

The Morning Email: TERM TEDS & Dirty TEDS

Table of Contents

PgA	Quotes	Pg9	2y Basis TED Curve
Pg1	Dirty TED: ZT vs Eurodollar Contracts	Pg10	5y Basis TED Curve
Pg2	Dirty TED: ZF vs Eurodollar Contracts	Pg11	10y Basis TED Curve
Pg3	Dirty TED: ZN vs Eurodollar Contracts	Pg12	Packs
Pg4	TERM TED: 2y vs Eurodollar Contracts		
Pg5	TERM TED: 5y vs Eurodollar Contracts		
Pg6	TERM TED: 10y vs Eurodollar Contracts		
Pg7	Dirty TED Curve		
Pg8	TED Curve		

Correlations for the US Cash Treasuries are done on a YIELD basis. Therefore, you'll see negative values. The reason for this is due to the new issues. Every new issue takes too long to 'catch up' because the correlation formula looks back 10days.

Want something added? Let me know: jgoulding@ghco.com

Disclaimer: All information within this newsletter is meant for internal use at GH Trader's LLC, only. All information has been recorded to the best of my ability. This material is based upon information that I consider reliable, but I do not represent that it is accurate or complete.

Quotes

F.I. Futures and Cash					
	Last Decimal	Last 32	Last Yield*	MDuration	
ZT	106.6625	106.212	2.133	1.85	
ZF	113.4219	113.135	2.612	3.91	
ZN	117.3750	117.120	3.116	5.87	
2y	102.078	102.0250	2.131	1.85	
5y	104.078	104.0250	2.730	4.42	
10y	105.953	105.3050	3.525	7.96	

Eurodollars (ED)							
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month		
EDAH08	96.990	3.010	49	0.134	MAR	} White Pack	
EDAM08	97.415	2.585	140	0.383	JUN		
EDAU08	97.480	2.520	231	0.632	SEP		
EDAZ08	97.435	2.565	322	0.882	DEC	} Red Pack	
EDAH09	97.350	2.650	413	1.131	MAR		
EDAM09	97.210	2.790	504	1.380	JUN		
EDAU09	97.055	2.945	595	1.629	SEP		
EDAZ09	96.910	3.090	686	1.879	DEC	} Green Pack	
EDAH10	96.770	3.230	777	2.128	MAR		
EDAM10	96.610	3.390	868	2.377	JUN		
EDAU10	96.470	3.530	959	2.627	SEP		
EDAZ10	96.320	3.680	1050	2.876	DEC	} Blue Pack	
EDAH11	96.140	3.860	1141	3.125	MAR		
EDAM11	96.000	4.000	1232	3.375	JUN		
EDAU11	95.870	4.130	1330	3.643	SEP		
EDAZ11	95.740	4.260	1421	3.892	DEC	} Gold Pack	
EDAH12	#VALUE!	#VALUE!	1512	4.142	MAR		
EDAM12	#VALUE!	#VALUE!	1603	4.391	JUN		
EDAU12	#VALUE!	#VALUE!	1694	4.640	SEP		
EDAU12	#VALUE!	#VALUE!	1694	4.640	SEP		

Notes

Futures use CTD for Last Yield

Mduration = Modified Macaulay Duration

#VALUE! = no quote being provided by exchange.

	Last Yield	Net Yield	Last Price	
Q.ED.White	2.725	5.500	9733.000	} Pack Prices
Q.ED.Red	2.930	4.000	9713.125	
Q.ED.Green	3.536	4.500	9654.250	
Q.ED.Blue	4.161	0.000	9593.750	
Q.ED.Gold		0.000	9547.250	

Red pack is a 2yr proxy
 Gold pack is a 10yr proxy
 Red /Gold is a 2/10 proxy
 Blue pack is a 5yr proxy
 Blue/Gold is a 5/10 proxy

