

**Morning Email: TERM TEDS & Dirty TEDS**

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Rotate Me

F.I. Futures and Cash			
	Last Decimal	Last 32	Last Yield*
ZT	102.0156	102.0050	4.810%
ZF	104.9844	104.3150	4.698%
ZN	107.28	107.090	4.726%
Blank			
2y	100.164	100.0525	4.787%
3y	100.422	100.1350	4.719%
5y	99.641	99.2050	4.707%
10y	100.953	100.3050	4.753%

\*Futures use CTD for Last Yield

Eurodollars (GE)					
	Last Price	Last Yield	Days til Expr.	Fraction of year	
@GE06U	94.605	5.395	13	0.035	Whites
@GE06Z	94.645	5.355	104	0.284	
@GE07H	94.780	5.220	195	0.534	
@GE07M	94.920	5.080	286	0.783	Reds
@GE07U	95.035	4.965	377	1.032	
@GE07Z	95.105	4.895	468	1.282	
@GE08H	95.125	4.875	559	1.531	Greens
@GE08M	95.110	4.890	650	1.780	
@GE08U	95.080	4.920	741	2.029	
@GE08Z	95.040	4.960	832	2.279	
@GE09H	95.005	4.995	923	2.528	
@GE09M	94.965	5.035	1014	2.777	

**How many ways can you hedge the TED? Let me count...there's lots and lots, like:**

- 1 Regression
- 2 Engineered
- 3 Strip with and without Stubs
- 4 Convexity Bias
- 5 Weighted
- 6 Unweighted  
and more...

Most of us are interested in the *unweighted hedge* which is simply a curve trade hedge. There are so many ways to hedge the TED trade that I can't possibly list them all.

If you email me and ask for a specific hedge, I'll get it to you.

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#### **Eurodollar Color Codes for Individual Year Strips:**

<b>Color</b>	<b>Year</b>	<b>Contracts</b>
White	One	1 – 4
Red	Two	5 – 8
Green	Three	9 – 12
Blue	Four	13 – 16
Gold	Five	17 – 20
Purple	Six	21 – 24
Orange	Seven	25 – 28
Pink	Eight	29 – 32
Silver	Nine	33 – 36
Copper	Ten	37 – 40

Dirty TED: ZT vs Eurodollar Contracts

ZT

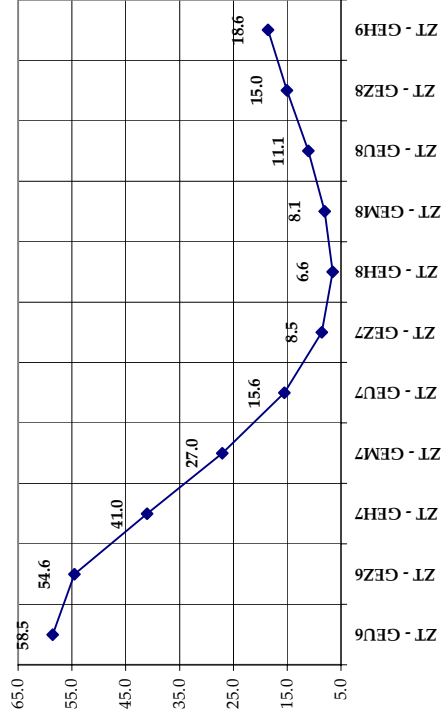
	Spread Price	Spread Yield	Spread Name
@GE06U	7.411	58.5	ZT - GEU6
@GE06Z	7.371	54.6	ZT - GEZ6
@GE07H	7.236	41.0	ZT - GEH7
@GE07M	7.096	27.0	ZT - GEM7
@GE07U	6.981	15.6	ZT - GEU7
@GE07Z	6.911	8.5	ZT - GEZ7
@GE08H	6.891	6.6	ZT - GEH8
@GE08M	6.906	8.1	ZT - GEM8
@GE08U	6.936	11.1	ZT - GEU8
@GE08Z	6.976	15.0	ZT - GEZ8
@GE09H	7.011	18.6	ZT - GEH9

Last = Outright ZT Decimal Price - Euro contract Price

Last32 = Amount after decimal in Last column \* 32

Yield = ABS(ZT Proxy Yield - Implied Euro contract yield)

