

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

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Rotate Me

F.I. Futures and Cash			
	Last Decimal	Last 32	Last Yield*
ZT	102.3438	102.1100	4.685%
ZF	105.8125	105.2600	4.526%
ZN	108.44	108.140	4.538%
Blank			
2y	100.398	100.1275	4.655%
3y	100.836	100.2675	4.561%
5y	100.406	100.1300	4.531%
10y	102.328	102.1050	4.579%

\*Futures use CTD for Last Yield

Eurodollars (GE)				
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year
@GE06Z	94.690	5.310	84	0.229
@GE07H	94.860	5.140	175	0.479
@GE07M	95.035	4.965	266	0.728
@GE07U	95.190	4.810	357	0.977
@GE07Z	95.275	4.725	448	1.227
@GE08H	95.305	4.695	539	1.476
@GE08M	95.295	4.705	630	1.725
@GE08U	95.280	4.720	721	1.975
@GE08Z	95.240	4.760	812	2.224
@GE09H	95.205	4.795	903	2.473
@GE09M	95.165	4.835	994	2.723
@GE09U	95.100	4.900	1085	2.972

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.

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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

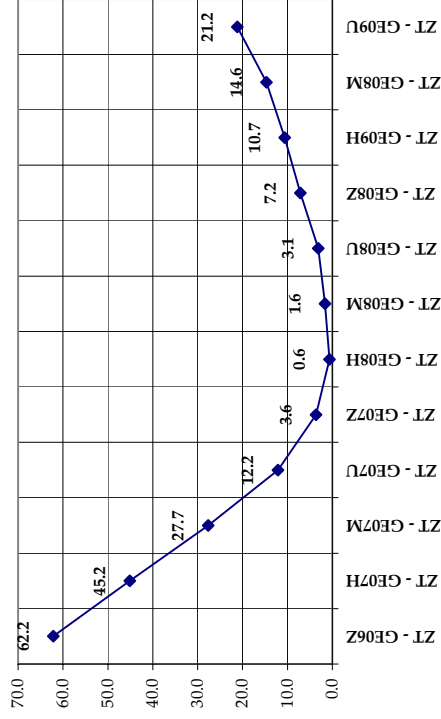
	Spread Price	Spread Yield	Spread Name
@GE06Z	7.654	62.6	ZT - GE06Z
@GE07H	7.484	45.6	ZT - GE07H
@GE07M	7.309	28.1	ZT - GE07M
@GE07U	7.154	12.6	ZT - GE07U
@GE07Z	7.069	4.0	ZT - GE07Z
@GE08H	7.039	1.0	ZT - GE08H
@GE08M	7.049	2.0	ZT - GE08M
@GE08U	7.064	3.5	ZT - GE08U
@GE08Z	7.104	7.6	ZT - GE08Z
@GE09H	7.139	11.1	ZT - GE09H
@GE09M	7.179	15.0	ZT - GE09M
@GE09U	7.244	21.6	ZT - GE09U

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



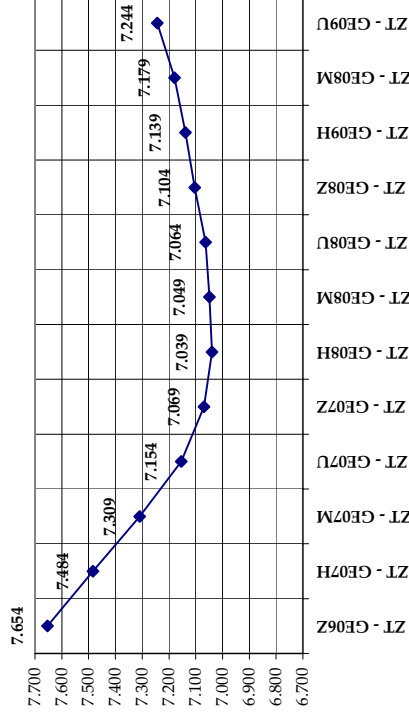
GE Duration as

GE Duration as Fraction of year	ZT Duration	Spread Duration
@GE06Z	0.229	1.88
@GE07H	0.479	1.88
@GE07M	0.728	1.88
@GE07U	0.977	1.88
@GE07Z	1.227	1.88
@GE08H	1.476	1.88
@GE08M	1.725	1.88
@GE08U	1.975	1.88
@GE08Z	2.224	1.88
@GE09H	2.473	1.88
@GE09M	2.723	1.88
@GE09U	2.972	1.88

The farther away from 0 the spread duration is

the riskier the trade.

