

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

### **Table of Contents**

- Pg1 Overview and hedges
- Pg2 Dirty TED: ZT vs Eurodollar Contracts
- Pg3 Dirty TED: ZF vs Eurodollar Contracts
- Pg4 Dirty TED: ZN vs Eurodollar Contracts
- Pg5 TERM TED: 2y vs Eurodollar Contracts
- Pg6 TERM TED: 5y vs Eurodollar Contracts
- Pg7 TERM TED: 10y vs Eurodollar Contracts

Rotate Me

		F.I. Futures and Cash			
	Last Decimal	Last 32	Last Yield*	**MDuration	
ZT	101.9906	101.317	4.809	1.75	
ZF	105.1250	105.040	4.657	3.79	
ZN	107.5938	107.190	4.656	5.72	
Blank					
2y	100.100	100.0320	4.815	1.83	
5y	100.344	100.1100	4.671	4.36	
10y	99.469	99.1500	4.690	7.91	

\*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	31	0.084	MAR	} White Pack	
F.EDAM07	94.690	5.310	122	0.334	JUN		
F.EDAU07	94.820	5.180	213	0.583	SEP		
F.EDAZ07	94.970	5.030	304	0.832	DEC	} Red Pack	
F.EDAH08	95.085	4.915	395	1.082	MAR		
F.EDAM08	95.145	4.855	486	1.331	JUN		
F.EDAU08	95.180	4.820	577	1.580	SEP		
F.EDAZ08	95.185	4.815	668	1.829	DEC	} Green Pack	
F.EDAH09	95.175	4.825	759	2.079	MAR		
F.EDAM09	95.155	4.845	850	2.328	JUN		
F.EDAU09	95.120	4.880	941	2.577	SEP		
F.EDAZ09	95.075	4.925	1032	2.827	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:**

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.EDAH07	7.346	0.55	ZT - GE07H
F.EDAM07	7.301	0.50	ZT - GE07M
F.EDAU07	7.171	0.37	ZT - GE07U
F.EDAZ07	7.021	0.22	ZT - GE07Z
F.EDAH08	6.906	0.11	ZT - GE08H
F.EDAM08	6.846	0.05	ZT - GE08M
F.EDAU08	6.811	0.01	ZT - GE08U
F.EDAZ08	6.806	0.01	ZT - GE08Z
F.EDAH09	6.816	0.02	ZT - GE09H
F.EDAM09	6.836	0.04	ZT - GE09M
F.EDAU09	6.871	0.07	ZT - GE09U
F.EDAZ09	6.916	0.12	ZT - GE09Z

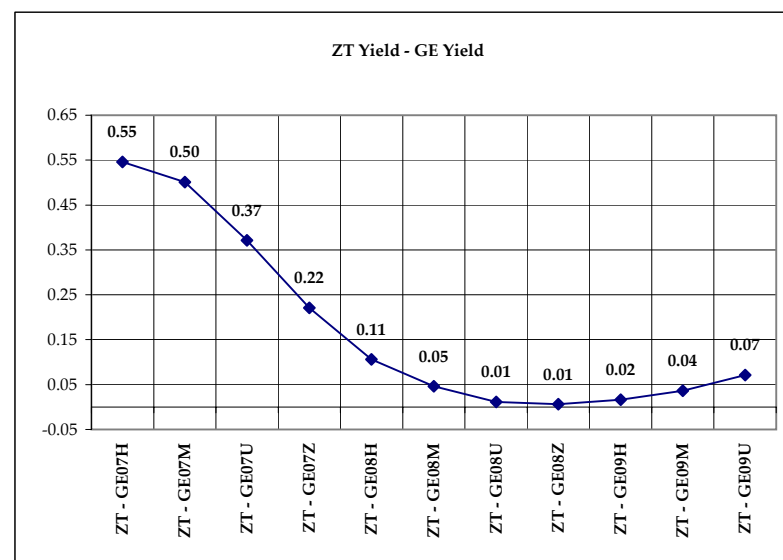
Price = Outright Decimal Price - Euro Contract Price

