

## **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	102.0844	102.027	4.776	1.84	
ZF	105.1094	105.035	4.678	3.89	
ZN	107.2813	107.090	4.735	5.84	
Blank					
2y	99.506	99.1620	4.762	1.84	
5y	99.178	99.0570	4.687	4.38	
10y	98.922	98.2950	4.763	7.75	

\*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.EDAM07	94.655	5.345	63	0.172	JUN	} White Pack	
F.EDAU07	94.730	5.270	154	0.421	SEP		
F.EDAZ07	94.875	5.125	245	0.671	DEC		
F.EDAH08	95.040	4.960	336	0.920	MAR	} Red Pack	
F.EDAM08	95.140	4.860	427	1.169	JUN		
F.EDAU08	95.175	4.825	518	1.419	SEP		
F.EDAZ08	95.165	4.835	609	1.668	DEC		
F.EDAH09	95.145	4.855	700	1.917	MAR	} Green Pack	
F.EDAM09	95.100	4.900	791	2.166	JUN		
F.EDAU09	95.060	4.940	882	2.416	SEP		
F.EDAZ09	95.015	4.985	973	2.665	DEC		
F.EDAH10	94.975	5.025	1064	2.914	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.

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**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

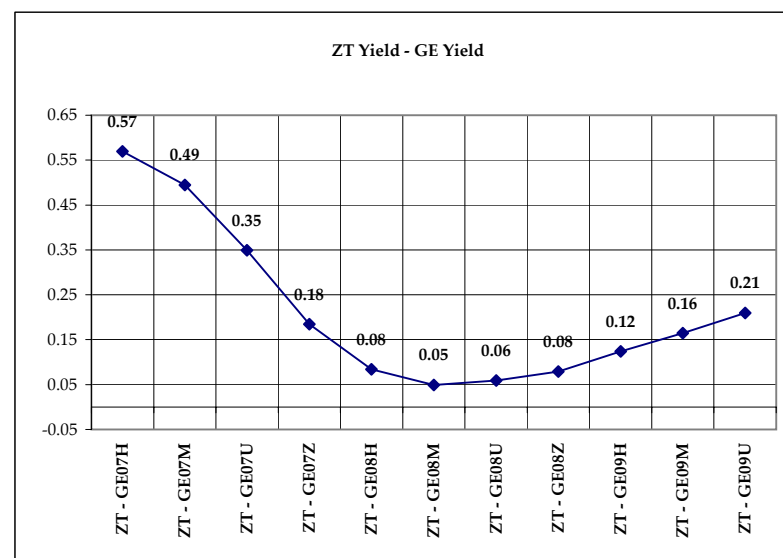
	ZT		
	Spread Price	Spread Yield	Spread Name
F.EDAM07	7.429	0.57	ZT - GE07H
F.EDAU07	7.354	0.49	ZT - GE07M
F.EDAZ07	7.209	0.35	ZT - GE07U
F.EDAH08	7.044	0.18	ZT - GE07Z
F.EDAM08	6.944	0.08	ZT - GE08H
F.EDAU08	6.909	0.05	ZT - GE08M
F.EDAZ08	6.919	0.06	ZT - GE08U
F.EDAH09	6.939	0.08	ZT - GE08Z
F.EDAM09	6.984	0.12	ZT - GE09H
F.EDAU09	7.024	0.16	ZT - GE09M
F.EDAZ09	7.069	0.21	ZT - GE09U
F.EDAH10	7.109	0.25	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	0.172	1.84	1.67
F.EDAU07	0.421	1.84	1.42
F.EDAZ07	0.671	1.84	1.17
F.EDAH08	0.920	1.84	0.92
F.EDAM08	1.169	1.84	0.68
F.EDAU08	1.419	1.84	0.43
F.EDAZ08	1.668	1.84	0.18
F.EDAH09	1.917	1.84	(0.07)
F.EDAM09	2.166	1.84	(0.32)
F.EDAU09	2.416	1.84	(0.57)
F.EDAZ09	2.665	1.84	(0.82)
F.EDAH10	2.914	1.84	(1.07)

