

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

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Rotate Me

F.I. Futures and Cash			
	Last Decimal	Last 32	Last Yield*
ZT	0.0000	0.0000	4.832%
ZF	0.0000	0.0000	4.692%
ZN	107.53	107.170	4.702%
Blank			
2y	100.125	100.0400	4.805%
3y	100.414	100.1325	4.719%
5y	99.695	99.2225	4.694%
10y	101.078	101.0250	4.737%

\*Futures use CTD for Last Yield

Eurodollars (GE)				
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year
@GE06U	94.610	5.390	-2	-0.006
@GE06Z	94.625	5.375	89	0.243
@GE07H	94.725	5.275	180	0.493
@GE07M	94.850	5.150	271	0.742
@GE07U	94.975	5.025	362	0.991
@GE07Z	95.055	4.945	453	1.240
@GE08H	95.100	4.900	544	1.490
@GE08M	95.105	4.895	635	1.739
@GE08U	95.085	4.915	726	1.988
@GE08Z	95.045	4.955	817	2.238
@GE09H	95.010	4.990	908	2.487
@GE09M	94.975	5.025	999	2.736

Whites

Reds

Greens

**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.

[igoulding@ghco.com](mailto:igoulding@ghco.com)

#### **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

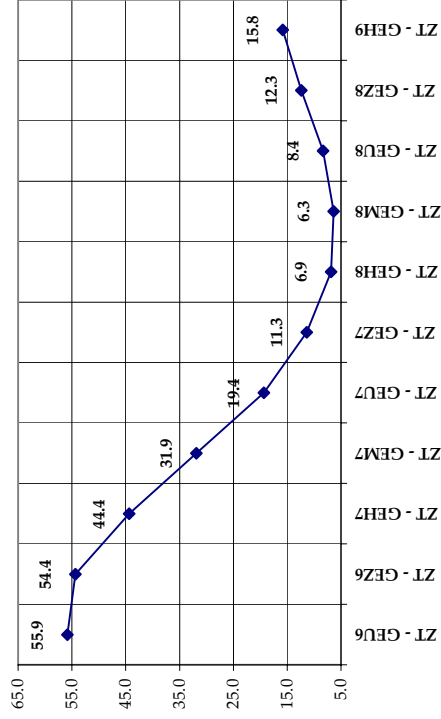
	Spread Price	Spread Yield	Spread Name
@GE06U	-94.610	55.9	ZT - GEU6
@GE06Z	-94.625	54.4	ZT - GEZ6
@GE07H	-94.725	44.4	ZT - GEH7
@GE07M	-94.850	31.9	ZT - GEM7
@GE07U	-94.975	19.4	ZT - GEU7
@GE07Z	-95.055	11.3	ZT - GEZ7
@GE08H	-95.100	6.9	ZT - GEH8
@GE08M	-95.105	6.3	ZT - GEM8
@GE08U	-95.085	8.4	ZT - GEU8
@GE08Z	-95.045	12.3	ZT - GEZ8
@GE09H	-95.010	15.8	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

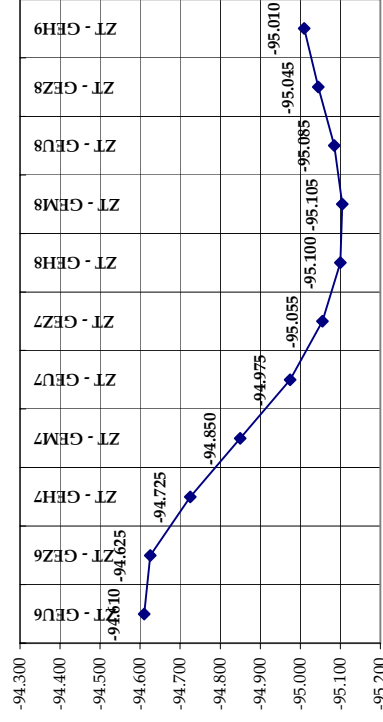
Spread Duration

	Duration	ZT Duration	Spread Duration
@GE06U	-0.006	1.89	1.90
@GE06Z	0.243	1.89	1.65
@GE07H	0.493	1.89	1.40
@GE07M	0.742	1.89	1.15
@GE07U	0.991	1.89	0.90
@GE07Z	1.240	1.89	0.65
@GE08H	1.490	1.89	0.40
@GE08M	1.739	1.89	0.15
@GE08U	1.988	1.89	(0.10)
@GE08Z	2.238	1.89	(0.36)
@GE09H	2.487	1.89	(0.60)

The farther away from 0 the spread duration is

the riskier the trade.