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

GE Duration as Fraction of year

	ZT Duration	Spread Duration	
F.EDAH07	0.084	1.75	1.67
F.EDAM07	0.334	1.75	1.42
F.EDAU07	0.583	1.75	1.17
F.EDAZ07	0.832	1.75	0.92
F.EDAH08	1.082	1.75	0.67
F.EDAM08	1.331	1.75	0.42
F.EDAU08	1.580	1.75	0.17
F.EDAZ08	1.829	1.75	(0.08)
F.EDAH09	2.079	1.75	(0.33)
F.EDAM09	2.328	1.75	(0.58)
F.EDAU09	2.577	1.75	(0.83)
F.EDAZ09	2.827	1.75	(1.08)

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



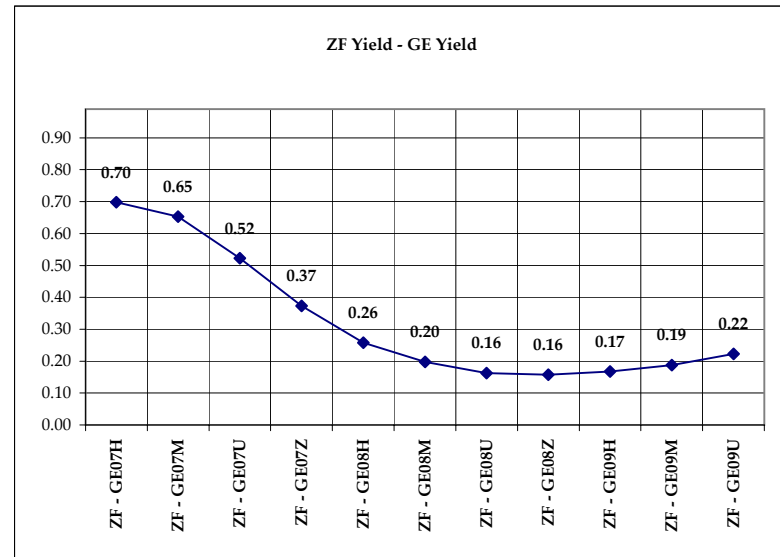
Dirty TED: ZF vs Eurodollar Contracts

ZF			
	Spread Price	Spread Yield	Spread Name
F.EDAH07	10.48	0.70	ZF - GE07H
F.EDAM07	10.44	0.65	ZF - GE07M
F.EDAU07	10.31	0.52	ZF - GE07U
F.EDAZ07	10.16	0.37	ZF - GE07Z
F.EDAH08	10.04	0.26	ZF - GE08H
F.EDAM08	9.98	0.20	ZF - GE08M
F.EDAU08	9.95	0.16	ZF - GE08U
F.EDAZ08	9.94	0.16	ZF - GE08Z
F.EDAH09	9.95	0.17	ZF - GE09H
F.EDAM09	9.97	0.19	ZF - GE09M
F.EDAU09	10.01	0.22	ZF - GE09U
F.EDAZ09	10.05	0.27	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.EDAH07	0.084	3.79	3.70	ZF - GE07H
F.EDAM07	0.334	3.79	3.45	ZF - GE07M
F.EDAU07	0.583	3.79	3.20	ZF - GE07U
F.EDAZ07	0.832	3.79	2.95	ZF - GE07Z
F.EDAH08	1.082	3.79	2.70	ZF - GE08H
F.EDAM08	1.331	3.79	2.46	ZF - GE08M
F.EDAU08	1.580	3.79	2.21	ZF - GE08U
F.EDAZ08	1.829	3.79	1.96	ZF - GE08Z
F.EDAH09	2.079	3.79	1.71	ZF - GE09H
F.EDAM09	2.328	3.79	1.46	ZF - GE09M
F.EDAU09	2.577	3.79	1.21	ZF - GE09U
F.EDAZ09	2.827	3.79	0.96	ZF - GE09U