Overview of Hedging

1/28/2008 5:55

Page A

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

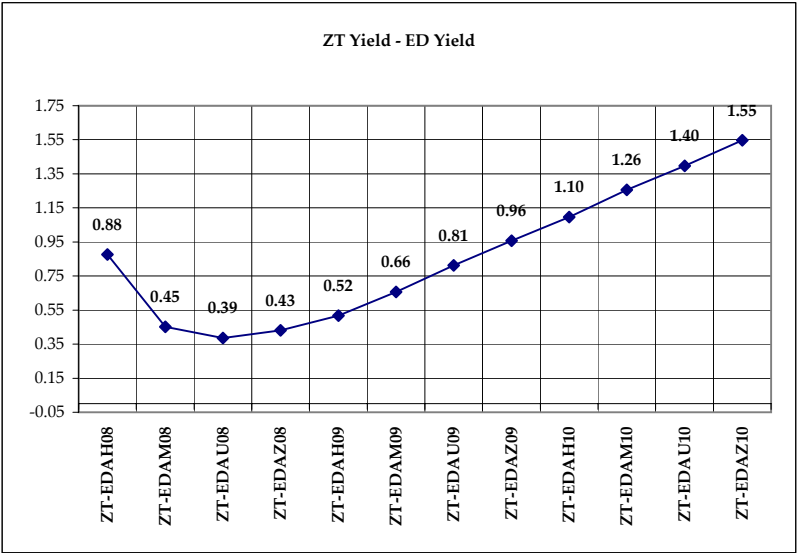
Eurodollar Color Codes for Individual Year Strips:

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

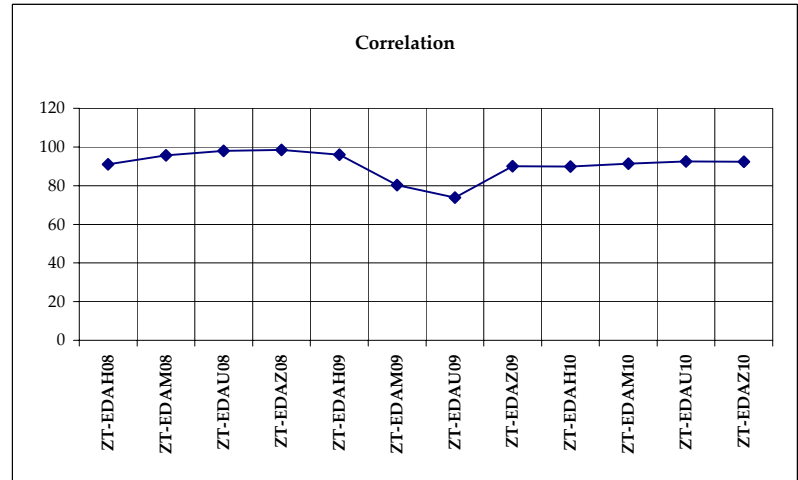
ZT				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH08	9.673	0.88	ZT-EDAH08	91.017
EDAM08	9.248	0.45	ZT-EDAM08	95.741
EDAU08	9.183	0.39	ZT-EDAU08	97.930
EDAZ08	9.228	0.43	ZT-EDAZ08	98.564
EDAH09	9.313	0.52	ZT-EDAH09	95.956
EDAM09	9.453	0.66	ZT-EDAM09	80.301
EDAU09	9.608	0.81	ZT-EDAU09	73.802
EDAZ09	9.753	0.96	ZT-EDAZ09	90.039
EDAH10	9.893	1.10	ZT-EDAH10	89.840
EDAM10	10.053	1.26	ZT-EDAM10	91.345
EDAU10	10.193	1.40	ZT-EDAU10	92.544
EDAZ10	10.343	1.55	ZT-EDAZ10	92.378

Price = Outright Decimal Price - Euro Contract Price
 Yield = ABS(Proxy Yield - Implied Euro Contract yield)
 *Correlation = ED Correlation to Treasury Future over 10 days



GE Duration as Fraction of year				
	ZT Duration	Spread Duration		
EDAH08	0.134	1.85	1.72	ZT-EDAH08
EDAM08	0.383	1.85	1.47	ZT-EDAM08
EDAU08	0.632	1.85	1.22	ZT-EDAU08
EDAZ08	0.882	1.85	0.97	ZT-EDAZ08
EDAH09	1.131	1.85	0.72	ZT-EDAH09
EDAM09	1.380	1.85	0.47	ZT-EDAM09
EDAU09	1.629	1.85	0.22	ZT-EDAU09
EDAZ09	1.879	1.85	(0.03)	ZT-EDAZ09
EDAH10	2.128	1.85	(0.27)	ZT-EDAH10
EDAM10	2.377	1.85	(0.52)	ZT-EDAM10
EDAU10	2.627	1.85	(0.77)	ZT-EDAU10
EDAZ10	2.876	1.85	(1.02)	ZT-EDAZ10