ZT Decimal Price - GE Price



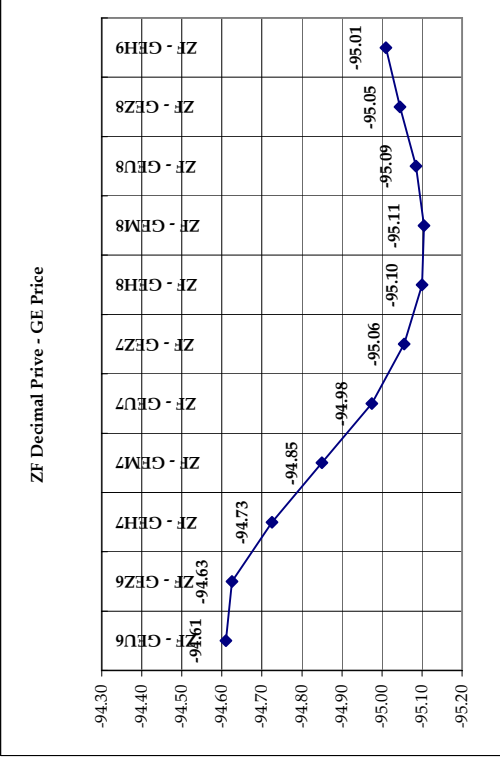
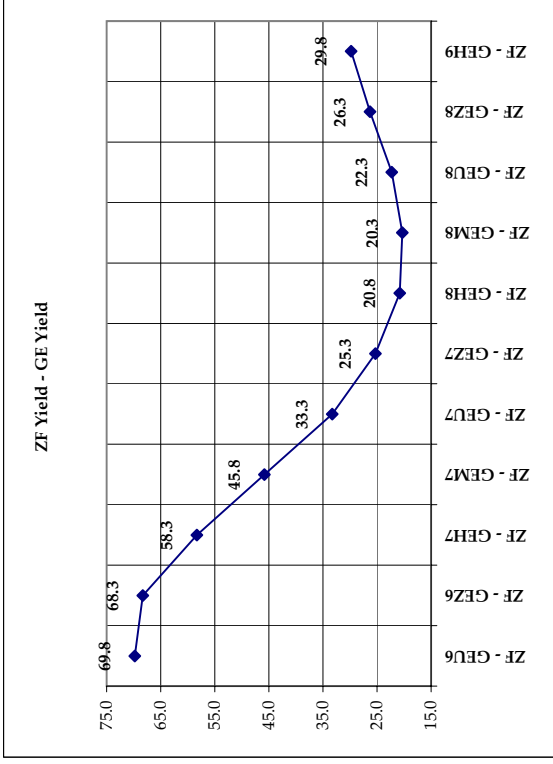
**Dirty TED: ZF vs Eurodollar Contracts**

	ZF	
	Spread Price	Spread Yield
	Price	Name
@GE06U	-94.61	ZF - GEU6
@GE06Z	-94.63	ZF - GEZ6
@GE07H	-94.73	ZF - GEH7
@GE07M	-94.85	ZF - GEM7
@GE07U	-94.98	ZF - GEU7
@GE07Z	-95.06	ZF - GEZ7
@GE08H	-95.10	ZF - GEH8
@GE08M	-95.11	ZF - GEM8
@GE08J	-95.09	ZF - GEU8
@GE08Z	-95.05	ZF - GEZ8
@GE09H	-95.01	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		Spread Duration	
	Fraction	of year	Duration	Duration	Spread	Duration
@GE06U	-0.006		3.68	3.68	3.69	ZF - GEU6
@GE06Z	0.243		3.68	3.68	3.44	ZF - GEZ6
@GE07H	0.493		3.68	3.68	3.19	ZF - GEH7
@GE07M	0.742		3.68	3.68	2.94	ZF - GEM7
@GE07U	0.991		3.68	3.68	2.69	ZF - GEU7
@GE07Z	1.240		3.68	3.68	2.44	ZF - GEZ7
@GE08H	1.490		3.68	3.68	2.20	ZF - GEH8
@GE08M	1.739		3.68	3.68	1.95	ZF - GEM8
@GE08U	1.988		3.68	3.68	1.70	ZF - GEU8
@GE08Z	2.238		3.68	3.68	1.45	ZF - GEZ8
@GE09H	2.487		3.68	3.68	1.20	ZF - GEH9