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



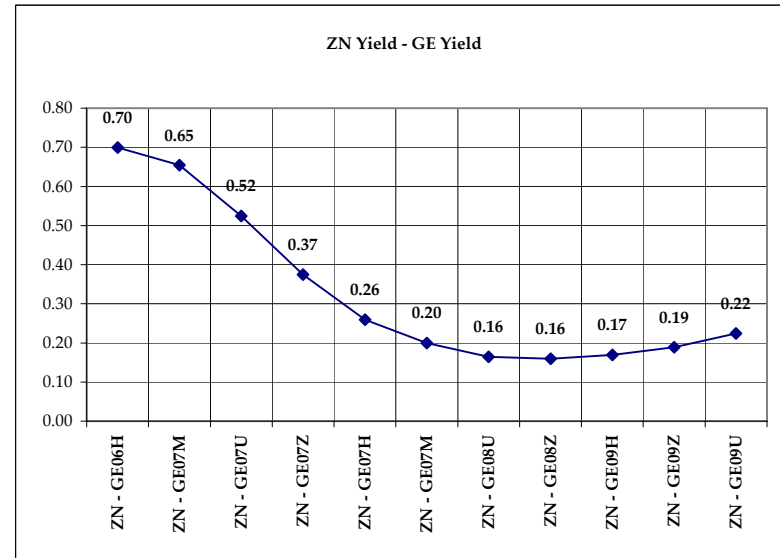
Dirty TED: ZN vs Eurodollar Contracts

ZN			
	Spread Price	Spread Yield	Spread Name
F.EDAH07	12.95	0.70	ZN - GE06H
F.EDAM07	12.90	0.65	ZN - GE07M
F.EDAU07	12.77	0.52	ZN - GE07U
F.EDAZ07	12.62	0.37	ZN - GE07Z
F.EDAH08	12.51	0.26	ZN - GE07H
F.EDAM08	12.45	0.20	ZN - GE07M
F.EDAU08	12.41	0.16	ZN - GE08U
F.EDAZ08	12.41	0.16	ZN - GE08Z
F.EDAH09	12.42	0.17	ZN - GE09H
F.EDAM09	12.44	0.19	ZN - GE09Z
F.EDAU09	12.47	0.22	ZN - GE09U
F.EDAZ09	12.52	0.27	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.EDAH07	0.084	5.72	5.63	ZN - GE06H
F.EDAM07	0.334	5.72	5.38	ZN - GE07M
F.EDAU07	0.583	5.72	5.13	ZN - GE07U
F.EDAZ07	0.832	5.72	4.88	ZN - GE07Z
F.EDAH08	1.082	5.72	4.63	ZN - GE07H
F.EDAM08	1.331	5.72	4.39	ZN - GE07M
F.EDAU08	1.580	5.72	4.14	ZN - GE08U
F.EDAZ08	1.829	5.72	3.89	ZN - GE08Z
F.EDAH09	2.079	5.72	3.64	ZN - GE09H
F.EDAM09	2.328	5.72	3.39	ZN - GE09Z
F.EDAU09	2.577	5.72	3.14	ZN - GE09U
F.EDAZ09	2.827	5.72	2.89	ZN - GE09U

