

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

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Rotate Me

F.I. Futures and Cash			
	Last Decimal	Last 32	Last Yield*
ZT	101.9125	101.292	4.863
ZF	104.8906	104.285	4.740
ZN	107.2813	107.090	4.736
Blank			
2y	99.781	99.2500	4.864
5y	99.516	99.1650	4.732
10y	99.063	99.0200	4.743

\*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.EDAH07	94.645	5.355	66	0.180	MAR	White Pack
F.EDAM07	94.725	5.275	157	0.429	JUN	
F.EDAU07	94.850	5.150	248	0.679	SEP	
F.EDAZ07	94.975	5.025	339	0.928	DEC	
F.EDAH08	95.055	4.945	430	1.177	MAR	Red Pack
F.EDAM08	95.085	4.915	521	1.427	JUN	
F.EDAU08	95.100	4.900	612	1.676	SEP	
F.EDAZ08	95.100	4.900	703	1.925	DEC	Green Pack
F.EDAH09	95.095	4.905	794	2.175	MAR	
F.EDAM09	95.075	4.925	885	2.424	JUN	
F.EDAU09	95.050	4.950	976	2.673	SEP	
F.EDAZ09	95.000	5.000	1067	2.923	DEC	

**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

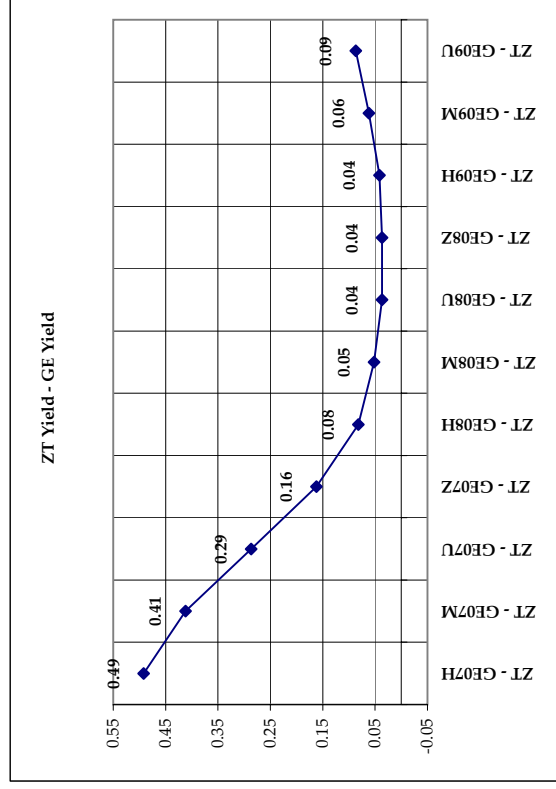
Dirty TED: ZT vs Eurodollar Contracts

ZT

	Spread Price	Spread Yield	Spread Name
F.EDAH07	7.268	0.49	ZT - GE07H
F.EDAM07	7.188	0.41	ZT - GE07M
F.EDAU07	7.063	0.29	ZT - GE07U
F.EDAZ07	6.938	0.16	ZT - GE07Z
F.EDAH08	6.858	0.08	ZT - GE08H
F.EDAM08	6.828	0.05	ZT - GE08M
F.EDAU08	6.813	0.04	ZT - GE08U
F.EDAZ08	6.813	0.04	ZT - GE08Z
F.EDAH09	6.818	0.04	ZT - GE09H
F.EDAM09	6.838	0.06	ZT - GE09M
F.EDAU09	6.863	0.09	ZT - GE09U
F.EDAZ09	6.913	0.14	ZT - GE09Z

Price = Outright Decimal Price - Euro Contract Price

Yield = ABS(Proxy Yield - Implied Euro Contract yield)