ZT Yield - GE Yield



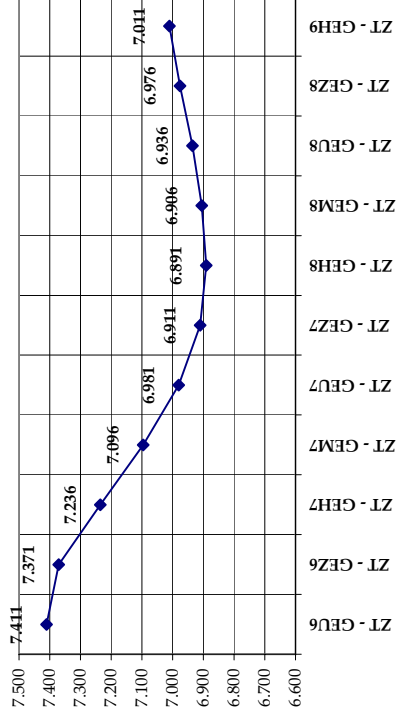
GE Duration as Fraction of year

	Duration	ZT Duration	Spread Duration
@GE06U	0.035	1.90	1.87
@GE06Z	0.284	1.90	1.62
@GE07H	0.534	1.90	1.37
@GE07M	0.783	1.90	1.12
@GE07U	1.032	1.90	0.87
@GE07Z	1.282	1.90	0.62
@GE08H	1.531	1.90	0.37
@GE08M	1.780	1.90	0.12
@GE08U	2.029	1.90	(0.13)
@GE08Z	2.279	1.90	(0.38)
@GE09H	2.528	1.90	(0.63)

The farther away from 0 the spread duration is

the riskier the trade.

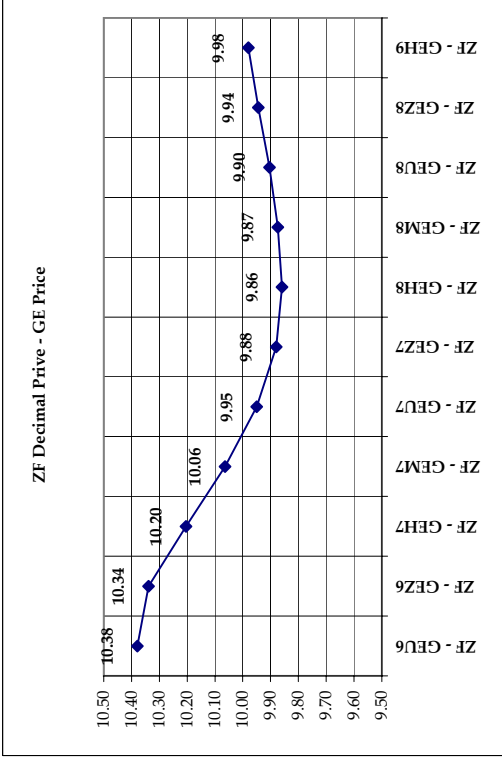
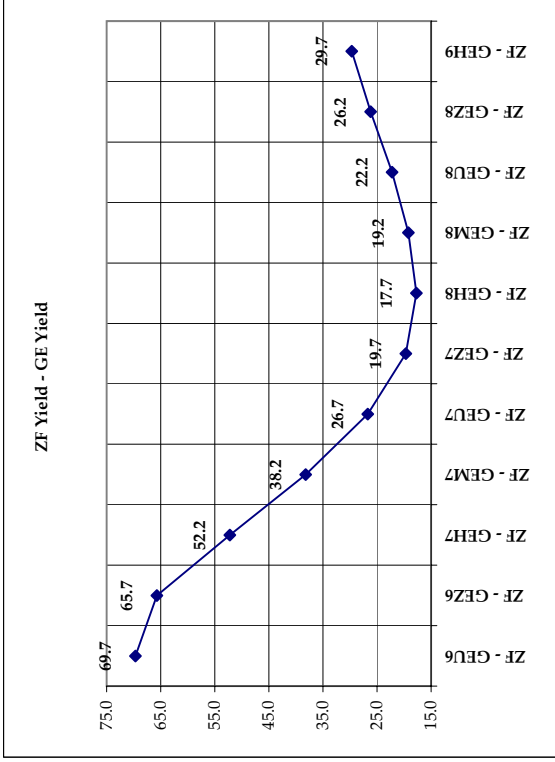
ZT Decimal Price - GE Price