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



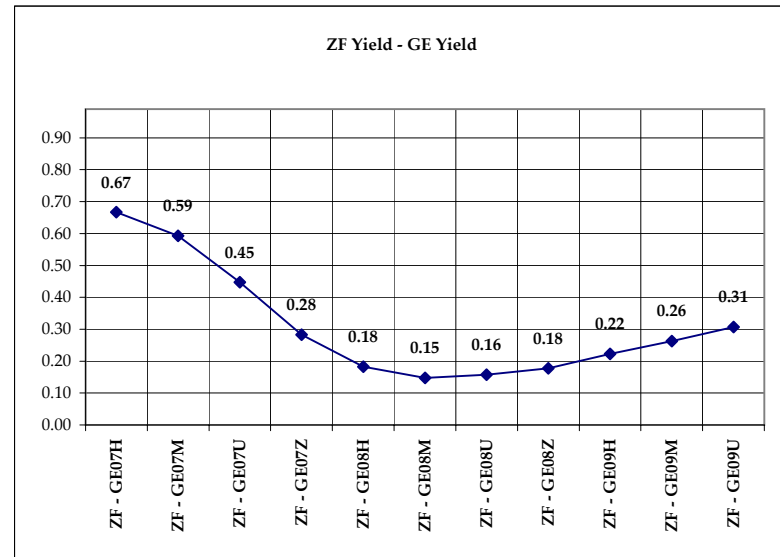
Dirty TED: ZF vs Eurodollar Contracts

ZF			
	Spread Price	Spread Yield	Spread Name
F.EDAM07	10.45	0.67	ZF - GE07H
F.EDAU07	10.38	0.59	ZF - GE07M
F.EDAZ07	10.23	0.45	ZF - GE07U
F.EDAH08	10.07	0.28	ZF - GE07Z
F.EDAM08	9.97	0.18	ZF - GE08H
F.EDAU08	9.93	0.15	ZF - GE08M
F.EDAZ08	9.94	0.16	ZF - GE08U
F.EDAH09	9.96	0.18	ZF - GE08Z
F.EDAM09	10.01	0.22	ZF - GE09H
F.EDAU09	10.05	0.26	ZF - GE09M
F.EDAZ09	10.09	0.31	ZF - GE09U
F.EDAH10	10.13	0.35	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	0.172	3.89	3.72	ZF - GE07H
F.EDAU07	0.421	3.89	3.47	ZF - GE07M
F.EDAZ07	0.671	3.89	3.22	ZF - GE07U
F.EDAH08	0.920	3.89	2.97	ZF - GE07Z
F.EDAM08	1.169	3.89	2.72	ZF - GE08H
F.EDAU08	1.419	3.89	2.47	ZF - GE08M
F.EDAZ08	1.668	3.89	2.22	ZF - GE08U
F.EDAH09	1.917	3.89	1.97	ZF - GE08Z
F.EDAM09	2.166	3.89	1.73	ZF - GE09H
F.EDAU09	2.416	3.89	1.48	ZF - GE09M
F.EDAZ09	2.665	3.89	1.23	ZF - GE09U
F.EDAH10	2.914	3.89	0.98	ZF - GE09U