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

**Dirty TED: ZN vs Eurodollar Contracts**

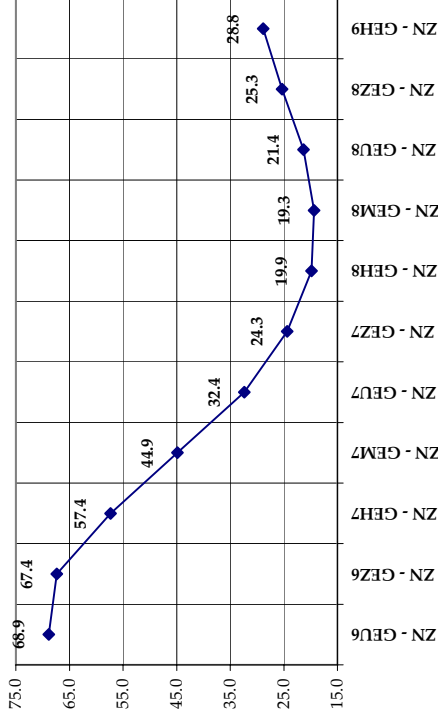
	Spread Price	ZN Spread Yield	Spread Name
@GE06U	12.92	68.9	ZN - GEU6
@GE06Z	12.91	67.4	ZN - GEZ6
@GE07H	12.81	57.4	ZN - GEH7
@GE07M	12.68	44.9	ZN - GEM7
@GE07U	12.56	32.4	ZN - GEU7
@GE07Z	12.48	24.3	ZN - GEZ7
@GE08H	12.43	19.9	ZN - GEH8
@GE08M	12.43	19.3	ZN - GEM8
@GE08J	12.45	21.4	ZN - GEU8
@GE08Z	12.49	25.3	ZN - GEZ8
@GE09H	12.52	28.8	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)

ZN Yield - GE Yield

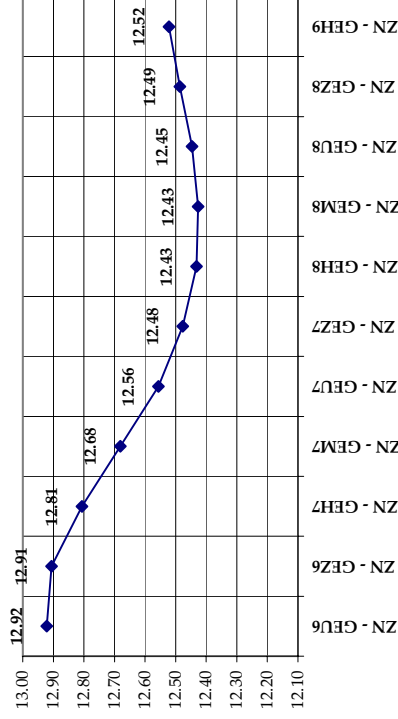


GE Duration as Fraction of year

	GE Duration as Fraction of year	ZN Duration	Spread Duration
@GE06U	-0.006	5.73	5.73
@GE06Z	0.243	5.73	5.49
@GE07H	0.493	5.73	5.24
@GE07M	0.742	5.73	4.99
@GE07U	0.991	5.73	4.74
@GE07Z	1.240	5.73	4.49
@GE08H	1.490	5.73	4.24
@GE08M	1.739	5.73	3.99
@GE08U	1.988	5.73	3.74
@GE08Z	2.238	5.73	3.49
@GE09H	2.487	5.73	3.24

