

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

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Rotate Me

		F.I. Futures and Cash			
	Last Decimal	Last 32	Last Yield*	**MDuration	
ZT	102.5313	102.170	4.555	1.89	
ZF	106.0625	106.020	4.465	3.96	
ZN	108.5938	108.190	4.543	5.92	
Blank					
2y	100.334	100.1070	4.557	1.82	
5y	100.678	100.2170	4.468	4.35	
10y	100.359	100.1150	4.579	7.83	

\*Futures use CTD for Last Yield

\*\*Mduration = Modified Macaulay Duration

		Eurodollars (ED)					
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month		
F.EDAU07	94.765	5.235	87	0.238	JUN	} White Pack	
F.EDAZ07	94.970	5.030	178	0.487	SEP		
F.EDAH08	95.165	4.835	269	0.736	DEC		
F.EDAM08	95.325	4.675	360	0.986	MAR	} Red Pack	
F.EDAU08	95.405	4.595	451	1.235	JUN		
F.EDAZ08	95.425	4.575	542	1.484	SEP		
F.EDAH09	95.410	4.590	633	1.734	DEC	} Green Pack	
F.EDAM09	95.385	4.615	724	1.983	MAR		
F.EDAU09	95.350	4.650	815	2.232	JUN		
F.EDAZ09	95.300	4.700	906	2.482	SEP		
F.EDAH10	95.245	4.755	997	2.731	DEC		
F.EDAM10	95.210	4.790	1088	2.980	MAR		

**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.

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

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

Color	Year	Contracts
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

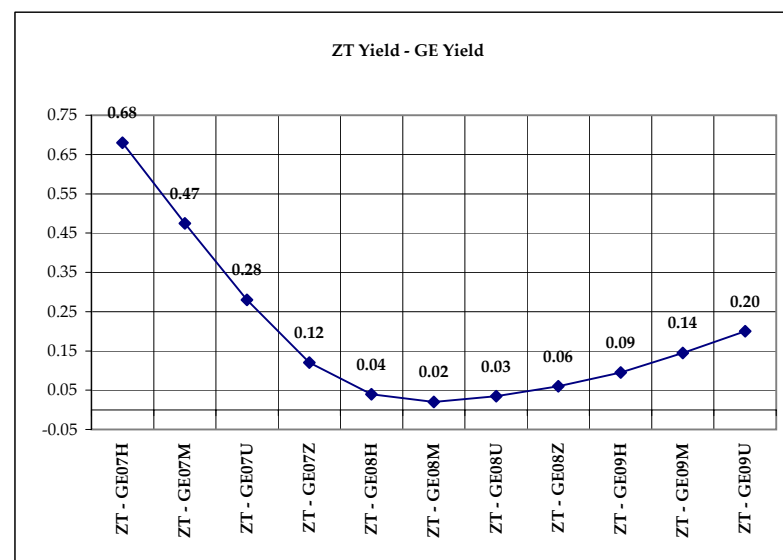
	ZT		
	Spread Price	Spread Yield	Spread Name
F.EDAM07	7.766	0.68	ZT - GE07H
F.EDAU07	7.561	0.47	ZT - GE07M
F.EDAZ07	7.366	0.28	ZT - GE07U
F.EDAH08	7.206	0.12	ZT - GE07Z
F.EDAM08	7.126	0.04	ZT - GE08H
F.EDAU08	7.106	0.02	ZT - GE08M
F.EDAZ08	7.121	0.03	ZT - GE08U
F.EDAH09	7.146	0.06	ZT - GE08Z
F.EDAM09	7.181	0.09	ZT - GE09H
F.EDAU09	7.231	0.14	ZT - GE09M
F.EDAZ09	7.286	0.20	ZT - GE09U
F.EDAH10	7.321	0.23	ZT - GE09Z

Price = Outright Decimal Price - Euro Contract Price  
 Yield = ABS(Proxy Yield - Implied Euro Contract yield)

GE Duration as Fraction of year

	ZT Duration	Spread Duration	
F.EDAM07	0.238	1.89	1.65
F.EDAU07	0.487	1.89	1.40
F.EDAZ07	0.736	1.89	1.15
F.EDAH08	0.986	1.89	0.90
F.EDAM08	1.235	1.89	0.65
F.EDAU08	1.484	1.89	0.40
F.EDAZ08	1.734	1.89	0.15
F.EDAH09	1.983	1.89	(0.10)
F.EDAM09	2.232	1.89	(0.34)
F.EDAU09	2.482	1.89	(0.59)
F.EDAZ09	2.731	1.89	(0.84)
F.EDAH10	2.980	1.89	(1.09)