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



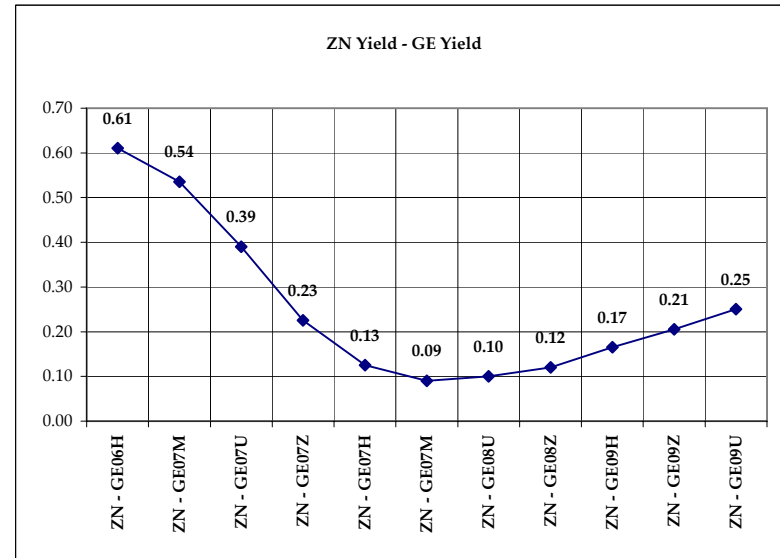
Dirty TED: ZN vs Eurodollar Contracts

ZN			
	Spread Price	Spread Yield	Spread Name
F.EDAM07	12.63	0.61	ZN - GE06H
F.EDAU07	12.55	0.54	ZN - GE07M
F.EDAZ07	12.41	0.39	ZN - GE07U
F.EDAH08	12.24	0.23	ZN - GE07Z
F.EDAM08	12.14	0.13	ZN - GE07H
F.EDAU08	12.11	0.09	ZN - GE07M
F.EDAZ08	12.12	0.10	ZN - GE08U
F.EDAH09	12.14	0.12	ZN - GE08Z
F.EDAM09	12.18	0.17	ZN - GE09H
F.EDAU09	12.22	0.21	ZN - GE09Z
F.EDAZ09	12.27	0.25	ZN - GE09U
F.EDAH10	12.31	0.29	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	0.172	5.84	5.67	ZN - GE06H
F.EDAU07	0.421	5.84	5.42	ZN - GE07M
F.EDAZ07	0.671	5.84	5.17	ZN - GE07U
F.EDAH08	0.920	5.84	4.92	ZN - GE07Z
F.EDAM08	1.169	5.84	4.68	ZN - GE07H
F.EDAU08	1.419	5.84	4.43	ZN - GE07M
F.EDAZ08	1.668	5.84	4.18	ZN - GE08U
F.EDAH09	1.917	5.84	3.93	ZN - GE08Z
F.EDAM09	2.166	5.84	3.68	ZN - GE09H
F.EDAU09	2.416	5.84	3.43	ZN - GE09Z
F.EDAZ09	2.665	5.84	3.18	ZN - GE09U
F.EDAH10	2.914	5.84	2.93	ZN - GE09U