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



TERM TED: 2y vs Eurodollar Contracts

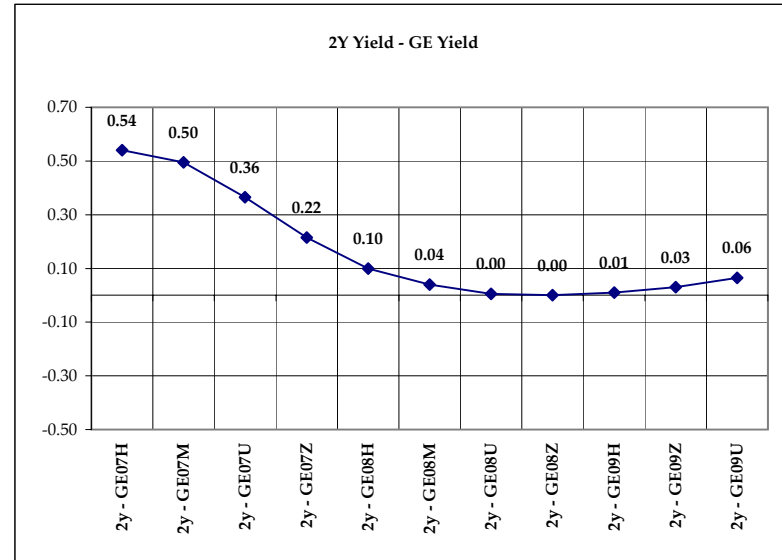
	2y		
	Spread Price	Spread Yield	Spread Name
F.EDAH07	5.46	0.54	2y - GE07H
F.EDAM07	5.41	0.50	2y - GE07M
F.EDAU07	5.28	0.36	2y - GE07U
F.EDAZ07	5.13	0.22	2y - GE07Z
F.EDAH08	5.01	0.10	2y - GE08H
F.EDAM08	4.96	0.04	2y - GE08M
F.EDAU08	4.92	0.00	2y - GE08U
F.EDAZ08	4.91	0.00	2y - GE08Z
F.EDAH09	4.93	0.01	2y - GE09H
F.EDAM09	4.94	0.03	2y - GE09Z
F.EDAU09	4.98	0.06	2y - GE09U
F.EDAZ09	5.02	0.11	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	0.084	1.75	2y - GE07H
F.EDAM07	0.334	1.50	2y - GE07M
F.EDAU07	0.583	1.25	2y - GE07U
F.EDAZ07	0.832	1.00	2y - GE07Z
F.EDAH08	1.082	0.75	2y - GE08H
F.EDAM08	1.331	0.50	2y - GE08M
F.EDAU08	1.580	0.25	2y - GE08U
F.EDAZ08	1.829	0.00	2y - GE08Z
F.EDAH09	2.079	(0.25)	2y - GE09H
F.EDAM09	2.328	(0.49)	2y - GE09Z
F.EDAU09	2.577	(0.74)	2y - GE09U
F.EDAZ09	2.827	(0.99)	2y - GE09U

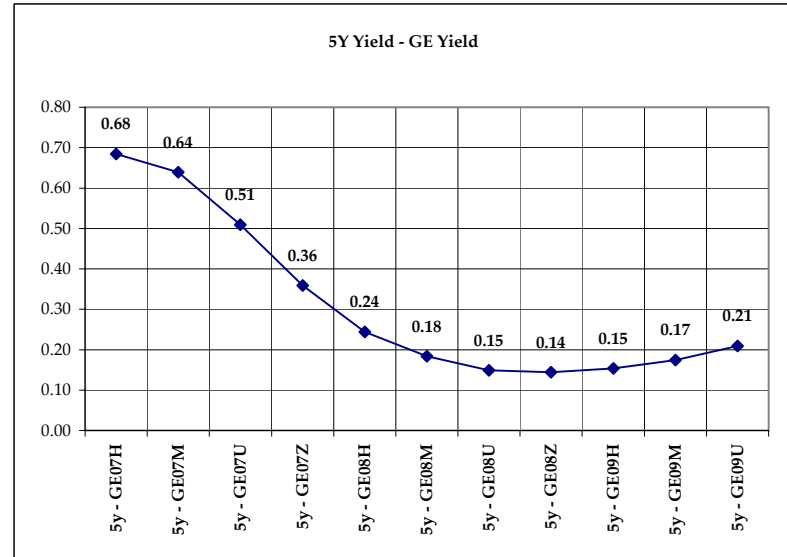
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TERM TED: 5y vs Eurodollar Contracts

5y			
	Spread Price	Spread Yield	Spread Name
F.EDAH07	5.70	0.68	5y - GE07H
F.EDAM07	5.65	0.64	5y - GE07M
F.EDAU07	5.52	0.51	5y - GE07U
F.EDAZ07	5.37	0.36	5y - GE07Z
F.EDAH08	5.26	0.24	5y - GE08H
F.EDAM08	5.20	0.18	5y - GE08M
F.EDAU08	5.16	0.15	5y - GE08U
F.EDAZ08	5.16	0.14	5y - GE08Z
F.EDAH09	5.17	0.15	5y - GE09H
F.EDAM09	5.19	0.17	5y - GE09M
F.EDAU09	5.22	0.21	5y - GE09U
F.EDAZ09	5.27	0.25	5y - GE09U

