMBS TBA - 3.0% Coupon vs. 5-Year T-Note	1.0000	1:1	URF 01-01 X4-Z4	
UTV	30-Year UMBS TBA - 3.5% Coupon vs. 5-Year T-Note	1.0000	1:1	UTV 01-01 X4-Z4	
UUF	30-Year UMBS TBA - 4.0% Coupon vs. 5-Year T-Note	1.0000	1:1	UUF 01-01 X4-Z4	
VTU	30-Year UMBS TBA - 4.5% Coupon vs. 5-Year T-Note	1.0000	1:1	VTU 01-01 X4-Z4	
THF	30-Year UMBS TBA - 5.0% Coupon vs. 5-Year T-Note	1.0000	1:1	THF 01-01 X4-Z4	
UVF	30-Year UMBS TBA - 5.5% Coupon vs. 5-Year T-Note	1.0000	1:1	UVF 01-01 X4-Z4	
UWV	30-Year UMBS TBA - 6.0% Coupon vs. 5-Year T-Note	1.0000	1:1	UWV 01-01 X4-Z4	
UYF	30-Year UMBS TBA - 6.5% Coupon vs. 5-Year T-Note	1.0000	1:1	UYF 01-01 X4-Z4	

\* Leg quantity and price ratios are subject to change. New ratios are highlighted.

^ Active contract code.