GE Duration as Fraction of year

	Duration	ZT Duration	Spread Duration
F.EDAH07	0.180	1.85	1.66
F.EDAM07	0.429	1.85	1.42
F.EDAU07	0.679	1.85	1.17
F.EDAZ07	0.928	1.85	0.92
F.EDAH08	1.177	1.85	0.67
F.EDAM08	1.427	1.85	0.42
F.EDAU08	1.676	1.85	0.17
F.EDAZ08	1.925	1.85	(0.08)
F.EDAH09	2.175	1.85	(0.33)
F.EDAM09	2.424	1.85	(0.58)
F.EDAU09	2.673	1.85	(0.83)
F.EDAZ09	2.923	1.85	(1.08)

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.EDAH07	10.25	0.62	ZF - GE07H
F.EDAM07	10.17	0.54	ZF - GE07M
F.EDAU07	10.04	0.41	ZF - GE07U
F.EDAZ07	9.92	0.29	ZF - GE07Z
F.EDAH08	9.84	0.21	ZF - GE08H
F.EDAM08	9.81	0.18	ZF - GE08M
F.EDAU08	9.79	0.16	ZF - GE08U
F.EDAZ08	9.79	0.16	ZF - GE08Z
F.EDAH09	9.80	0.17	ZF - GE09H
F.EDAM09	9.82	0.19	ZF - GE09M
F.EDAU09	9.84	0.21	ZF - GE09U
F.EDAZ09	9.89	0.26	ZF - GE09Z

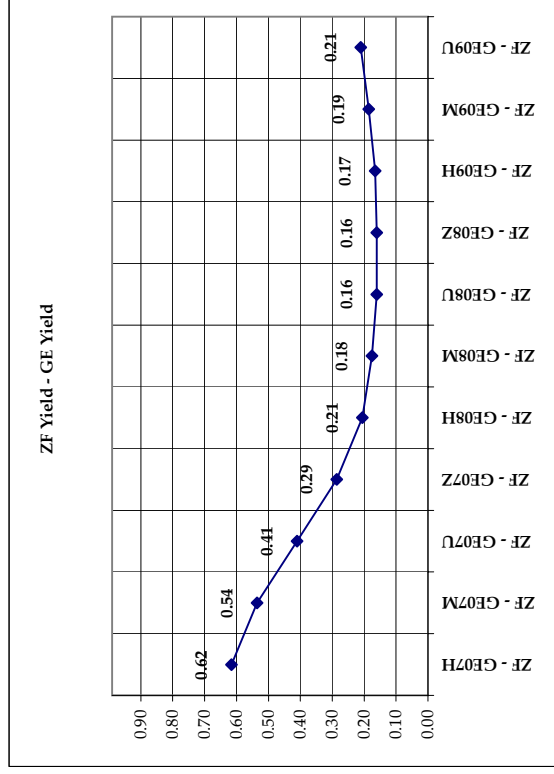
Price = Outright Decimal Price - Euro Contract Price

Yield = ABS(Proxy Yield - Implied Euro Contract yield)

**GE Duration as Fraction of year**

	Duration	ZF Duration	Spread Duration
F.EDAH07	0.180	3.88	3.70
F.EDAM07	0.429	3.88	3.45
F.EDAU07	0.679	3.88	3.20
F.EDAZ07	0.928	3.88	2.95
F.EDAH08	1.177	3.88	2.70
F.EDAM08	1.427	3.88	2.45
F.EDAU08	1.676	3.88	2.20
F.EDAZ08	1.925	3.88	1.95
F.EDAH09	2.175	3.88	1.70
F.EDAM09	2.424	3.88	1.45
F.EDAU09	2.673	3.88	1.20
F.EDAZ09	2.923	3.88	0.96