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



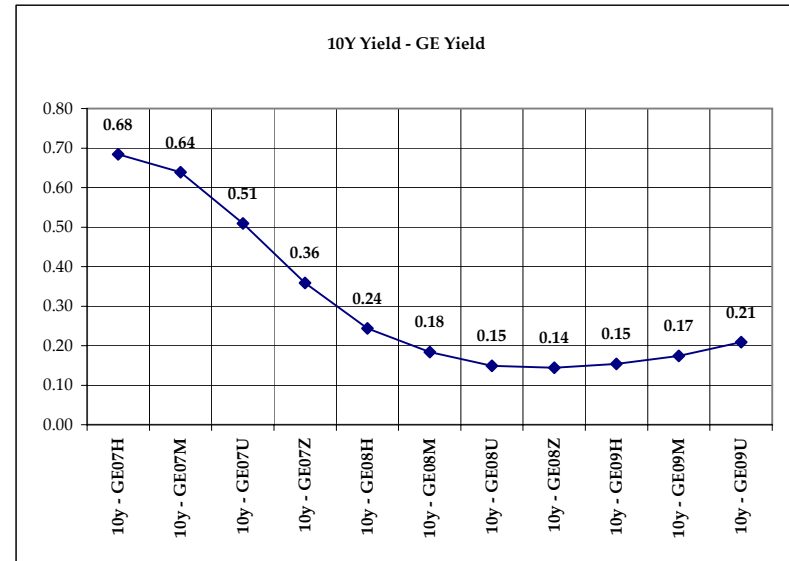
	GE Duration as Fraction of year	5Y Duration	Spread Duration	
F.EDAH07	0.084	4.36	4.27	5y - GE07H
F.EDAM07	0.334	4.36	4.02	5y - GE07M
F.EDAU07	0.583	4.36	3.77	5y - GE07U
F.EDAZ07	0.832	4.36	3.52	5y - GE07Z
F.EDAH08	1.082	4.36	3.27	5y - GE08H
F.EDAM08	1.331	4.36	3.02	5y - GE08M
F.EDAU08	1.580	4.36	2.78	5y - GE08U
F.EDAZ08	1.829	4.36	2.53	5y - GE08Z
F.EDAH09	2.079	4.36	2.28	5y - GE09H
F.EDAM09	2.328	4.36	2.03	5y - GE09M
F.EDAU09	2.577	4.36	1.78	5y - GE09U
F.EDAZ09	2.827	4.36	1.53	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.EDAH07	5.70	0.68	10y - GE07H
F.EDAM07	5.65	0.64	10y - GE07M
F.EDAU07	5.52	0.51	10y - GE07U
F.EDAZ07	5.37	0.36	10y - GE07Z
F.EDAH08	5.26	0.24	10y - GE08H
F.EDAM08	5.20	0.18	10y - GE08M
F.EDAU08	5.16	0.15	10y - GE08U
F.EDAZ08	5.16	0.14	10y - GE08Z
F.EDAH09	5.17	0.15	10y - GE09H
F.EDAM09	5.19	0.17	10y - GE09M
F.EDAU09	5.22	0.21	10y - GE09U
F.EDAZ09	5.27	0.25	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.EDAH07	0.084	7.91	7.83	10y - GE07H
F.EDAM07	0.334	7.91	7.58	10y - GE07M
F.EDAU07	0.583	7.91	7.33	10y - GE07U
F.EDAZ07	0.832	7.91	7.08	10y - GE07Z
F.EDAH08	1.082	7.91	6.83	10y - GE08H
F.EDAM08	1.331	7.91	6.58	10y - GE08M
F.EDAU08	1.580	7.91	6.33	10y - GE08U
F.EDAZ08	1.829	7.91	6.09	10y - GE08Z
F.EDAH09	2.079	7.91	5.84	10y - GE09H
F.EDAM09	2.328	7.91	5.59	10y - GE09M
F.EDAU09	2.577	7.91	5.34	10y - GE09U
F.EDAZ09	2.827	7.91	5.09	10y - GE09U

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