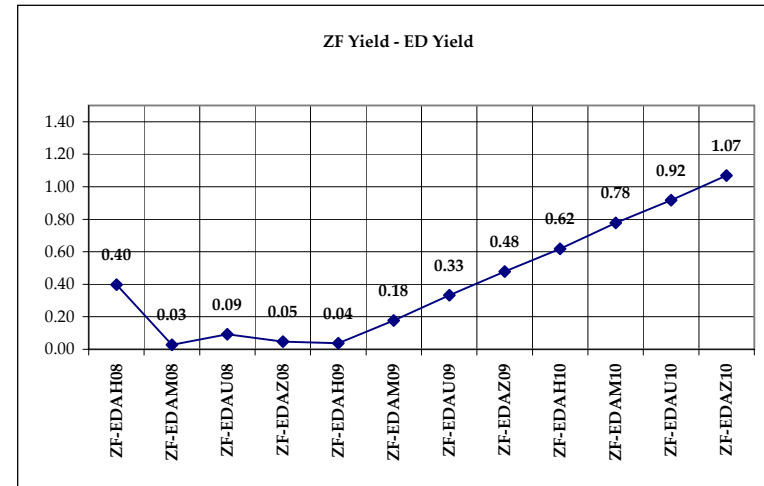
The farther away from 0 the spread duration is the riskier the trade.



Dirty TED: ZF vs Eurodollar Contracts

	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH08	16.43	0.40	ZF-EDAH08	88.541
EDAM08	16.01	0.03	ZF-EDAM08	94.525
EDAU08	15.94	0.09	ZF-EDAU08	97.712
EDAZ08	15.99	0.05	ZF-EDAZ08	99.110
EDAH09	16.07	0.04	ZF-EDAH09	97.688
EDAM09	16.21	0.18	ZF-EDAM09	84.181
EDAU09	16.37	0.33	ZF-EDAU09	78.221
EDAZ09	16.51	0.48	ZF-EDAZ09	93.057
EDAH10	16.65	0.62	ZF-EDAH10	93.077
EDAM10	16.81	0.78	ZF-EDAM10	94.387
EDAU10	16.95	0.92	ZF-EDAU10	95.374
EDAZ10	17.10	1.07	ZF-EDAZ10	95.259

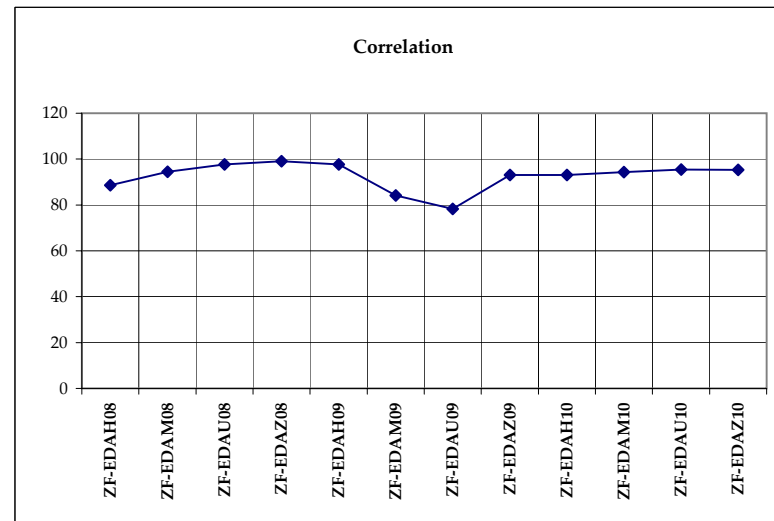
Price = Outright Decimal Price - Euro Contract Price
 Yield = ABS(Proxy Yield - Implied Euro Contract yield)
 *Correlation = ED Correlation to Treasury Future over 10 days



GE Duration as Fraction of year

	GE Duration as Fraction of year	ZF Duration	Spread Duration	
EDAH08	0.134	3.91	3.78	ZF-EDAH08
EDAM08	0.383	3.91	3.53	ZF-EDAM08
EDAU08	0.632	3.91	3.28	ZF-EDAU08
EDAZ08	0.882	3.91	3.03	ZF-EDAZ08
EDAH09	1.131	3.91	2.78	ZF-EDAH09
EDAM09	1.380	3.91	2.53	ZF-EDAM09
EDAU09	1.629	3.91	2.28	ZF-EDAU09
EDAZ09	1.879	3.91	2.03	ZF-EDAZ09
EDAH10	2.128	3.91	1.78	ZF-EDAH10
EDAM10	2.377	3.91	1.53	ZF-EDAM10
EDAU10	2.627	3.91	1.28	ZF-EDAU10
EDAZ10	2.876	3.91	1.03	ZF-EDAZ10

