

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

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Rotate Me

F.I. Futures and Cash			
	Last Decimal	Last 32	Last Yield*
ZT	101.9453	101.3025	4.846%
ZF	104.8125	104.2600	4.740%
ZN	107.00	107.000	4.777%
Blank			
2y	100.102	100.0325	4.820%
3y	100.320	100.1025	4.756%
5y	99.445	99.1425	4.751%
10y	100.516	100.1650	4.809%

\*Futures use CTD for Last Yield

Eurodollars (GE)					
	Last Price	Last Yield	Days til Expr.	Fraction of year	
@GE06U	94.600	5.400	11	0.030	Whites
@GE06Z	94.620	5.380	102	0.279	
@GE07H	94.750	5.250	193	0.528	
@GE07M	94.885	5.115	284	0.777	Reds
@GE07U	94.995	5.005	375	1.027	
@GE07Z	95.060	4.940	466	1.276	
@GE08H	95.080	4.920	557	1.525	Greens
@GE08M	95.070	4.930	648	1.775	
@GE08U	95.050	4.950	739	2.024	
@GE08Z	95.010	4.990	830	2.273	
@GE09H	94.975	5.025	921	2.523	
@GE09M	94.925	5.075	1012	2.772	

**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

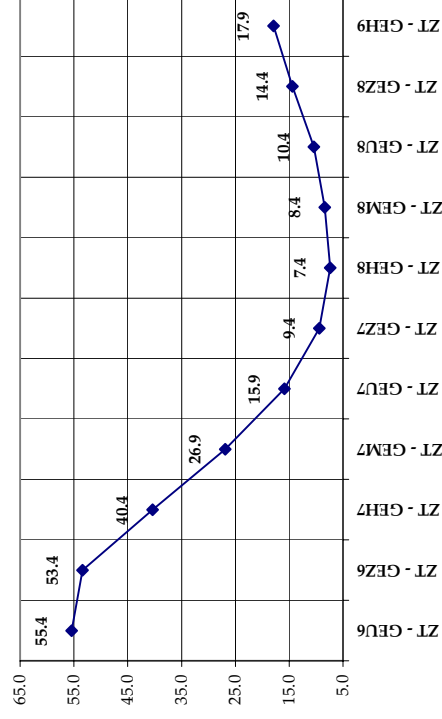
	Spread Price	Spread Yield	Spread Name
@GE06U	7.345	55.4	ZT - GEU6
@GE06Z	7.325	53.4	ZT - GEZ6
@GE07H	7.195	40.4	ZT - GEH7
@GE07M	7.060	26.9	ZT - GEM7
@GE07U	6.950	15.9	ZT - GEU7
@GE07Z	6.885	9.4	ZT - GEZ7
@GE08H	6.865	7.4	ZT - GEH8
@GE08M	6.875	8.4	ZT - GEM8
@GE08U	6.895	10.4	ZT - GEU8
@GE08Z	6.935	14.4	ZT - GEZ8
@GE09H	6.970	17.9	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