ZT Decimal Price - GE Price



Dirty TED: ZF vs Eurodollar Contracts

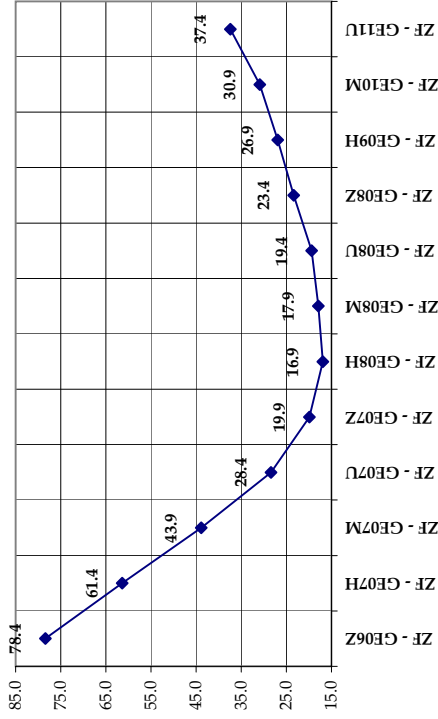
	Spread Price	Spread Yield	Spread Name
@GE06Z	11.12	78.4	ZF - GE06Z
@GE07H	10.95	61.4	ZF - GE07H
@GE07M	10.78	43.9	ZF - GE07M
@GE07U	10.62	28.4	ZF - GE07U
@GE07Z	10.54	19.9	ZF - GE07Z
@GE08H	10.51	16.9	ZF - GE08H
@GE08M	10.52	17.9	ZF - GE08M
@GE08U	10.53	19.4	ZF - GE08U
@GE08Z	10.57	23.4	ZF - GE08Z
@GE09H	10.61	26.9	ZF - GE09H
@GE09M	10.65	30.9	ZF - GE09M
@GE09U	10.71	37.4	ZF - GE09U

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 - GF Yield

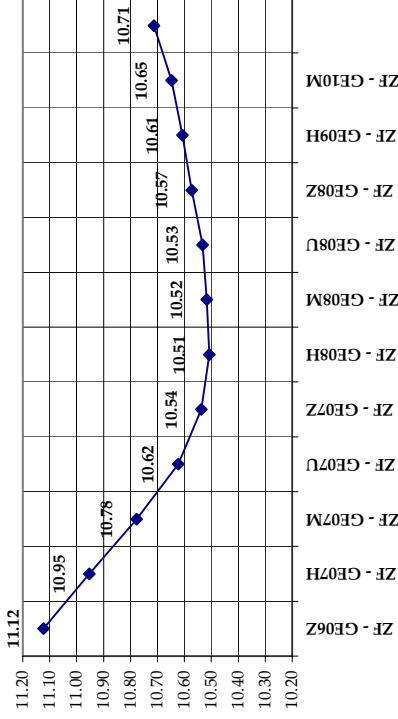


GE Duration as Fraction of year

	GE Duration as Fraction of year	ZF Duration	Spread Duration
@GE06Z	0.229	3.68	3.45
@GE07H	0.479	3.68	3.20
@GE07M	0.728	3.68	2.95
@GE07U	0.977	3.68	2.70
@GE07Z	1.227	3.68	2.45
@GE08H	1.476	3.68	2.20
@GE08M	1.725	3.68	1.95
@GE08U	1.975	3.68	1.70
@GE08Z	2.224	3.68	1.45
@GE09H	2.473	3.68	1.20
@GE09M	2.723	3.68	0.95
@GE09U	2.972	3.68	0.70