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



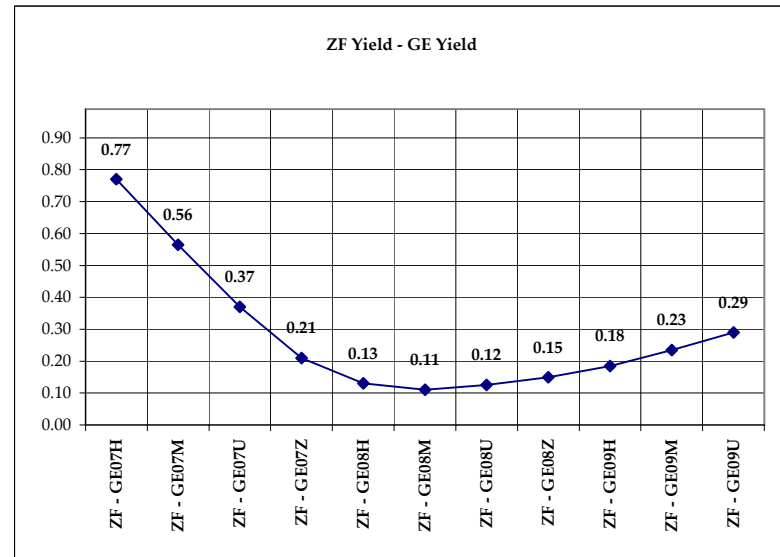
Dirty TED: ZF vs Eurodollar Contracts

ZF			
	Spread Price	Spread Yield	Spread Name
F.EDAM07	11.30	0.77	ZF - GE07H
F.EDAU07	11.09	0.56	ZF - GE07M
F.EDAZ07	10.90	0.37	ZF - GE07U
F.EDAH08	10.74	0.21	ZF - GE07Z
F.EDAM08	10.66	0.13	ZF - GE08H
F.EDAU08	10.64	0.11	ZF - GE08M
F.EDAZ08	10.65	0.12	ZF - GE08U
F.EDAH09	10.68	0.15	ZF - GE08Z
F.EDAM09	10.71	0.18	ZF - GE09H
F.EDAU09	10.76	0.23	ZF - GE09M
F.EDAZ09	10.82	0.29	ZF - GE09U
F.EDAH10	10.85	0.32	ZF - GE09U

Price = Outright Decimal Price - Euro Contract Price  
 Yield = ABS(Proxy Yield - Implied Euro Contract yield)

	GE Duration as Fraction of year	ZF Duration	Spread Duration	
F.EDAM07	0.238	3.96	3.72	ZF - GE07H
F.EDAU07	0.487	3.96	3.47	ZF - GE07M
F.EDAZ07	0.736	3.96	3.22	ZF - GE07U
F.EDAH08	0.986	3.96	2.97	ZF - GE07Z
F.EDAM08	1.235	3.96	2.72	ZF - GE08H
F.EDAU08	1.484	3.96	2.47	ZF - GE08M
F.EDAZ08	1.734	3.96	2.22	ZF - GE08U
F.EDAH09	1.983	3.96	1.97	ZF - GE08Z
F.EDAM09	2.232	3.96	1.72	ZF - GE09H
F.EDAU09	2.482	3.96	1.47	ZF - GE09M
F.EDAZ09	2.731	3.96	1.23	ZF - GE09U
F.EDAH10	2.980	3.96	0.98	ZF - GE09U