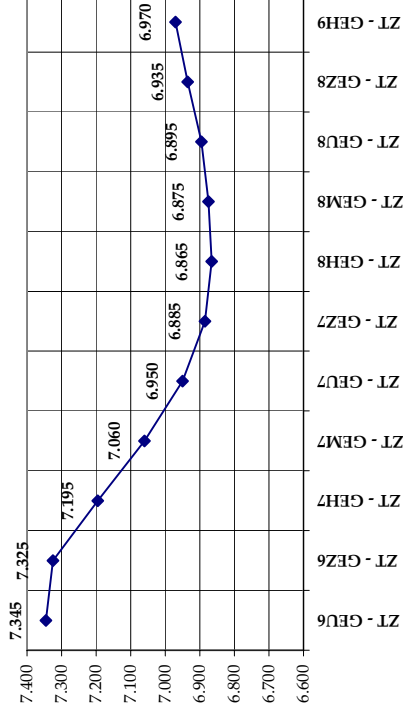
GE Duration as Fraction of year

	Duration	ZT Duration	Spread Duration
@GE06U	0.030	1.90	1.87
@GE06Z	0.279	1.90	1.62
@GE07H	0.528	1.90	1.37
@GE07M	0.777	1.90	1.12
@GE07U	1.027	1.90	0.87
@GE07Z	1.276	1.90	0.62
@GE08H	1.525	1.90	0.37
@GE08M	1.775	1.90	0.12
@GE08U	2.024	1.90	(0.13)
@GE08Z	2.273	1.90	(0.38)
@GE09H	2.523	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**

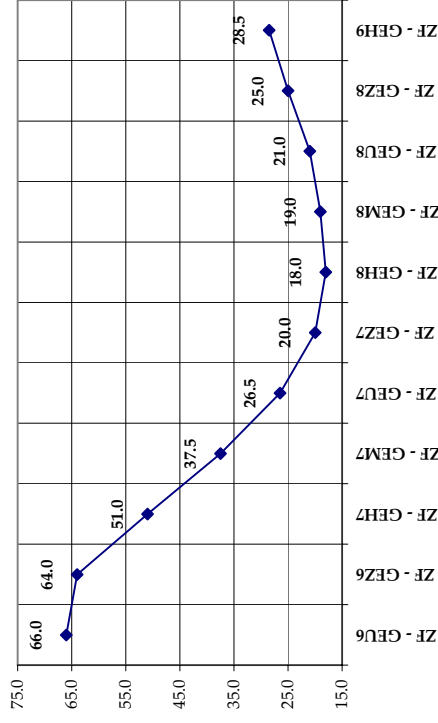
	Spread Price	Spread Yield	Spread Name
@GE06U	10.21	66.0	ZF - GEU6
@GE06Z	10.19	64.0	ZF - GEZ6
@GE07H	10.06	51.0	ZF - GEH7
@GE07M	9.93	37.5	ZF - GEM7
@GE07U	9.82	26.5	ZF - GEU7
@GE07Z	9.75	20.0	ZF - GEZ7
@GE08H	9.73	18.0	ZF - GEH8
@GE08M	9.74	19.0	ZF - GEM8
@GE08U	9.76	21.0	ZF - GEU8
@GE08Z	9.80	25.0	ZF - GEZ8
@GE09H	9.84	28.5	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)

ZF Yield - GE Yield

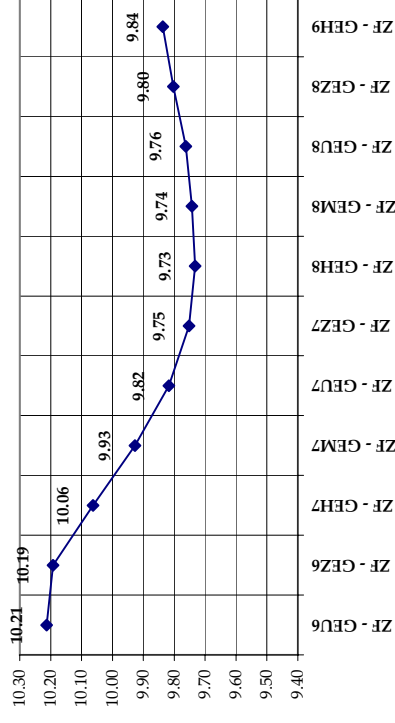


GE Duration as Fraction of year

	Fraction of year	ZF Duration	Spread Duration
@GE06U	0.030	3.72	3.69
@GE06Z	0.279	3.72	3.44
@GE07H	0.528	3.72	3.19
@GE07M	0.777	3.72	2.94
@GE07U	1.027	3.72	2.69
@GE07Z	1.276	3.72	2.44
@GE08H	1.525	3.72	2.19
@GE08M	1.775	3.72	1.94
@GE08U	2.024	3.72	1.69
@GE08Z	2.273	3.72	1.44
@GE09H	2.523	3.72	1.20