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

ZF Decimal Price - GE Price



Dirty TED: ZN vs Eurodollar Contracts

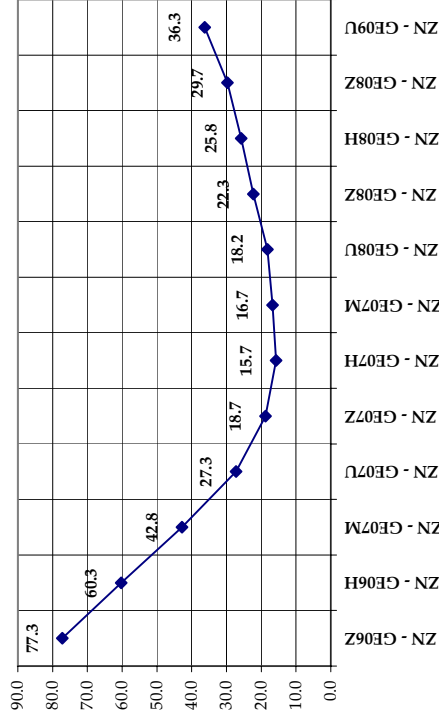
	Spread Price	ZN Yield	Spread Yield	Spread Name
@GE06Z	13.75	77.3	ZN - GE06Z	
@GE07H	13.58	60.3	ZN - GE06H	
@GE07M	13.40	42.8	ZN - GE07M	
@GE07U	13.25	27.3	ZN - GE07U	
@GE07Z	13.16	18.7	ZN - GE07Z	
@GE08H	13.13	15.7	ZN - GE07H	
@GE08M	13.14	16.7	ZN - GE07M	
@GE08U	13.16	18.2	ZN - GE08U	
@GE08Z	13.20	22.3	ZN - GE08Z	
@GE09H	13.23	25.8	ZN - GE08H	
@GE09M	13.27	29.7	ZN - GE08M	
@GE09U	13.34	36.3	ZN - GE09U	

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

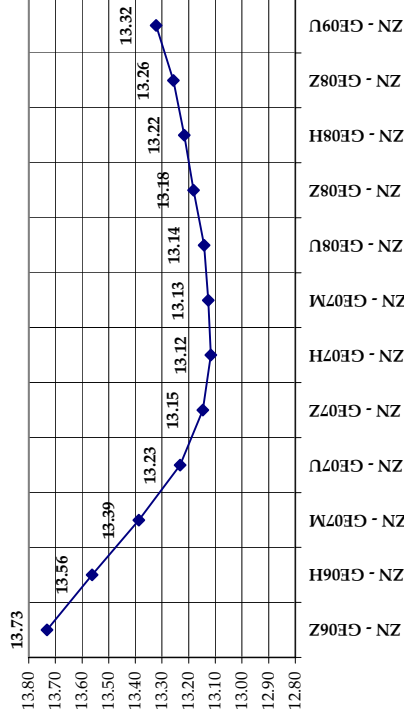


GE Duration as

Fraction of year	ZN Duration	Spread Duration
@GE06Z	0.229	5.50
@GE07H	0.479	5.25
@GE07M	0.728	5.00
@GE07U	0.977	4.75
@GE07Z	1.227	4.50
@GE08H	1.476	4.25
@GE08M	1.725	4.00
@GE08U	1.975	3.75
@GE08Z	2.224	3.50
@GE09H	2.473	3.25
@GE09M	2.723	3.00
@GE09U	2.972	2.75