**Dirty TED: ZF vs Eurodollar Contracts**

	Spread Price	Spread Yield	Spread Name
@GE06U	10.38	69.7	ZF - GEU6
@GE06Z	10.34	65.7	ZF - GEZ6
@GE07H	10.20	52.2	ZF - GEH7
@GE07M	10.06	38.2	ZF - GEM7
@GE07U	9.95	26.7	ZF - GEU7
@GE07Z	9.88	19.7	ZF - GEZ7
@GE08H	9.86	17.7	ZF - GEH8
@GE08M	9.87	19.2	ZF - GEM8
@GE08U	9.90	22.2	ZF - GEU8
@GE08Z	9.94	26.2	ZF - GEZ8
@GE09H	9.98	29.7	ZF - GEH9

Last = Outright ZF Decimal Price - Euro contract Price  
 Last32 = Amount after decimal in Last column \* 32  
 Yield = ABS( ZT Proxy Yield - Implied Euro contract yield)



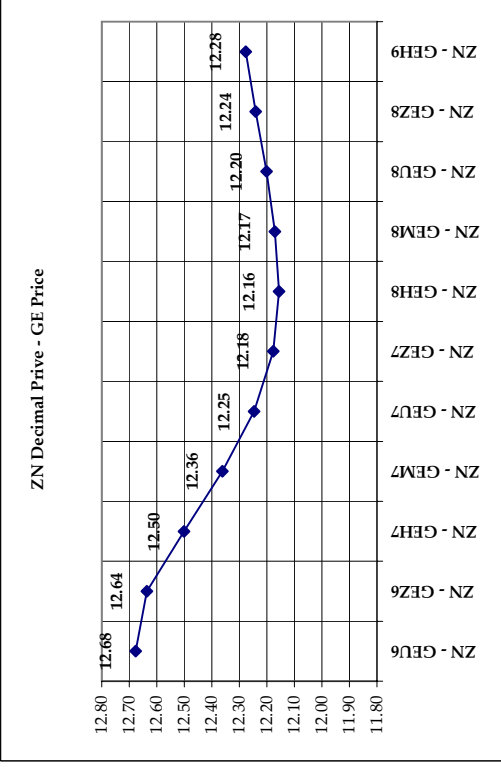
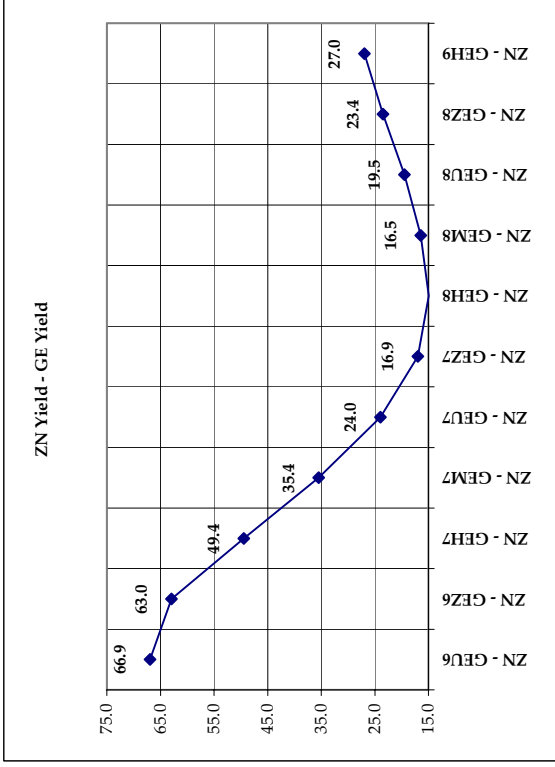
GE Duration as Fraction of year	ZF Duration	Spread Duration
@GE06U	0.035	3.69
@GE06Z	0.284	3.44
@GE07H	0.534	3.19
@GE07M	0.783	2.94
@GE07U	1.032	2.69
@GE07Z	1.282	2.44
@GE08H	1.531	2.19
@GE08M	1.780	1.94
@GE08U	2.029	1.70
@GE08Z	2.279	1.45
@GE09H	2.528	1.20

The farther away from 0 the spread duration is the riskier the trade.