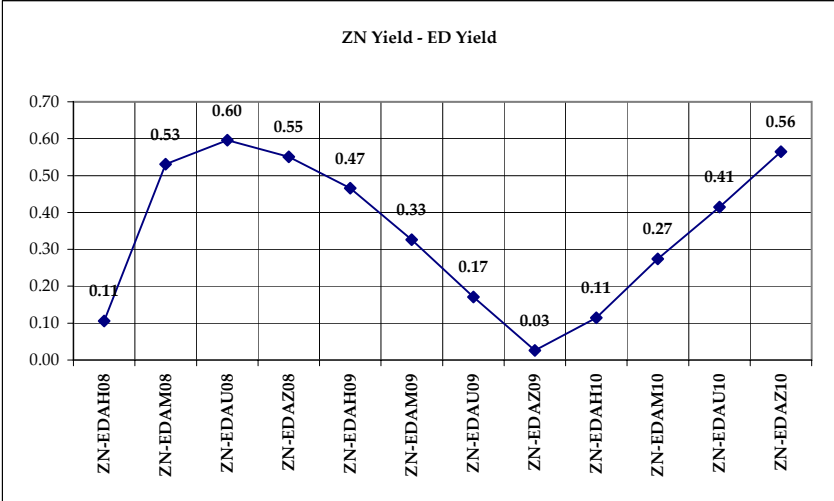
The farther away from 0 the spread duration is the riskier the trade.



Dirty TED: ZN vs Eurodollar Contracts

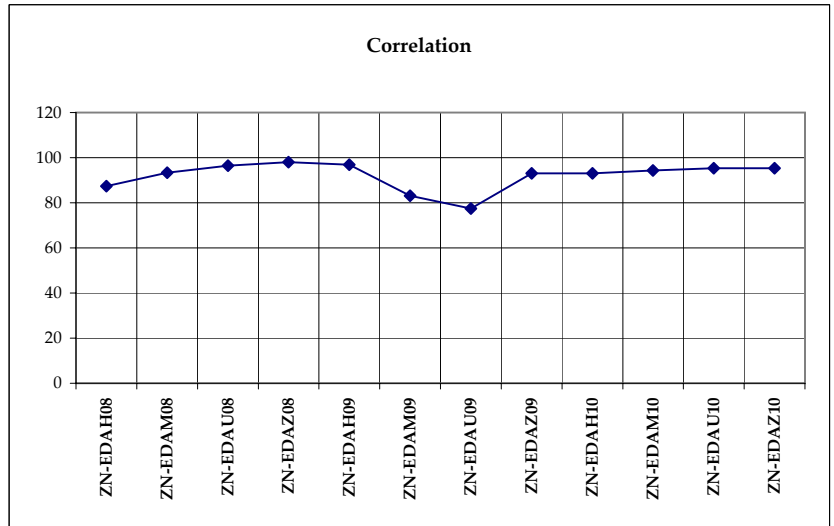
ZN				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH08	20.39	0.11	ZN-EDAH08	87.40
EDAM08	19.96	0.53	ZN-EDAM08	93.30
EDAU08	19.90	0.60	ZN-EDAU08	96.52
EDAZ08	19.94	0.55	ZN-EDAZ08	98.07
EDAH09	20.03	0.47	ZN-EDAH09	96.84
EDAM09	20.17	0.33	ZN-EDAM09	83.10
EDAU09	20.32	0.17	ZN-EDAU09	77.38
EDAZ09	20.47	0.03	ZN-EDAZ09	93.04
EDAH10	20.61	0.11	ZN-EDAH10	93.08
EDAM10	20.77	0.27	ZN-EDAM10	94.39
EDAU10	20.91	0.41	ZN-EDAU10	95.37
EDAZ10	21.06	0.56	ZN-EDAZ10	95.26

Price = Outright Decimal Price - Euro Contract Price
 Yield = ABS(Proxy Yield - Implied Euro Contract yield)
 *Correlation = ED Correlation to Treasury Future over 10 days



	GE Duration as Fraction of year	ZN Duration	Spread Duration	
EDAH08	0.134	5.87	5.73	ZN-EDAH08
EDAM08	0.383	5.87	5.48	ZN-EDAM08
EDAU08	0.632	5.87	5.23	ZN-EDAU08
EDAZ08	0.882	5.87	4.98	ZN-EDAZ08
EDAH09	1.131	5.87	4.74	ZN-EDAH09
EDAM09	1.380	5.87	4.49	ZN-EDAM09
EDAU09	1.629	5.87	4.24	ZN-EDAU09
EDAZ09	1.879	5.87	3.99	ZN-EDAZ09
EDAH10	2.128	5.87	3.74	ZN-EDAH10
EDAM10	2.377	5.87	3.49	ZN-EDAM10
EDAU10	2.627	5.87	3.24	ZN-EDAU10
EDAZ10	2.876	5.87	2.99	ZN-EDAZ10