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



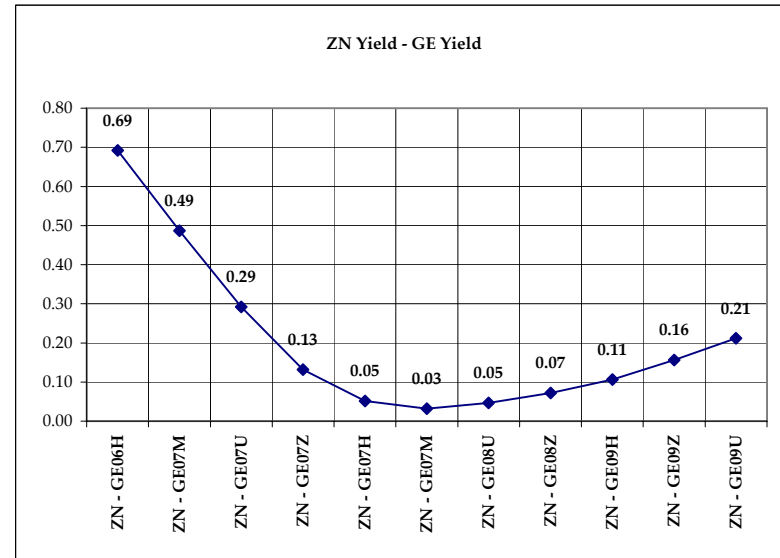
Dirty TED: ZN vs Eurodollar Contracts

ZN			
	Spread Price	Spread Yield	Spread Name
F.EDAM07	13.83	0.69	ZN - GE06H
F.EDAU07	13.62	0.49	ZN - GE07M
F.EDAZ07	13.43	0.29	ZN - GE07U
F.EDAH08	13.27	0.13	ZN - GE07Z
F.EDAM08	13.19	0.05	ZN - GE07H
F.EDAU08	13.17	0.03	ZN - GE07M
F.EDAZ08	13.18	0.05	ZN - GE08U
F.EDAH09	13.21	0.07	ZN - GE08Z
F.EDAM09	13.24	0.11	ZN - GE09H
F.EDAU09	13.29	0.16	ZN - GE09Z
F.EDAZ09	13.35	0.21	ZN - GE09U
F.EDAH10	13.38	0.25	ZN - GE09U

Price = Outright Decimal Price - Euro Contract Price  
 Yield = ABS(Proxy Yield - Implied Euro Contract yield)

	GE Duration as Fraction of year	ZN Duration	Spread Duration	
F.EDAM07	0.238	5.92	5.68	ZN - GE06H
F.EDAU07	0.487	5.92	5.43	ZN - GE07M
F.EDAZ07	0.736	5.92	5.18	ZN - GE07U
F.EDAH08	0.986	5.92	4.93	ZN - GE07Z
F.EDAM08	1.235	5.92	4.68	ZN - GE07H
F.EDAU08	1.484	5.92	4.43	ZN - GE07M
F.EDAZ08	1.734	5.92	4.18	ZN - GE08U
F.EDAH09	1.983	5.92	3.93	ZN - GE08Z
F.EDAM09	2.232	5.92	3.68	ZN - GE09H
F.EDAU09	2.482	5.92	3.43	ZN - GE09Z
F.EDAZ09	2.731	5.92	3.18	ZN - GE09U
F.EDAH10	2.980	5.92	2.94	ZN - GE09U

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TERM TED: 2y vs Eurodollar Contracts

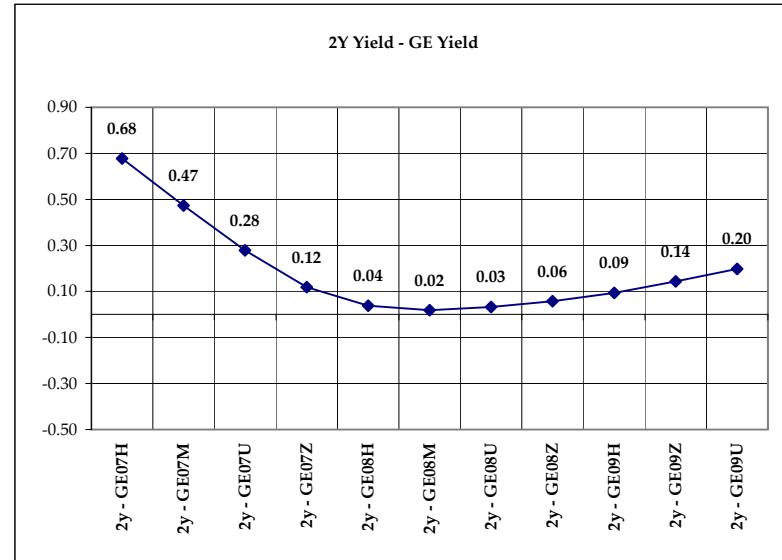
	2y		
	Spread Price	Spread Yield	Spread Name
F.EDAM07	5.57	0.68	2y - GE07H
F.EDAU07	5.36	0.47	2y - GE07M
F.EDAZ07	5.17	0.28	2y - GE07U
F.EDAH08	5.01	0.12	2y - GE07Z
F.EDAM08	4.93	0.04	2y - GE08H
F.EDAU08	4.91	0.02	2y - GE08M
F.EDAZ08	4.92	0.03	2y - GE08U
F.EDAH09	4.95	0.06	2y - GE08Z
F.EDAM09	4.98	0.09	2y - GE09H
F.EDAU09	5.03	0.14	2y - GE09Z
F.EDAZ09	5.09	0.20	2y - GE09U
F.EDAH10	5.12	0.23	2y - GE09U