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

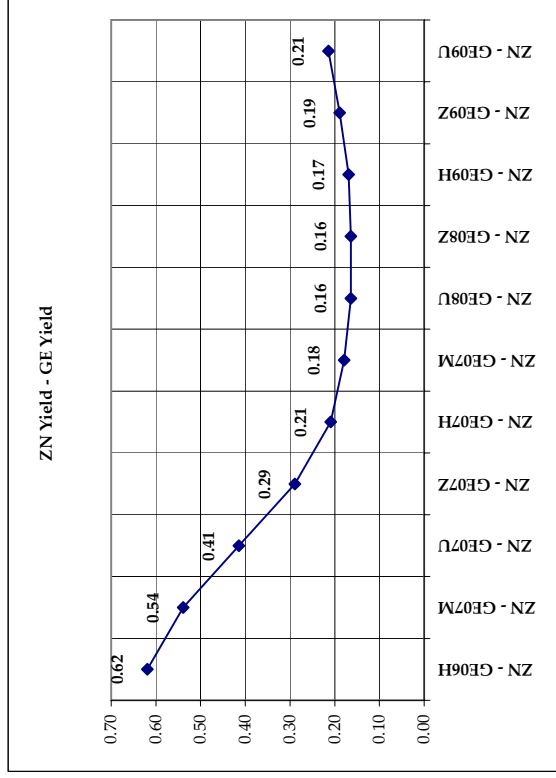


**Dirty TED: ZN vs Eurodollar Contracts**

	Spread Price	ZN Spread Yield	Spread Name
F.EDAH07	12.64	0.62	ZN - GE06H
F.EDAM07	12.56	0.54	ZN - GE07M
F.EDAU07	12.43	0.41	ZN - GE07U
F.EDAZ07	12.31	0.29	ZN - GE07Z
F.EDA+H08	12.23	0.21	ZN - GE07H
F.EDAM08	12.20	0.18	ZN - GE07M
F.EDAU08	12.18	0.16	ZN - GE08U
F.EDAZ08	12.18	0.16	ZN - GE08Z
F.EDA+H09	12.19	0.17	ZN - GE09H
F.EDAM09	12.21	0.19	ZN - GE09M
F.EDAU09	12.23	0.21	ZN - GE09U
F.EDAZ09	12.28	0.26	ZN - GE09Z

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.EDAH07	0.180	5.63
F.EDAM07	0.429	5.38
F.EDAU07	0.679	5.13
F.EDAZ07	0.928	4.88
F.EDA+H08	1.177	4.63
F.EDAM08	1.427	4.38
F.EDAU08	1.676	4.13
F.EDAZ08	1.925	3.88
F.EDA+H09	2.175	3.63
F.EDAM09	2.424	3.38
F.EDAU09	2.673	3.13
F.EDAZ09	2.923	2.88

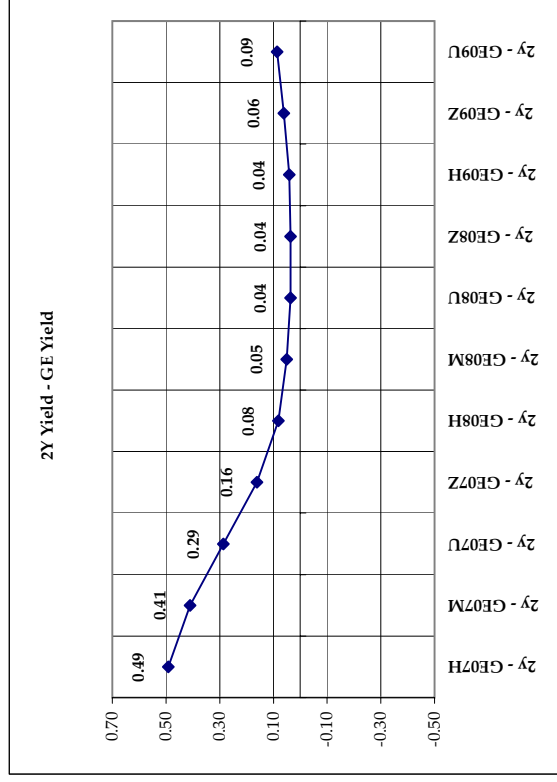
The farther away from 0 the spread duration is the riskier the trade.