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

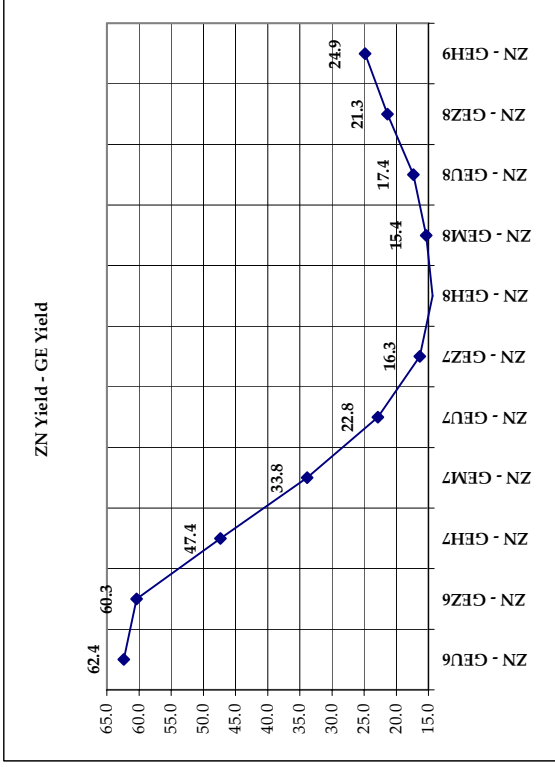
ZF Decimal Price - GE Price



**Dirty TED: ZN vs Eurodollar Contracts**

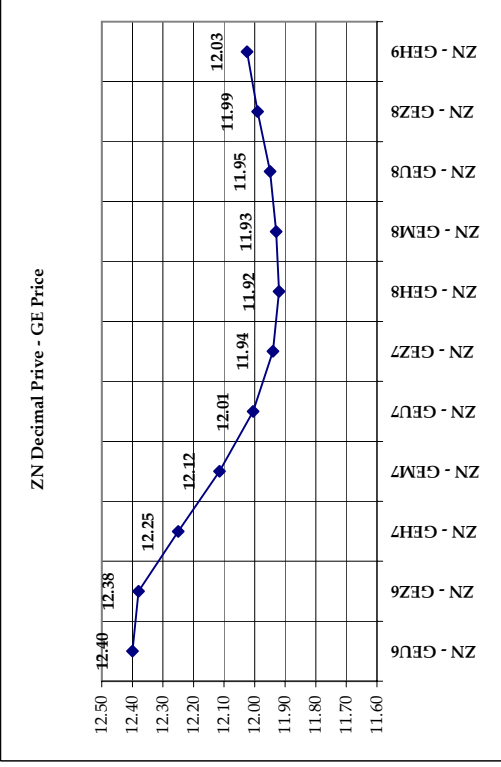
	Spread Price	ZN Spread Yield	Spread Name
@GE06U	12.40	62.4	ZN - GEU6
@GE06Z	12.38	60.3	ZN - GEZ6
@GE07H	12.25	47.4	ZN - GEH7
@GE07M	12.12	33.8	ZN - GEM7
@GE07U	12.01	22.8	ZN - GEU7
@GE07Z	11.94	16.3	ZN - GEZ7
@GE08H	11.92	14.4	ZN - GEH8
@GE08M	11.93	15.4	ZN - GEM8
@GE08J	11.95	17.4	ZN - GEU8
@GE08Z	11.99	21.3	ZN - GEZ8
@GE09H	12.03	24.9	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	0.030	5.73
@GE06Z	0.279	5.48
@GE07H	0.528	5.23
@GE07M	0.777	4.98
@GE07U	1.027	4.73
@GE07Z	1.276	4.48
@GE08H	1.525	4.23
@GE08M	1.775	3.98
@GE08U	2.024	3.73
@GE08Z	2.273	3.49
@GE09H	2.523	3.24