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



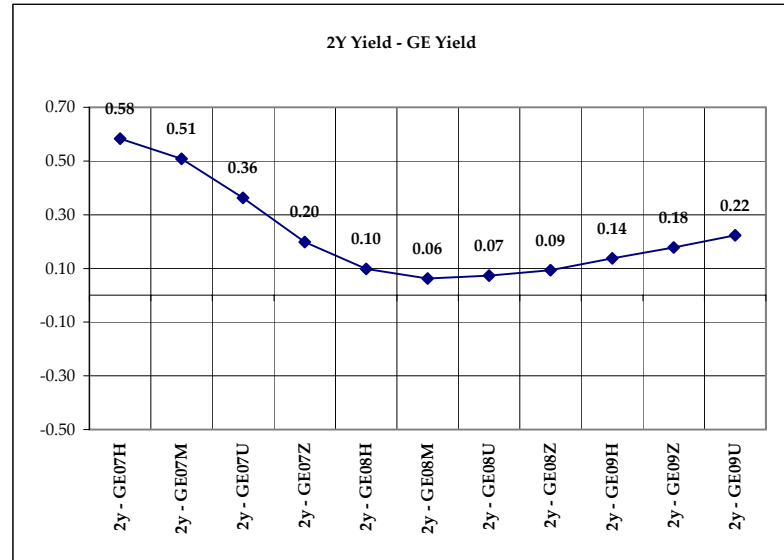
TERM TED: 2y vs Eurodollar Contracts

	2y		
	Spread Price	Spread Yield	Spread Name
F.EDAM07	4.85	0.58	2y - GE07H
F.EDAU07	4.78	0.51	2y - GE07M
F.EDAZ07	4.63	0.36	2y - GE07U
F.EDAH08	4.47	0.20	2y - GE07Z
F.EDAM08	4.37	0.10	2y - GE08H
F.EDAU08	4.33	0.06	2y - GE08M
F.EDAZ08	4.34	0.07	2y - GE08U
F.EDAH09	4.36	0.09	2y - GE08Z
F.EDAM09	4.41	0.14	2y - GE09H
F.EDAU09	4.45	0.18	2y - GE09Z
F.EDAZ09	4.49	0.22	2y - GE09U
F.EDAH10	4.53	0.26	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	0.172	1.84	1.67	2y - GE07H
F.EDAU07	0.421	1.84	1.42	2y - GE07M
F.EDAZ07	0.671	1.84	1.17	2y - GE07U
F.EDAH08	0.920	1.84	0.92	2y - GE07Z
F.EDAM08	1.169	1.84	0.68	2y - GE08H
F.EDAU08	1.419	1.84	0.43	2y - GE08M
F.EDAZ08	1.668	1.84	0.18	2y - GE08U
F.EDAH09	1.917	1.84	(0.07)	2y - GE08Z
F.EDAM09	2.166	1.84	(0.32)	2y - GE09H
F.EDAU09	2.416	1.84	(0.57)	2y - GE09Z
F.EDAZ09	2.665	1.84	(0.82)	2y - GE09U
F.EDAH10	2.914	1.84	(1.07)	2y - GE09U

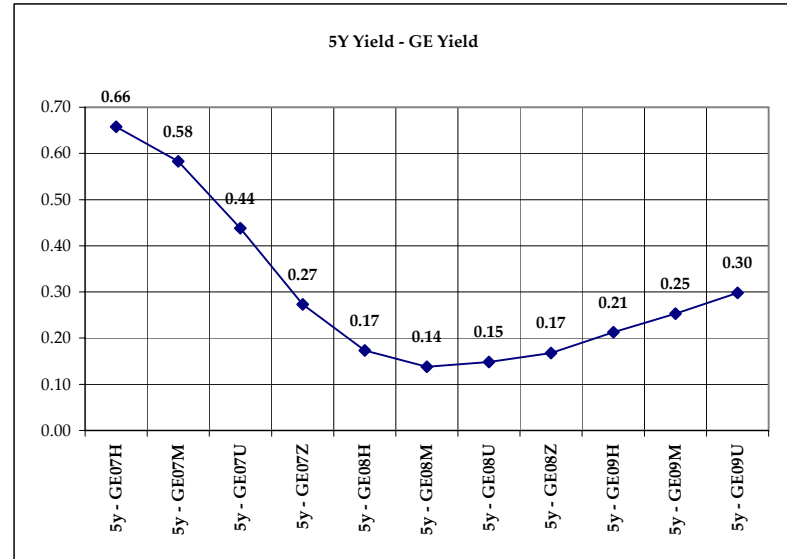
The farther away from 0 the spread duration is the riskier the trade.



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

5y			
	Spread Price	Spread Yield	Spread Name
F.EDAM07	4.52	0.66	5y - GE07H
F.EDAU07	4.45	0.58	5y - GE07M
F.EDAZ07	4.30	0.44	5y - GE07U
F.EDAH08	4.14	0.27	5y - GE07Z
F.EDAM08	4.04	0.17	5y - GE08H
F.EDAU08	4.00	0.14	5y - GE08M
F.EDAZ08	4.01	0.15	5y - GE08U
F.EDAH09	4.03	0.17	5y - GE08Z
F.EDAM09	4.08	0.21	5y - GE09H
F.EDAU09	4.12	0.25	5y - GE09M
F.EDAZ09	4.16	0.30	5y - GE09U
F.EDAH10	4.20	0.34	5y - GE09U