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

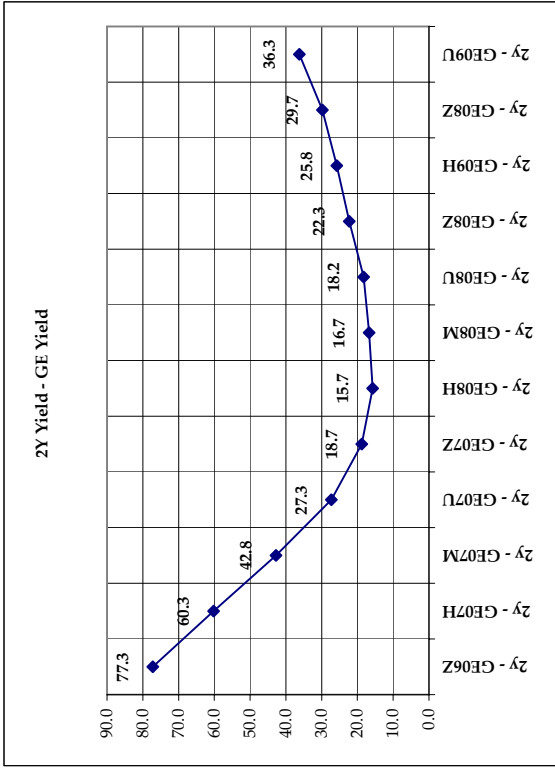
ZN Decimal Price - GE Price



TERM TED: 2y vs Eurodollar Contracts

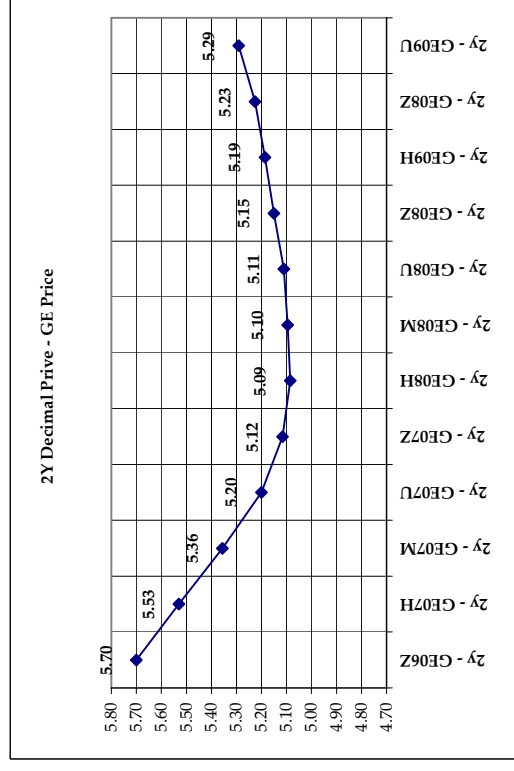
2y	
Spread Price	Spread Yield
@GE06Z	2y - GE06Z
@GE07H	2y - GE07H
@GE07M	2y - GE07M
@GE07U	2y - GE07U
@GE07Z	2y - GE07Z
@GE08H	2y - GE08H
@GE08M	2y - GE08M
@GE08U	2y - GE08U
@GE08Z	2y - GE08Z
@GE09H	2y - GE09H
@GE09M	2y - GE09M
@GE09U	2y - GE09U

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
@GE06Z	1.73	1.50
@GE07H	1.73	1.25
@GE07M	1.73	1.00
@GE07U	1.73	0.76
@GE07Z	1.73	0.51
@GE08H	1.73	0.26
@GE08M	1.73	0.01
@GE08U	1.73	(0.24)
@GE08Z	1.73	(0.49)
@GE09H	1.73	(0.74)
@GE09M	1.73	(0.99)
@GE09U	1.73	(1.24)

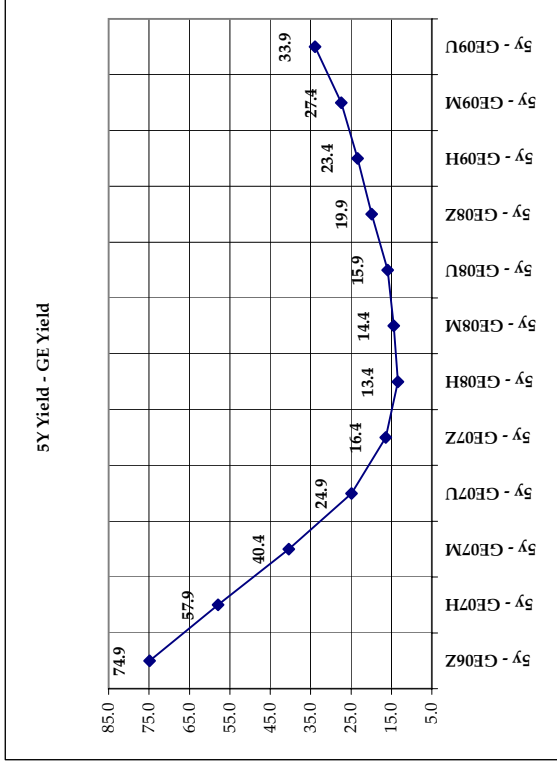
The farther away from 0 the spread duration is the riskier the trade.



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

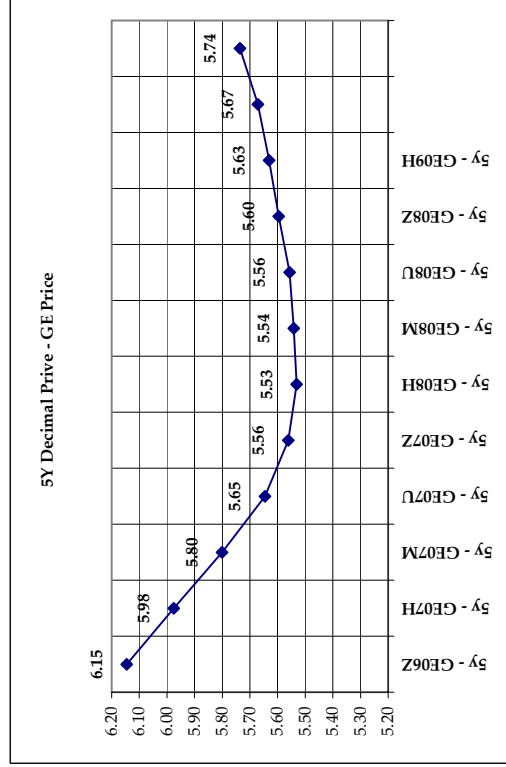
	Spread Price	Spread Yield	Spread Name
@GE06Z	6.15	74.9	5y - GE06Z
@GE07H	5.98	57.9	5y - GE07H
@GE07M	5.80	40.4	5y - GE07M
@GE07U	5.65	24.9	5y - GE07U
@GE07Z	5.56	16.4	5y - GE07Z
@GE08H	5.53	13.4	5y - GE08H
@GE08M	5.54	14.4	5y - GE08M
@GE08U	5.56	15.9	5y - GE08U
@GE08Z	5.60	19.9	5y - GE08Z
@GE09H	5.63	23.4	5y - GE09H
@GE09M	5.67	27.4	5y - GE09M
@GE09U	5.74	33.9	5y - GE09U