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



TERM TED: 2y vs Eurodollar Contracts

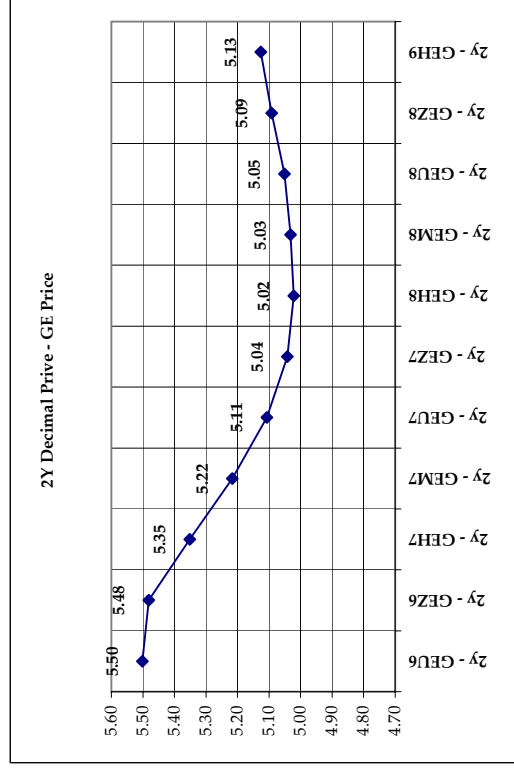
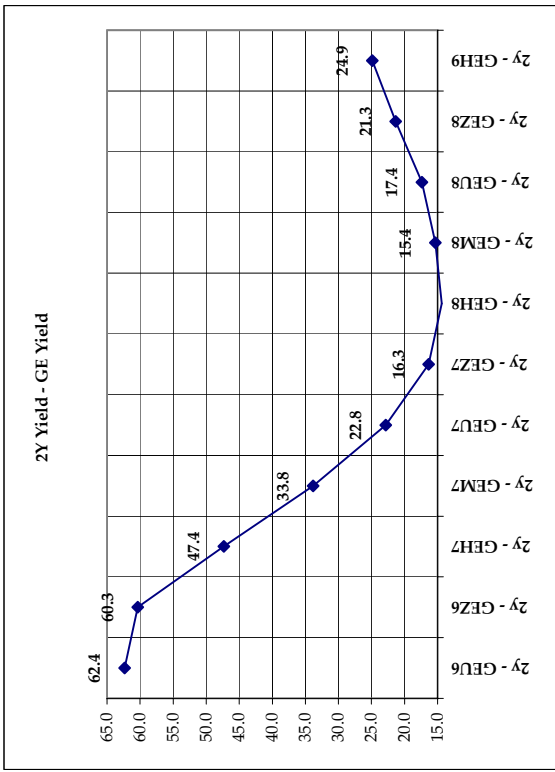
2y

Spread Price	Spread Yield	Spread Name
5.50	62.4	2y - GEU6
5.48	60.3	2y - GEZ6
5.35	47.4	2y - GEH7
5.22	33.8	2y - GEM7
5.11	22.8	2y - GEU7
5.04	16.3	2y - GEZ7
5.02	14.4	2y - GEH8
5.03	15.4	2y - GEM8
5.05	17.4	2y - GEU8
5.09	21.3	2y - GEZ8
5.13	24.9	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 Duration	Spread Duration
@GE06U	1.78	1.75
@GE06Z	1.78	1.50
@GE07H	1.78	1.25
@GE07M	1.78	1.00
@GE07U	1.78	0.75
@GE07Z	1.78	0.50
@GE08H	1.78	0.25
@GE08M	1.78	0.00
@GE08U	1.78	(0.24)
@GE08Z	1.78	(0.49)
@GE09H	1.78	(0.74)