TBA/Treasury Spreads (December 2024)					
Spread Name	Futures Contract Legs	Price Ratio*	Leg Quantity Ratio*	External Name*	Bloomberg Code^
UPN	30-Year UMBS TBA - 2.0% Coupon vs. 10-Year T-Note	0.9000	9:10	UPN 09-10 Z4-Z4	JYATY Comdty
UQN	30-Year UMBS TBA - 2.5% Coupon vs. 10-Year T-Note	0.9000	9:10	UQN 09-10 Z4-Z4	JYBTY Comdty
URN	30-Year UMBS TBA - 3.0% Coupon vs. 10-Year T-Note	0.9000	9:10	URN 09-10 Z4-Z4	JYCTY Comdty
UTN	30-Year UMBS TBA - 3.5% Coupon vs. 10-Year T-Note	1.1250	9:8	UTN 09-08 Z4-Z4	JYDTY Comdty
UUN	30-Year UMBS TBA - 4.0% Coupon vs. 10-Year T-Note	1.5000	3:2	UUN 03-02 Z4-Z4	JYETY Comdty
NTU	30-Year UMBS TBA - 4.5% Coupon vs. 10-Year T-Note	1.8000	9:5	NTU 09-05 Z4-Z4	JYITY Comdty
THN	30-Year UMBS TBA - 5.0% Coupon vs. 10-Year T-Note	2.5000	5:2	THN 05-02 Z4-Z4	JYPTY Comdty
UVN	30-Year UMBS TBA - 5.5% Coupon vs. 10-Year T-Note	3.0000	3:1	UVN 03-01 Z4-Z4	JYTTY Comdty
UWN	30-Year UMBS TBA - 6.0% Coupon vs. 10-Year T-Note	4.0000	4:1	UWN 04-01 Z4-Z4	JYWTY Comdty
UYN	30-Year UMBS TBA - 6.5% Coupon vs. 10-Year T-Note	4.0000	4:1	UYN 04-01 Z4-Z4	JYLYTY Comdty
UPT	30-Year UMBS TBA - 2.0% Coupon vs. 10-Year T-Note	1.0000	1:1	UPT 01-01 Z4-Z4	
UQY	30-Year UMBS TBA - 2.5% Coupon vs. 10-Year T-Note	1.0000	1:1	UQY 01-01 Z4-Z4	
URY	30-Year UMBS TBA - 3.0% Coupon vs. 10-Year T-Note	1.0000	1:1	URY 01-01 Z4-Z4	
UTY	30-Year UMBS TBA - 3.5% Coupon vs. 10-Year T-Note	1.0000	1:1	UTY 01-01 Z4-Z4	
UUY	30-Year UMBS TBA - 4.0% Coupon vs. 10-Year T-Note	1.0000	1:1	UUY 01-01 Z4-Z4	
YTU	30-Year UMBS TBA - 4.5% Coupon vs. 10-Year T-Note	1.0000	1:1	YTU 01-01 Z4-Z4	
THY	30-Year UMBS TBA - 5.0% Coupon vs. 10-Year T-Note	1.0000	1:1	THY 01-01 Z4-Z4	
UVY	30-Year UMBS TBA - 5.5% Coupon vs. 10-Year T-Note	1.0000	1:1	UVY 01-01 Z4-Z4	
UWY	30-Year UMBS TBA - 6.0% Coupon vs. 10-Year T-Note	1.0000	1:1	UWY 01-01 Z4-Z4	
UYY	30-Year UMBS TBA - 6.5% Coupon vs. 10-Year T-Note	1.0000	1:1	UYY 01-01 Z4-Z4	
UPF	30-Year UMBS TBA - 2.0% Coupon vs. 5-Year T-Note	1.0000	1:1	UPF 01-01 Z4-Z4	
UQF	30-Year UMBS TBA - 2.5% Coupon vs. 5-Year T-Note	1.0000	1:1	UQF 01-01 Z4-Z4	
URF	30-Year UMBS TBA - 3.0% Coupon vs. 5-Year T-Note	1.0000	1:1	URF 01-01 Z4-Z4	
UTV	30-Year UMBS TBA - 3.5% Coupon vs. 5-Year T-Note	1.0000	1:1	UTV 01-01 Z4-Z4	
UUF	30-Year UMBS TBA - 4.0% Coupon vs. 5-Year T-Note	1.0000	1:1	UUF 01-01 Z4-Z4	
VTU	30-Year UMBS TBA - 4.5% Coupon vs. 5-Year T-Note	1.0000	1:1	VTU 01-01 Z4-Z4	
THF	30-Year UMBS TBA - 5.0% Coupon vs. 5-Year T-Note	1.0000	1:1	THF 01-01 Z4-Z4	
UVF	30-Year UMBS TBA - 5.5% Coupon vs. 5-Year T-Note	1.0000	1:1	UVF 01-01 Z4-Z4	
UWV	30-Year UMBS TBA - 6.0% Coupon vs. 5-Year T-Note	1.0000	1:1	UWV 01-01 Z4-Z4	
UYF	30-Year UMBS TBA - 6.5% Coupon vs. 5-Year T-Note	1.0000	1:1	UYF 01-01 Z4-Z4	

\* Leg quantity and price ratios are subject to change. New ratios are highlighted.

^ Active contract code.