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
@GE06Z	0.229	4.02
@GE07H	0.479	3.77
@GE07M	0.728	3.52
@GE07U	0.977	3.27
@GE07Z	1.227	3.02
@GE08H	1.476	2.77
@GE08M	1.725	2.53
@GE08U	1.975	2.28
@GE08Z	2.224	2.03
@GE09H	2.473	1.78
@GE09M	2.723	1.53
@GE09U	2.972	1.28

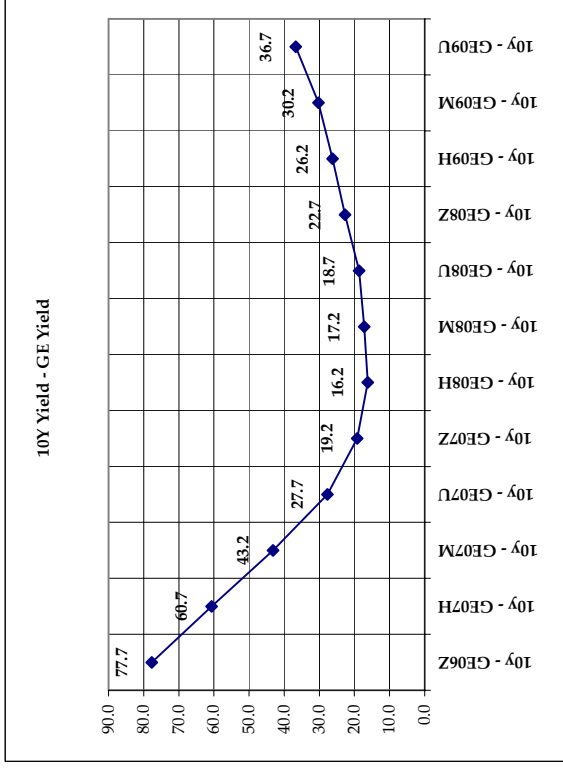
The farther away from 0 the spread duration is the riskier the trade.



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

	Spread Price	Spread Yield	10y Spread	10y Yield	Spread Name
@GE06Z	5.72	77.9	10y - GE06Z	77.9	10y - GE06Z
@GE07H	5.55	60.9	10y - GE07H	60.9	10y - GE07H
@GE07M	5.37	43.4	10y - GE07M	43.4	10y - GE07M
@GE07U	5.22	27.9	10y - GE07U	27.9	10y - GE07U
@GE07Z	5.13	19.4	10y - GE07Z	19.4	10y - GE07Z
@GE08H	5.10	16.4	10y - GE08H	16.4	10y - GE08H
@GE08M	5.11	17.4	10y - GE08M	17.4	10y - GE08M
@GE08U	5.13	18.9	10y - GE08U	18.9	10y - GE08U
@GE08Z	5.17	22.9	10y - GE08Z	22.9	10y - GE08Z
@GE09H	5.20	26.4	10y - GE09H	26.4	10y - GE09H
@GE09M	5.24	30.4	10y - GE09M	30.4	10y - GE09M
@GE09U	5.31	36.9	10y - GE09U	36.9	10y - GE09U

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
@GE06Z	0.229	7.77
@GE07H	0.479	7.77
@GE07M	0.728	7.77
@GE07U	0.977	7.77
@GE07Z	1.227	7.77
@GE08H	1.476	7.77
@GE08M	1.725	7.77
@GE08U	1.975	7.77
@GE08Z	2.224	7.77
@GE09H	2.473	7.77
@GE09M	2.723	7.77
@GE09U	2.972	7.77

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