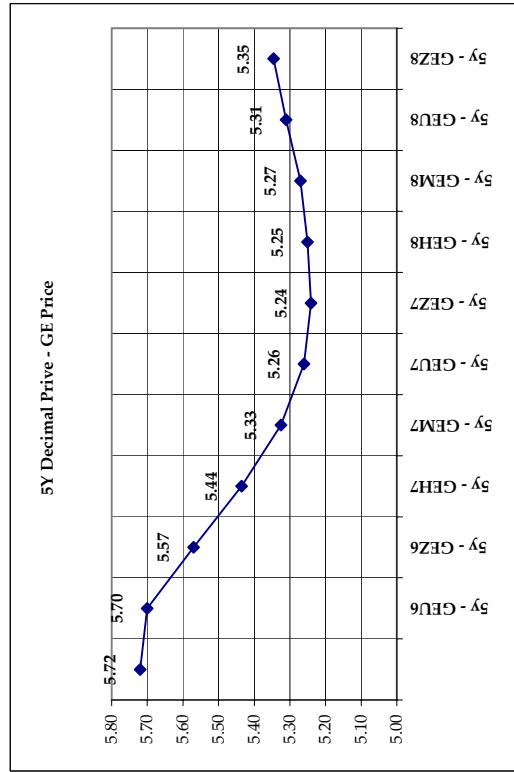
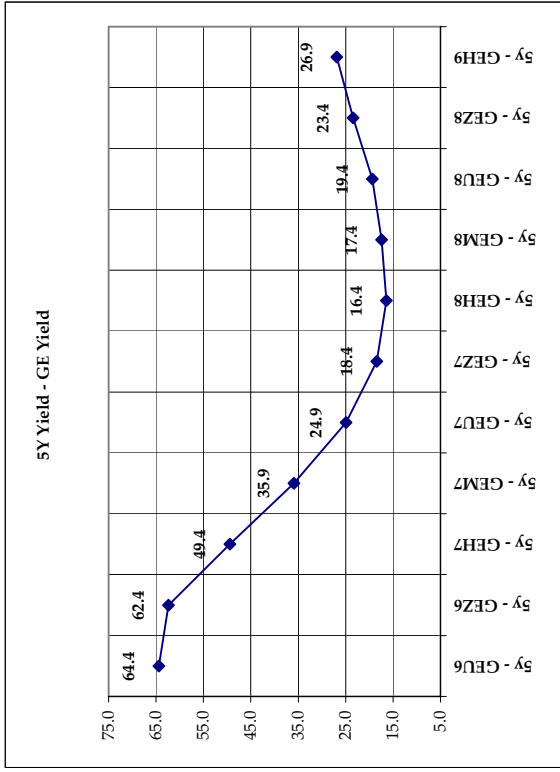
The farther away from 0 the spread duration is the riskier the trade.

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

**5y**

	Spread Price	Spread Yield	Spread Name
@GE06U	5.72	64.4	5y - GEU6
@GE06Z	5.70	62.4	5y - GEZ6
@GE07H	5.57	49.4	5y - GEH7
@GE07M	5.44	35.9	5y - GEM7
@GE07U	5.33	24.9	5y - GEU7
@GE07Z	5.26	18.4	5y - GEZ7
@GE08H	5.24	16.4	5y - GEH8
@GE08M	5.25	17.4	5y - GEM8
@GE08J	5.27	19.4	5y - GEU8
@GE08Z	5.31	23.4	5y - GEZ8
@GE09H	5.35	26.9	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
@GE06U	0.030	4.26
@GE06Z	0.279	4.01
@GE07H	0.528	3.76
@GE07M	0.777	3.51
@GE07U	1.027	3.26
@GE07Z	1.276	3.01
@GE08H	1.525	2.77
@GE08M	1.775	2.52
@GE08U	2.024	2.27
@GE08Z	2.273	2.02
@GE09H	2.523	1.77