TBA/Treasury Spreads (January 2025)					
Spread Name	Futures Contract Legs	Price Ratio*	Leg Quantity Ratio*	External Name*	Bloomberg Code^
UPN	30-Year UMBS TBA - 2.0% Coupon vs. 10-Year T-Note	0.9000	9:10	UPN 09-10 F5-H5	JYATY Comdty
UQN	30-Year UMBS TBA - 2.5% Coupon vs. 10-Year T-Note	0.9000	9:10	UQN 09-10 F5-H5	JYBTY Comdty
URN	30-Year UMBS TBA - 3.0% Coupon vs. 10-Year T-Note	0.9000	9:10	URN 09-10 F5-H5	JYCTY Comdty
UTN	30-Year UMBS TBA - 3.5% Coupon vs. 10-Year T-Note	0.9000	9:10	UTN 09-10 F5-H5	JYDTY Comdty
UUN	30-Year UMBS TBA - 4.0% Coupon vs. 10-Year T-Note	1.2500	5:4	UUN 05-04 F5-H5	JYETY Comdty
NTU	30-Year UMBS TBA - 4.5% Coupon vs. 10-Year T-Note	1.5000	3:2	NTU 03-02 F5-H5	JYITY Comdty
THN	30-Year UMBS TBA - 5.0% Coupon vs. 10-Year T-Note	2.0000	2:1	THN 02-01 F5-H5	JYPTY Comdty
UVN	30-Year UMBS TBA - 5.5% Coupon vs. 10-Year T-Note	2.0000	2:1	UVN 02-01 F5-H5	JYTTY Comdty
UWN	30-Year UMBS TBA - 6.0% Coupon vs. 10-Year T-Note	3.0000	3:1	UWN 03-01 F5-H5	JYWTY Comdty
UYN	30-Year UMBS TBA - 6.5% Coupon vs. 10-Year T-Note	3.0000	3:1	UYN 03-01 F5-H5	JYLYTY Comdty
UPT	30-Year UMBS TBA - 2.0% Coupon vs. 10-Year T-Note	1.0000	1:1	UPT 01-01 F5-H5	
UQY	30-Year UMBS TBA - 2.5% Coupon vs. 10-Year T-Note	1.0000	1:1	UQY 01-01 F5-H5	
URY	30-Year UMBS TBA - 3.0% Coupon vs. 10-Year T-Note	1.0000	1:1	URY 01-01 F5-H5	
UTY	30-Year UMBS TBA - 3.5% Coupon vs. 10-Year T-Note	1.0000	1:1	UTY 01-01 F5-H5	
UUY	30-Year UMBS TBA - 4.0% Coupon vs. 10-Year T-Note	1.0000	1:1	UUY 01-01 F5-H5	
YTU	30-Year UMBS TBA - 4.5% Coupon vs. 10-Year T-Note	1.0000	1:1	YTU 01-01 F5-H5	
THY	30-Year UMBS TBA - 5.0% Coupon vs. 10-Year T-Note	1.0000	1:1	THY 01-01 F5-H5	
UVY	30-Year UMBS TBA - 5.5% Coupon vs. 10-Year T-Note	1.0000	1:1	UVY 01-01 F5-H5	
UWY	30-Year UMBS TBA - 6.0% Coupon vs. 10-Year T-Note	1.0000	1:1	UWY 01-01 F5-H5	
UYY	30-Year UMBS TBA - 6.5% Coupon vs. 10-Year T-Note	1.0000	1:1	UYY 01-01 F5-H5	
UPF	30-Year UMBS TBA - 2.0% Coupon vs. 5-Year T-Note	1.0000	1:1	UPF 01-01 F5-H5	
UQF	30-Year UMBS TBA - 2.5% Coupon vs. 5-Year T-Note	1.0000	1:1	UQF 01-01 F5-H5	
URF	30-Year UMBS TBA - 3.0% Coupon vs. 5-Year T-Note	1.0000	1:1	URF 01-01 F5-H5	
UTV	30-Year UMBS TBA - 3.5% Coupon vs. 5-Year T-Note	1.0000	1:1	UTV 01-01 F5-H5	
UUF	30-Year UMBS TBA - 4.0% Coupon vs. 5-Year T-Note	1.0000	1:1	UUF 01-01 F5-H5	
VTU	30-Year UMBS TBA - 4.5% Coupon vs. 5-Year T-Note	1.0000	1:1	VTU 01-01 F5-H5	
THF	30-Year UMBS TBA - 5.0% Coupon vs. 5-Year T-Note	1.0000	1:1	THF 01-01 F5-H5	
UVF	30-Year UMBS TBA - 5.5% Coupon vs. 5-Year T-Note	1.0000	1:1	UVF 01-01 F5-H5	
UWV	30-Year UMBS TBA - 6.0% Coupon vs. 5-Year T-Note	1.0000	1:1	UWV 01-01 F5-H5	
UYF	30-Year UMBS TBA - 6.5% Coupon vs. 5-Year T-Note	1.0000	1:1	UYF 01-01 F5-H5	

\* Leg quantity and price ratios are subject to change. New ratios are highlighted.

^ Active contract code.