TERM TED: 2y vs Eurodollar Contracts

	Spread Price	2y Spread Yield	Spread Name
F.EDAH07	5.14	0.49	2y - GE07H
F.EDAM07	5.06	0.41	2y - GE07M
F.EDAU07	4.93	0.29	2y - GE07U
F.EDAZ07	4.81	0.16	2y - GE07Z
F.EDAH08	4.73	0.08	2y - GE08H
F.EDAM08	4.70	0.05	2y - GE08M
F.EDAU08	4.68	0.04	2y - GE08U
F.EDAZ08	4.68	0.04	2y - GE08Z
F.EDAH09	4.69	0.04	2y - GE09H
F.EDAM09	4.71	0.06	2y - GE09Z
F.EDAU09	4.73	0.09	2y - GE09U
F.EDAZ09	4.78	0.14	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.EDAH07	0.180	1.85	1.66	2y - GE07H
F.EDAM07	0.429	1.85	1.42	2y - GE07M
F.EDAU07	0.679	1.85	1.17	2y - GE07U
F.EDAZ07	0.928	1.85	0.92	2y - GE07Z
F.EDAH08	1.177	1.85	0.67	2y - GE08H
F.EDAM08	1.427	1.85	0.42	2y - GE08M
F.EDAU08	1.676	1.85	0.17	2y - GE08U
F.EDAZ08	1.925	1.85	(0.08)	2y - GE08Z
F.EDAH09	2.175	1.85	(0.33)	2y - GE09H
F.EDAM09	2.424	1.85	(0.58)	2y - GE09Z
F.EDAU09	2.673	1.85	(0.83)	2y - GE09U
F.EDAZ09	2.923	1.85	(1.08)	2y - GE09U

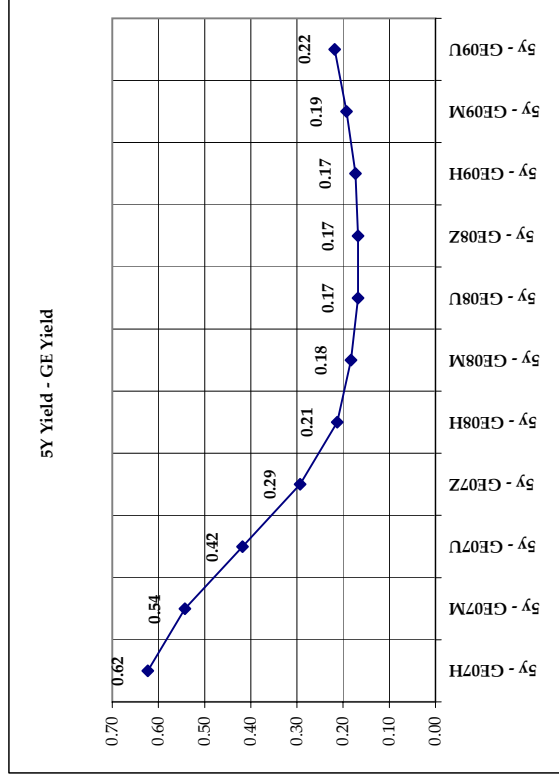
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**TERM TED: 5y vs Eurodollar Contracts**

	Spread Price	5y Spread Yield	Spread Name
F.EDAH07	4.87	0.62	5y - GE07H
F.EDAM07	4.79	0.54	5y - GE07M
F.EDAU07	4.67	0.42	5y - GE07U
F.EDAZ07	4.54	0.29	5y - GE07Z
F.EDAH08	4.46	0.21	5y - GE08H
F.EDAM08	4.43	0.18	5y - GE08M
F.EDAU08	4.42	0.17	5y - GE08U
F.EDAZ08	4.42	0.17	5y - GE08Z
F.EDAH09	4.42	0.17	5y - GE09H
F.EDAM09	4.44	0.19	5y - GE09M
F.EDAU09	4.47	0.22	5y - GE09U
F.EDAZ09	4.52	0.27	5y - GE09Z