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

ZN Decimal Price - GE Price

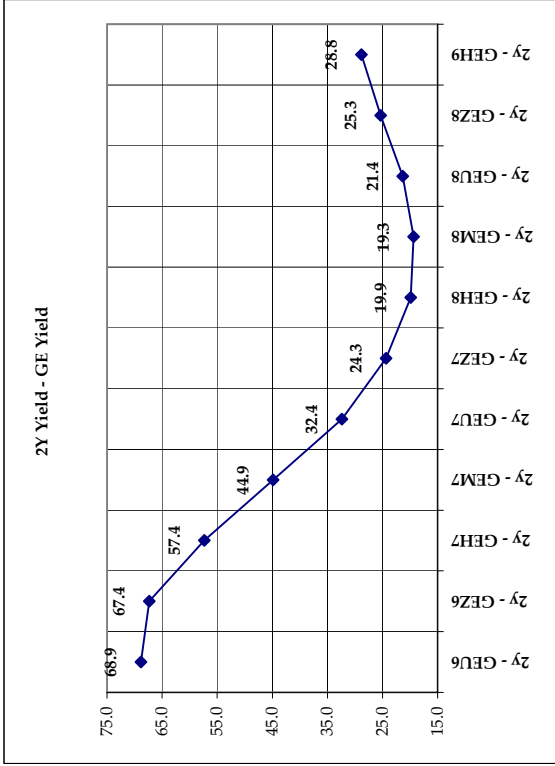


**TERM TED: 2y vs Eurodollar Contracts**

**2y**

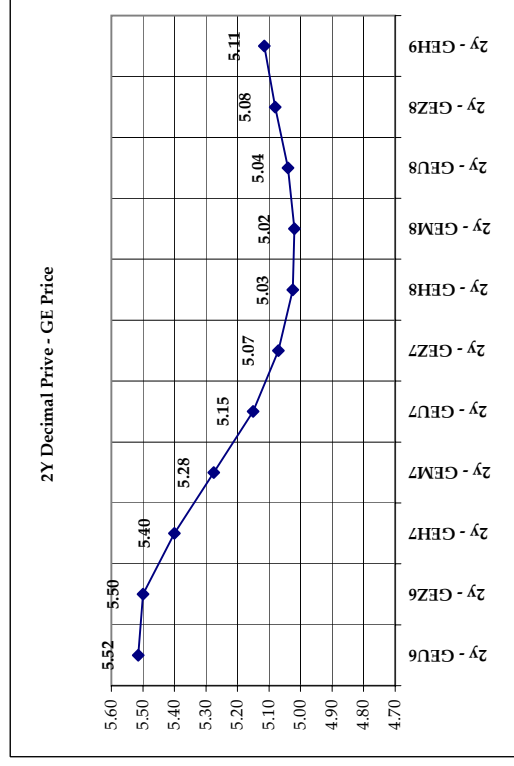
Spread Price	Spread Yield	Spread Name
5.52	68.9	2y - GEU6
5.50	67.4	2y - GEZ6
5.40	57.4	2y - GEH7
5.28	44.9	2y - GEM7
5.15	32.4	2y - GEU7
5.07	24.3	2y - GEZ7
5.03	19.9	2y - GEH8
5.02	19.3	2y - GEM8
5.04	21.4	2y - GEU8
5.08	25.3	2y - GEZ8
5.11	28.8	2y - GEH9

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	1.74	1.75
@GE06Z	1.74	1.50
@GE07H	1.74	1.25
@GE07M	1.74	1.00
@GE07U	1.74	0.75
@GE07Z	1.74	0.50
@GE08H	1.74	0.25
@GE08M	1.74	0.01
@GE08U	1.74	(0.24)
@GE08Z	1.74	(0.49)
@GE09H	1.74	(0.74)

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



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

**5y**

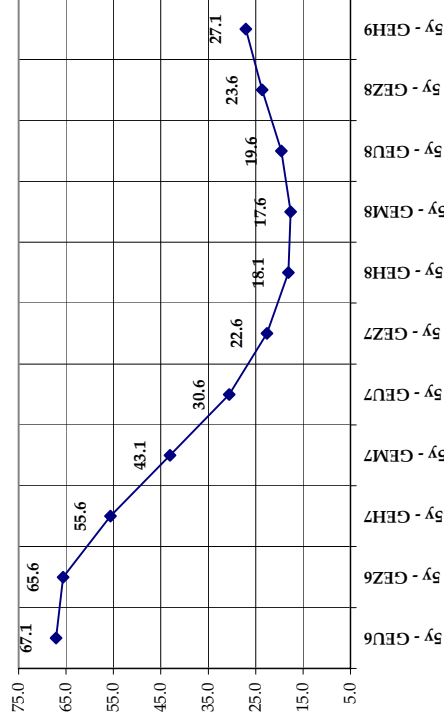
	Spread Price	Spread Yield	Spread Name
@GE06U	5.80	67.1	5y - GEU6
@GE06Z	5.79	65.6	5y - GEZ6
@GE07H	5.69	55.6	5y - GEH7
@GE07M	5.56	43.1	5y - GEM7
@GE07U	5.44	30.6	5y - GEU7
@GE07Z	5.36	22.6	5y - GEZ7
@GE08H	5.31	18.1	5y - GEH8
@GE08M	5.31	17.6	5y - GEM8
@GE08J	5.33	19.6	5y - GEU8
@GE08Z	5.37	23.6	5y - GEZ8
@GE09H	5.40	27.1	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)