**Dirty TED: ZN vs Eurodollar Contracts**

	Spread Price	ZN Spread Yield	Spread Name
@GE06U	12.68	66.9	ZN - GEU6
@GE06Z	12.64	63.0	ZN - GEZ6
@GE07H	12.50	49.4	ZN - GEH7
@GE07M	12.36	35.4	ZN - GEM7
@GE07U	12.25	24.0	ZN - GEU7
@GE07Z	12.18	16.9	ZN - GEZ7
@GE08H	12.16	15.0	ZN - GEH8
@GE08M	12.17	16.5	ZN - GEM8
@GE08U	12.20	19.5	ZN - GEU8
@GE08Z	12.24	23.4	ZN - GEZ8
@GE09H	12.28	27.0	ZN - GEH9

Last = Outright ZN Decimal Price - Euro contract Price  
 Last32 = Amount after decimal in Last column \* 32  
 Yield = ABS( ZT Proxy Yield - Implied Euro contract yield)



GE Duration as Fraction of year	ZN Duration	Spread Duration
@GE06U	0.035	5.77
@GE06Z	0.284	5.77
@GE07H	0.534	5.77
@GE07M	0.783	5.77
@GE07U	1.032	5.77
@GE07Z	1.282	5.77
@GE08H	1.531	5.77
@GE08M	1.780	5.77
@GE08U	2.029	5.77
@GE08Z	2.279	5.77
@GE09H	2.528	5.77

The farther away from 0 the spread duration is the riskier the trade.

**TERM TED: 2y vs Eurodollar Contracts**

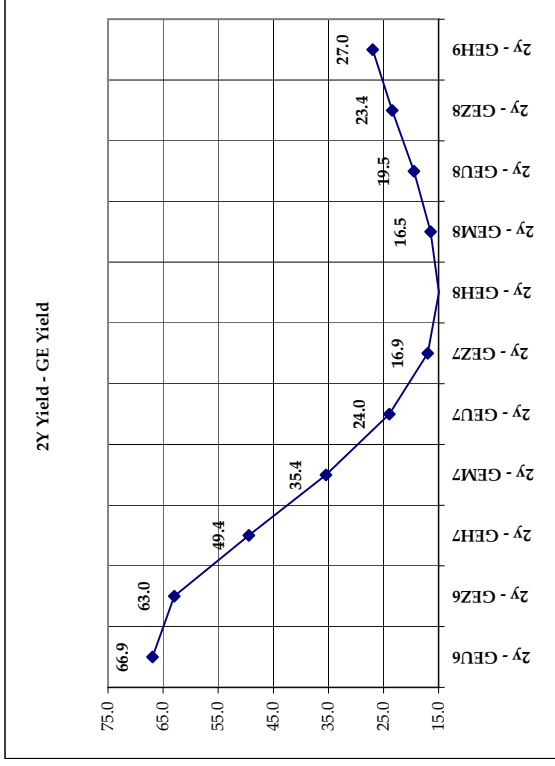
**2y**

	Spread Price	Spread Yield	Spread Name
@GE06U	5.56	66.9	2y - GEU6
@GE06Z	5.52	63.0	2y - GEZ6
@GE07H	5.38	49.4	2y - GEH7
@GE07M	5.24	35.4	2y - GEM7
@GE07U	5.13	24.0	2y - GEU7
@GE07Z	5.06	16.9	2y - GEZ7
@GE08H	5.04	15.0	2y - GEH8
@GE08M	5.05	16.5	2y - GEM8
@GE08J	5.08	19.5	2y - GEU8
@GE08Z	5.12	23.4	2y - GEZ8
@GE09H	5.16	27.0	2y - GEH9

Last = Outright 2y Decimal Price - Euro contract Price

Last32 = Amount after decimal in Last column \* 32

Yield = ABS( ZT Proxy Yield - Implied Euro contract yield)