Price = Outright Decimal Price - Euro Contract Price  
 Yield = ABS(Cash Yield - Implied Euro Contract yield)

GE Duration as Fraction of year

	2Y Duration	Spread Duration	
F.EDAM07	0.238	1.82	2y - GE07H
F.EDAU07	0.487	1.82	2y - GE07M
F.EDAZ07	0.736	1.82	2y - GE07U
F.EDAH08	0.986	1.82	2y - GE07Z
F.EDAM08	1.235	1.82	2y - GE08H
F.EDAU08	1.484	1.82	2y - GE08M
F.EDAZ08	1.734	1.82	2y - GE08U
F.EDAH09	1.983	1.82	2y - GE08Z
F.EDAM09	2.232	1.82	2y - GE09H
F.EDAU09	2.482	1.82	2y - GE09Z
F.EDAZ09	2.731	1.82	2y - GE09U
F.EDAH10	2.980	1.82	2y - GE09U

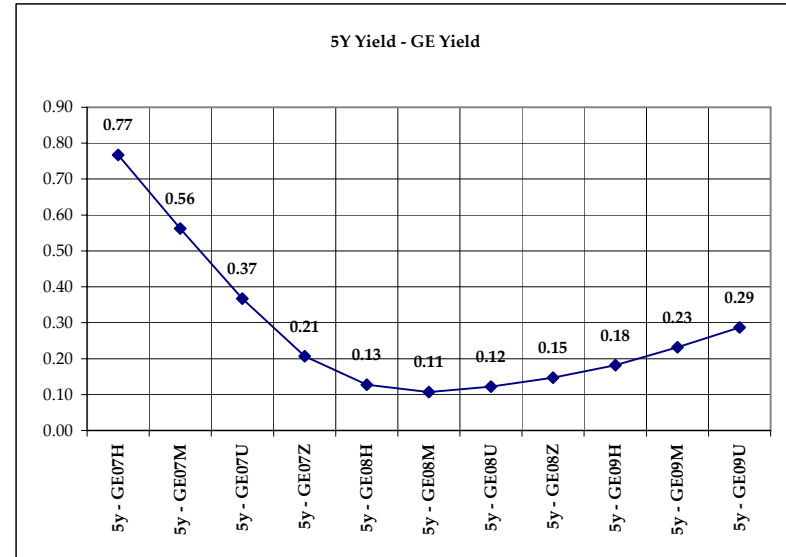
The farther away from 0 the spread duration is the riskier the trade.



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

5y			
	Spread Price	Spread Yield	Spread Name
F.EDAM07	5.91	0.77	5y - GE07H
F.EDAU07	5.71	0.56	5y - GE07M
F.EDAZ07	5.51	0.37	5y - GE07U
F.EDAH08	5.35	0.21	5y - GE07Z
F.EDAM08	5.27	0.13	5y - GE08H
F.EDAU08	5.25	0.11	5y - GE08M
F.EDAZ08	5.27	0.12	5y - GE08U
F.EDAH09	5.29	0.15	5y - GE08Z
F.EDAM09	5.33	0.18	5y - GE09H
F.EDAU09	5.38	0.23	5y - GE09M
F.EDAZ09	5.43	0.29	5y - GE09U
F.EDAH10	5.47	0.32	5y - GE09U