5Y Yield - GE Yield

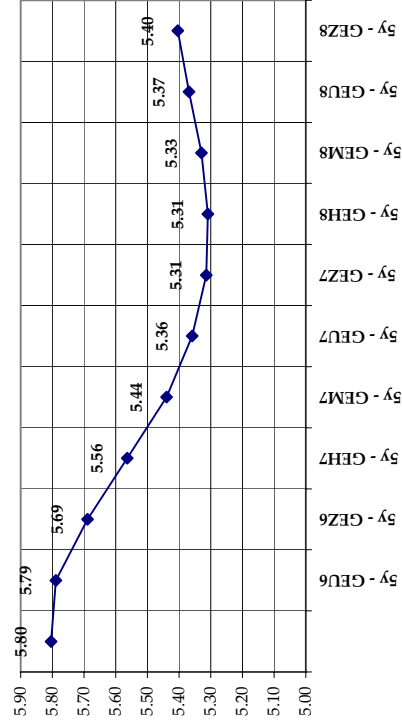


GE Duration as Fraction of year

	5Y Duration	Spread Duration
@GE06U	-0.006	4.26
@GE06Z	0.243	4.01
@GE07H	0.493	3.77
@GE07M	0.742	3.52
@GE07U	0.991	3.27
@GE07Z	1.240	3.02
@GE08H	1.490	2.77
@GE08M	1.739	2.52
@GE08U	1.988	2.27
@GE08Z	2.238	2.02
@GE09H	2.487	1.77

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

5Y Decimal Price - GE Price

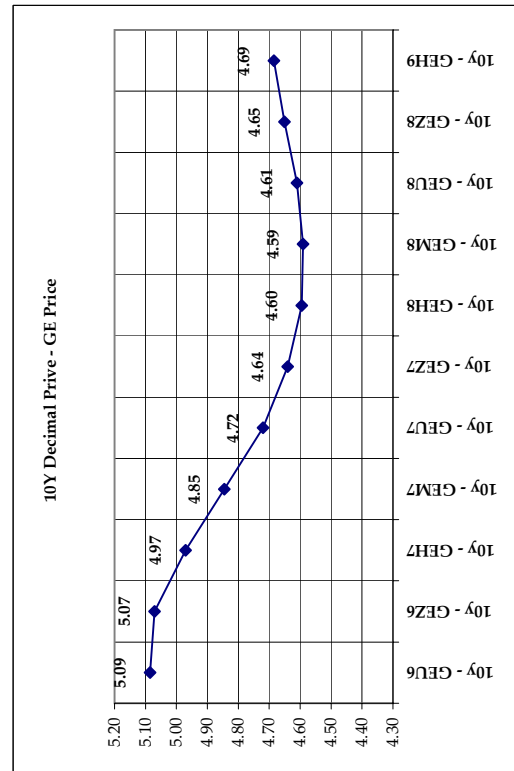
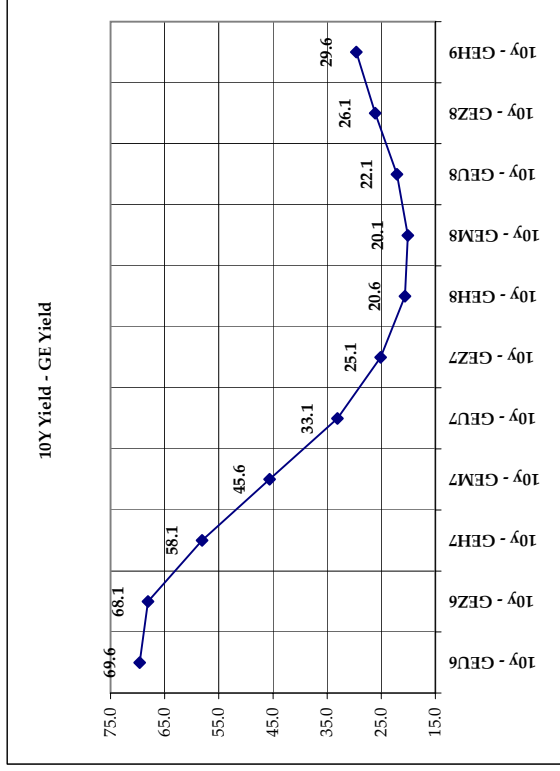


**TERM TED: 10y vs Eurodollar Contracts**

**10y**

Spread Price	Spread Yield	Spread Name
5.09	69.6	10y - GEU6
5.07	68.1	10y - GEZ6
4.97	58.1	10y - GEH7
4.85	45.6	10y - GEM7
4.72	33.1	10y - GEU7
4.64	25.1	10y - GEZ7
4.60	20.6	10y - GEH8
4.59	20.1	10y - GEM8
4.61	22.1	10y - GEU8
4.65	26.1	10y - GEZ8
4.69	29.6	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	7.76	7.77
@GE06Z	7.76	7.52
@GE07H	7.76	7.27
@GE07M	7.76	7.02
@GE07U	7.76	6.77
@GE07Z	7.76	6.52
@GE08H	7.76	6.27
@GE08M	7.76	6.02
@GE08U	7.76	5.77
@GE08Z	7.76	5.52
@GE09H	7.76	5.27

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