**GE Duration as**

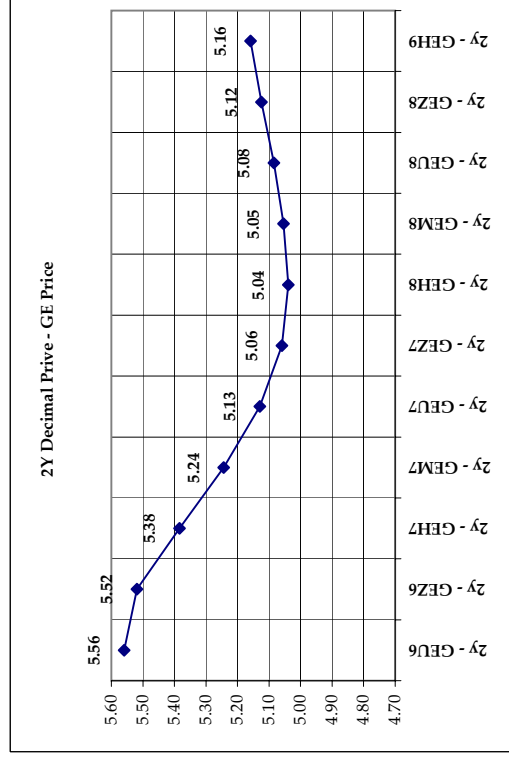
**Fraction of year**

**2Y**

**Spread Duration**

	Fraction of year	2Y Duration	Spread Duration
@GE06U	0.035	1.78	1.75
@GE06Z	0.284	1.78	1.50
@GE07H	0.534	1.78	1.25
@GE07M	0.783	1.78	1.00
@GE07U	1.032	1.78	0.75
@GE07Z	1.282	1.78	0.50
@GE08H	1.531	1.78	0.25
@GE08M	1.780	1.78	0.00
@GE08U	2.029	1.78	(0.24)
@GE08Z	2.279	1.78	(0.49)
@GE09H	2.528	1.78	(0.74)

The farther away from 0 the spread duration is the riskier the trade.

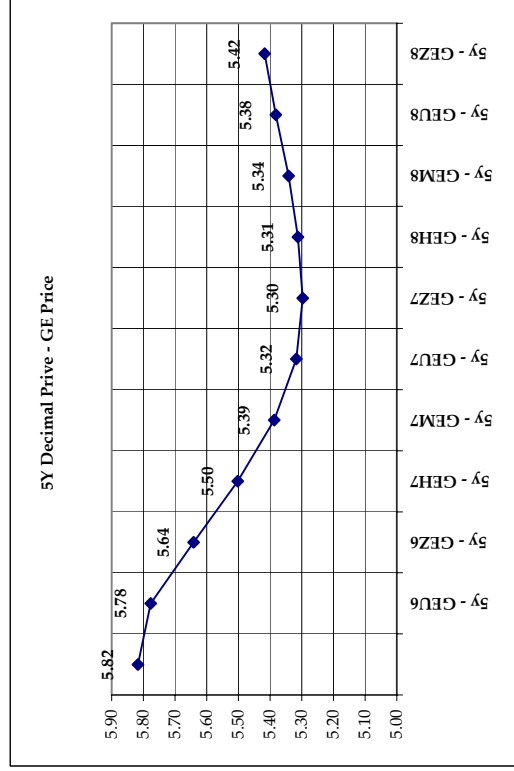
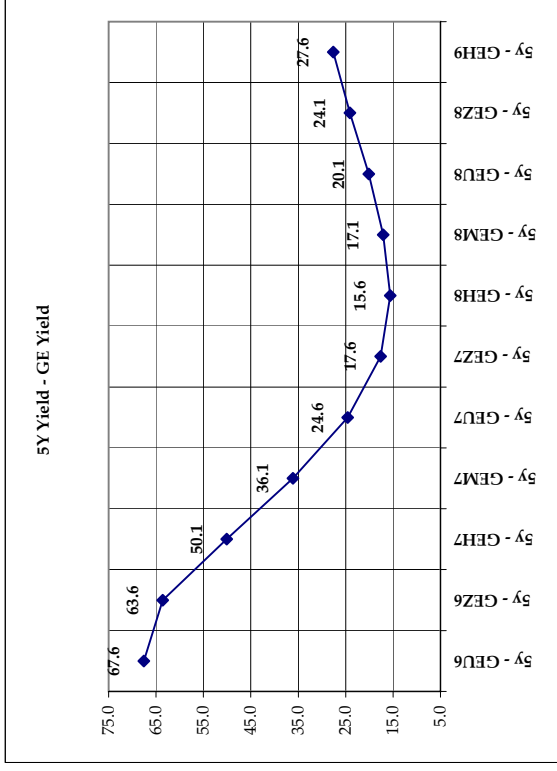


**TERM TED: 5y vs Eurodollar Contracts**

**5y**

Spread Price	Spread Yield	Spread Name
5.82	67.6	5y - GEU6
5.78	63.6	5y - GEZ6
5.64	50.1	5y - GEH7
5.50	36.1	5y - GEM7
5.39	24.6	5y - GEU7
5.32	17.6	5y - GEZ7
5.30	15.6	5y - GEH8
5.31	17.1	5y - GEM8
5.34	20.1	5y - GEU8
5.38	24.1	5y - GEZ8
5.42	27.6	5y - GEH9

Last = Outright 5y Decimal Price - Euro contract Price  
 Last32 = Amount after decimal in Last column \* 32  
 Yield = ABS( ZT Proxy Yield - Implied Euro contract yield)