Price = Outright Decimal Price - Euro Contract Price

Yield = ABS(Cash Yield - Implied Euro Contract yield)



**GE Duration as Fraction of year**

	5Y Fraction of year	5Y Duration	Spread Duration
F.EDAH07	0.180	4.37	4.19
F.EDAM07	0.429	4.37	3.95
F.EDAU07	0.679	4.37	3.70
F.EDAZ07	0.928	4.37	3.45
F.EDAH08	1.177	4.37	3.20
F.EDAM08	1.427	4.37	2.95
F.EDAU08	1.676	4.37	2.70
F.EDAZ08	1.925	4.37	2.45
F.EDAH09	2.175	4.37	2.20
F.EDAM09	2.424	4.37	1.95
F.EDAU09	2.673	4.37	1.70
F.EDAZ09	2.923	4.37	1.45

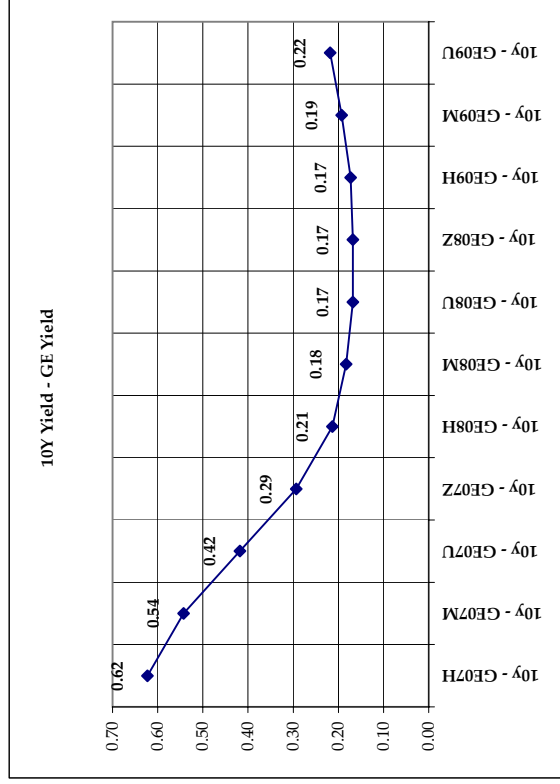
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**TERM TED: 10y vs Eurodollar Contracts**

	Spread Price	10y Spread Yield	Spread Name
F.EDAH07	4.87	0.62	10y - GE07H
F.EDAM07	4.79	0.54	10y - GE07M
F.EDAU07	4.67	0.42	10y - GE07U
F.EDAZ07	4.54	0.29	10y - GE07Z
F.EDAH08	4.46	0.21	10y - GE08H
F.EDAM08	4.43	0.18	10y - GE08M
F.EDAU08	4.42	0.17	10y - GE08U
F.EDAZ08	4.42	0.17	10y - GE08Z
F.EDAH09	4.42	0.17	10y - GE09H
F.EDAM09	4.44	0.19	10y - GE09M
F.EDAU09	4.47	0.22	10y - GE09U
F.EDAZ09	4.52	0.27	10y - GE09Z

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.EDAH07	0.180	7.57
F.EDAM07	0.429	7.33
F.EDAU07	0.679	7.08
F.EDAZ07	0.928	6.83
F.EDAH08	1.177	6.58
F.EDAM08	1.427	6.33
F.EDAU08	1.676	6.08
F.EDAZ08	1.925	5.83
F.EDAH09	2.175	5.58
F.EDAM09	2.424	5.33
F.EDAU09	2.673	5.08
F.EDAZ09	2.923	4.83

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