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



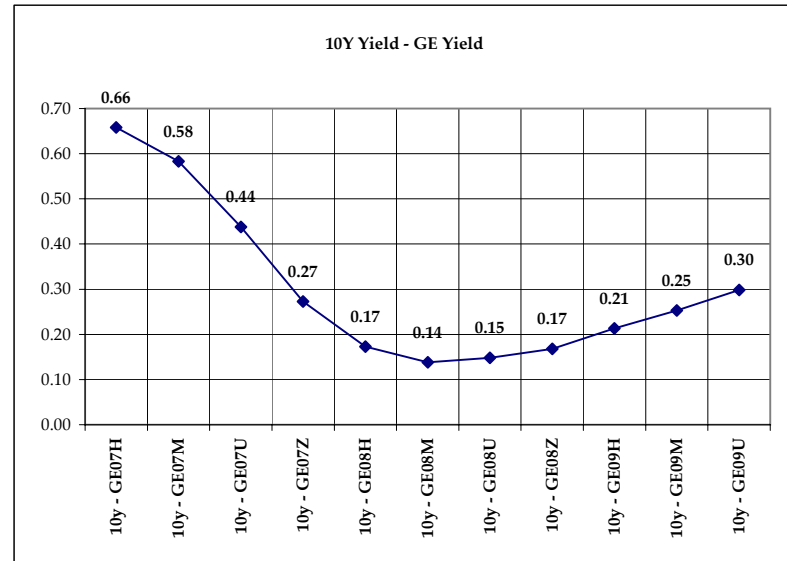
	GE Duration as Fraction of year	5Y Duration	Spread Duration	
F.EDAM07	0.172	4.38	4.21	5y - GE07H
F.EDAU07	0.421	4.38	3.96	5y - GE07M
F.EDAZ07	0.671	4.38	3.71	5y - GE07U
F.EDAH08	0.920	4.38	3.46	5y - GE07Z
F.EDAM08	1.169	4.38	3.21	5y - GE08H
F.EDAU08	1.419	4.38	2.96	5y - GE08M
F.EDAZ08	1.668	4.38	2.71	5y - GE08U
F.EDAH09	1.917	4.38	2.46	5y - GE08Z
F.EDAM09	2.166	4.38	2.21	5y - GE09H
F.EDAU09	2.416	4.38	1.97	5y - GE09M
F.EDAZ09	2.665	4.38	1.72	5y - GE09U
F.EDAH10	2.914	4.38	1.47	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	4.52	0.66	10y - GE07H
F.EDAU07	4.45	0.58	10y - GE07M
F.EDAZ07	4.30	0.44	10y - GE07U
F.EDAH08	4.14	0.27	10y - GE07Z
F.EDAM08	4.04	0.17	10y - GE08H
F.EDAU08	4.00	0.14	10y - GE08M
F.EDAZ08	4.01	0.15	10y - GE08U
F.EDAH09	4.03	0.17	10y - GE08Z
F.EDAM09	4.08	0.21	10y - GE09H
F.EDAU09	4.12	0.25	10y - GE09M
F.EDAZ09	4.16	0.30	10y - GE09U
F.EDAH10	4.20	0.34	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	0.172	7.75	7.58	10y - GE07H
F.EDAU07	0.421	7.75	7.33	10y - GE07M
F.EDAZ07	0.671	7.75	7.08	10y - GE07U
F.EDAH08	0.920	7.75	6.83	10y - GE07Z
F.EDAM08	1.169	7.75	6.58	10y - GE08H
F.EDAU08	1.419	7.75	6.33	10y - GE08M
F.EDAZ08	1.668	7.75	6.08	10y - GE08U
F.EDAH09	1.917	7.75	5.84	10y - GE08Z
F.EDAM09	2.166	7.75	5.59	10y - GE09H
F.EDAU09	2.416	7.75	5.34	10y - GE09M
F.EDAZ09	2.665	7.75	5.09	10y - GE09U
F.EDAH10	2.914	7.75	4.84	10y - GE09U

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