**Price** = Outright Decimal Price - Euro Contract Price  
**Yield** = ABS(Cash Yield - Implied Euro Contract yield)



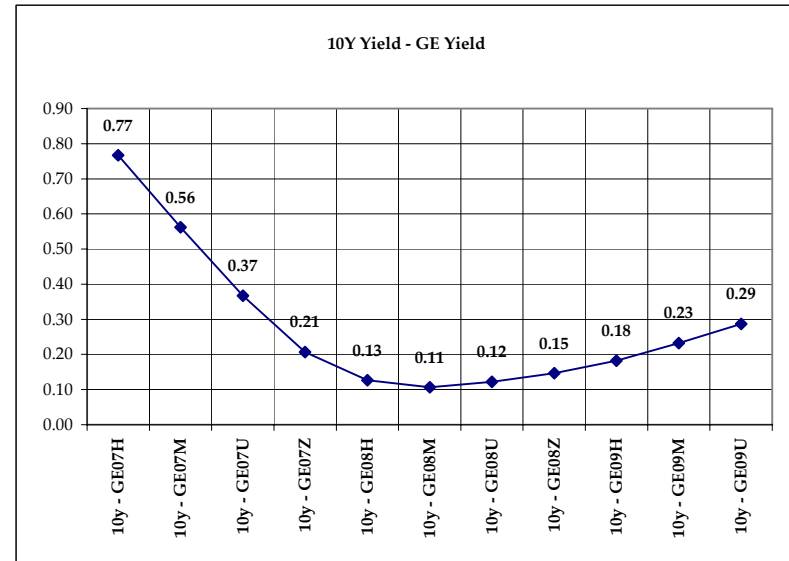
	GE Duration as Fraction of year	5Y Duration	Spread Duration	
F.EDAM07	0.238	4.35	4.12	5y - GE07H
F.EDAU07	0.487	4.35	3.87	5y - GE07M
F.EDAZ07	0.736	4.35	3.62	5y - GE07U
F.EDAH08	0.986	4.35	3.37	5y - GE07Z
F.EDAM08	1.235	4.35	3.12	5y - GE08H
F.EDAU08	1.484	4.35	2.87	5y - GE08M
F.EDAZ08	1.734	4.35	2.62	5y - GE08U
F.EDAH09	1.983	4.35	2.37	5y - GE08Z
F.EDAM09	2.232	4.35	2.12	5y - GE09H
F.EDAU09	2.482	4.35	1.87	5y - GE09M
F.EDAZ09	2.731	4.35	1.62	5y - GE09U
F.EDAH10	2.980	4.35	1.37	5y - GE09U

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
F.EDAM07	5.91	0.77	10y - GE07H
F.EDAU07	5.71	0.56	10y - GE07M
F.EDAZ07	5.51	0.37	10y - GE07U
F.EDAH08	5.35	0.21	10y - GE07Z
F.EDAM08	5.27	0.13	10y - GE08H
F.EDAU08	5.25	0.11	10y - GE08M
F.EDAZ08	5.27	0.12	10y - GE08U
F.EDAH09	5.29	0.15	10y - GE08Z
F.EDAM09	5.33	0.18	10y - GE09H
F.EDAU09	5.38	0.23	10y - GE09M
F.EDAZ09	5.43	0.29	10y - GE09U
F.EDAH10	5.47	0.32	10y - GE09U

Price = Outright Decimal Price - Euro Contract Price  
 Yield = ABS(Cash Yield - Implied Euro Contract yield)



	GE Duration as Fraction of year	10Y Duration	Spread Duration	
F.EDAM07	0.238	7.83	7.60	10y - GE07H
F.EDAU07	0.487	7.83	7.35	10y - GE07M
F.EDAZ07	0.736	7.83	7.10	10y - GE07U
F.EDAH08	0.986	7.83	6.85	10y - GE07Z
F.EDAM08	1.235	7.83	6.60	10y - GE08H
F.EDAU08	1.484	7.83	6.35	10y - GE08M
F.EDAZ08	1.734	7.83	6.10	10y - GE08U
F.EDAH09	1.983	7.83	5.85	10y - GE08Z
F.EDAM09	2.232	7.83	5.60	10y - GE09H
F.EDAU09	2.482	7.83	5.35	10y - GE09M
F.EDAZ09	2.731	7.83	5.10	10y - GE09U
F.EDAH10	2.980	7.83	4.85	10y - GE09U

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