GE Duration as Fraction of year	5Y Duration	Spread Duration
0.035	4.30	4.26
0.284	4.30	4.01
0.534	4.30	3.76
0.783	4.30	3.51
1.032	4.30	3.27
1.282	4.30	3.02
1.531	4.30	2.77
1.780	4.30	2.52
2.029	4.30	2.27
2.279	4.30	2.02
2.528	4.30	1.77

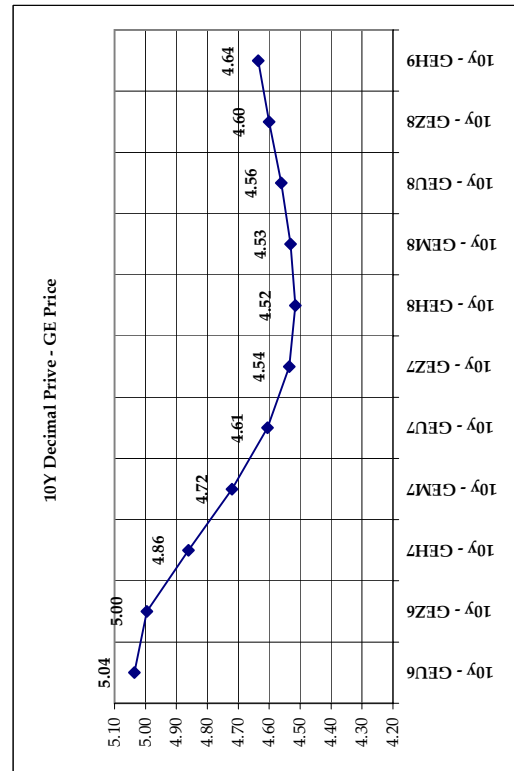
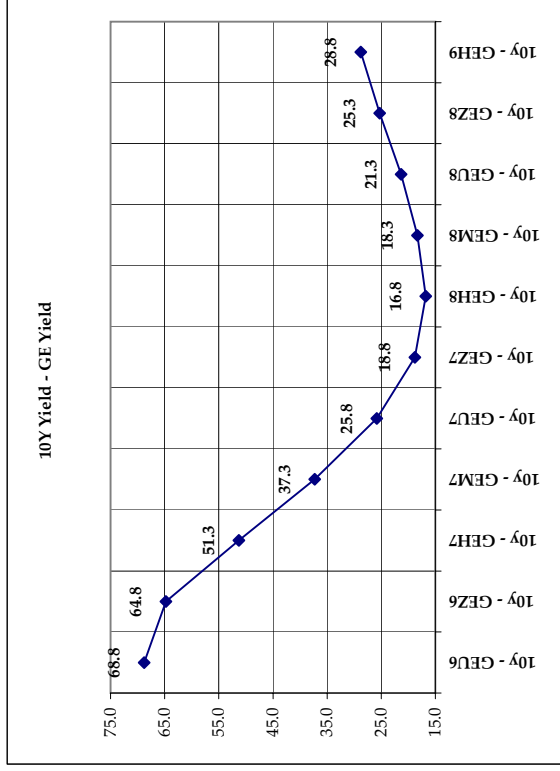
The farther away from 0 the spread duration is the riskier the trade.

**TERM TED: 10y vs Eurodollar Contracts**

**10y**

	Spread Price	Spread Yield	Spread Name
@GE06U	5.04	68.8	10y - GEU6
@GE06Z	5.00	64.8	10y - GEZ6
@GE07H	4.86	51.3	10y - GEH7
@GE07M	4.72	37.3	10y - GEM7
@GE07U	4.61	25.8	10y - GEU7
@GE07Z	4.54	18.8	10y - GEZ7
@GE08H	4.52	16.8	10y - GEH8
@GE08M	4.53	18.3	10y - GEM8
@GE08J	4.56	21.3	10y - GEU8
@GE08Z	4.60	25.3	10y - GEZ8
@GE09H	4.64	28.8	10y - GEH9

Last = Outright 10y Decimal Price - Euro contract Price  
 Last32 = Amount after decimal in Last column \* 32  
 Yield = ABS(ZT Proxy Yield - Implied Euro contract yield)



GE Duration as Fraction of year	10Y Duration	Spread Duration
@GE06U	7.80	7.76
@GE06Z	7.80	7.51
@GE07H	7.80	7.26
@GE07M	7.80	7.02
@GE07U	7.80	6.77
@GE07Z	7.80	6.52
@GE08H	7.80	6.27
@GE08M	7.80	6.02
@GE08U	7.80	5.77
@GE08Z	7.80	5.52
@GE09H	7.80	5.27

The farther away from 0 the spread duration is the riskier the trade.