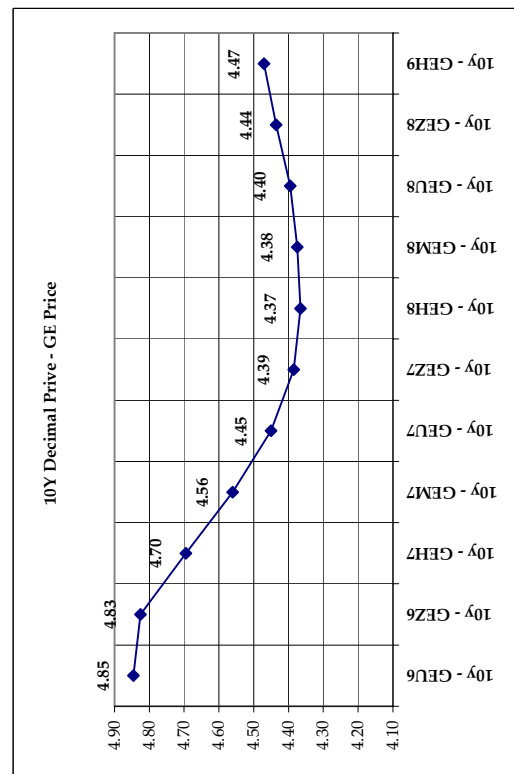
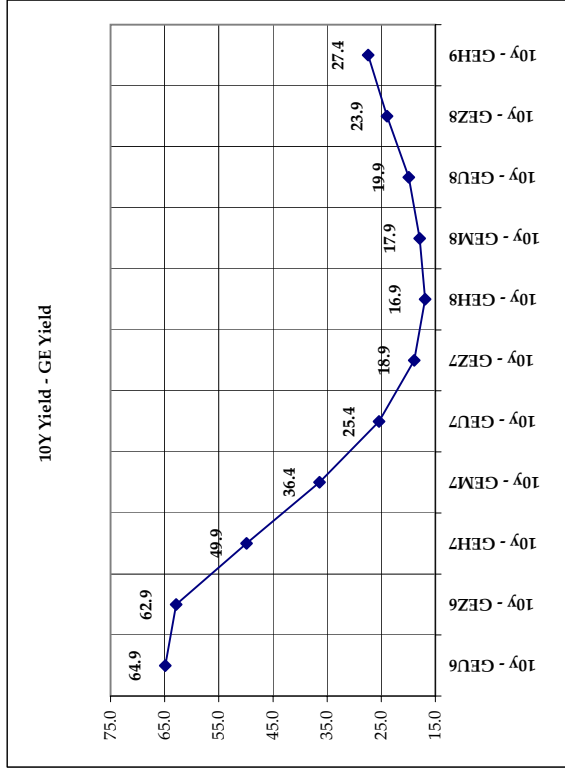
The farther away from 0 the spread duration is the riskier the trade.

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

**10y**

	Spread Price	Spread Yield	Spread Name
@GE06U	4.85	64.9	10y - GEU6
@GE06Z	4.83	62.9	10y - GEZ6
@GE07H	4.70	49.9	10y - GEH7
@GE07M	4.56	36.4	10y - GEM7
@GE07U	4.45	25.4	10y - GEU7
@GE07Z	4.39	18.9	10y - GEZ7
@GE08H	4.37	16.9	10y - GEH8
@GE08M	4.38	17.9	10y - GEM8
@GE08J	4.40	19.9	10y - GEU8
@GE08Z	4.44	23.9	10y - GEZ8
@GE09H	4.47	27.4	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	0.030	7.76
@GE06Z	0.279	7.51
@GE07H	0.528	7.26
@GE07M	0.777	7.01
@GE07U	1.027	6.76
@GE07Z	1.276	6.51
@GE08H	1.525	6.26
@GE08M	1.775	6.01
@GE08U	2.024	5.76
@GE08Z	2.273	5.51
@GE09H	2.523	5.26

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