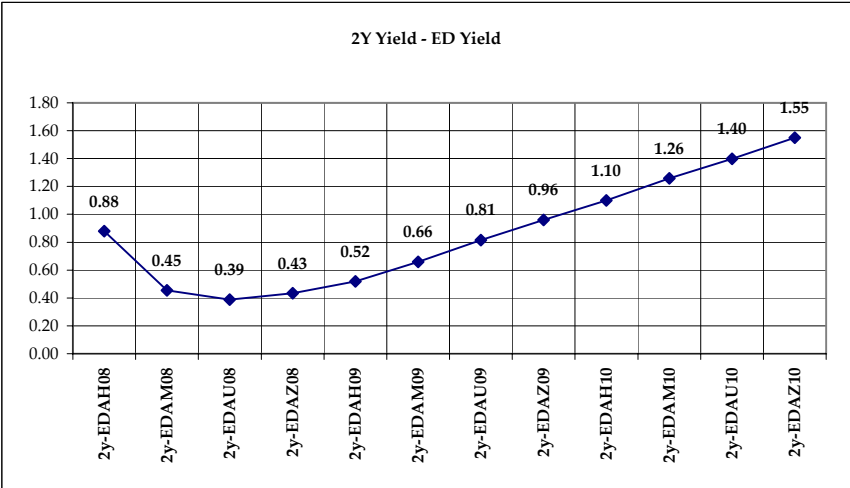
The farther away from 0 the spread duration is the riskier the trade.



TERM TED: 2y vs Eurodollar Contracts

	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH08	5.09	0.88	2y-EDAH08	-90.771
EDAM08	4.66	0.45	2y-EDAM08	-95.761
EDAU08	4.60	0.39	2y-EDAU08	-96.022
EDAZ08	4.64	0.43	2y-EDAZ08	-95.761
EDAH09	4.73	0.52	2y-EDAH09	-86.941
EDAM09	4.87	0.66	2y-EDAM09	-86.598
EDAU09	5.02	0.81	2y-EDAU09	-82.378
EDAZ09	5.17	0.96	2y-EDAZ09	-81.042
EDAH10	5.31	1.10	2y-EDAH10	-84.959
EDAM10	5.47	1.26	2y-EDAM10	-86.378
EDAU10	5.61	1.40	2y-EDAU10	-87.986
EDAZ10	5.76	1.55	2y-EDAZ10	-87.213

Price = Outright Decimal Price - Euro Contract Price
 Yield = ABS(Proxy Yield - Implied Euro Contract yield)
 *Correlation = ED Correlation to Treasury Future over 10 days.
 These are measuring YIELD correlations.

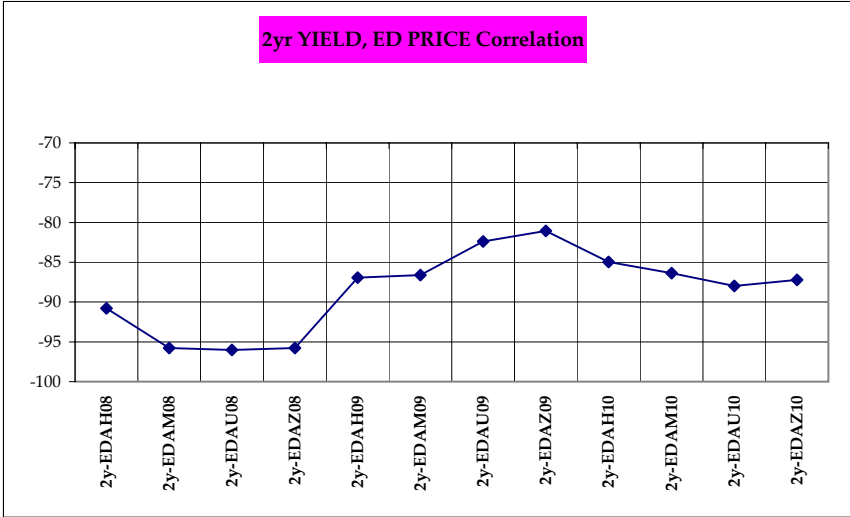


GE Duration as

	Fraction of year	2Y Duration	Spread Duration	
EDAH08	0.134	1.85	1.72	2y-EDAH08
EDAM08	0.383	1.85	1.47	2y-EDAM08
EDAU08	0.632	1.85	1.22	2y-EDAU08
EDAZ08	0.882	1.85	0.97	2y-EDAZ08
EDAH09	1.131	1.85	0.72	2y-EDAH09
EDAM09	1.380	1.85	0.47	2y-EDAM09
EDAU09	1.629	1.85	0.22	2y-EDAU09
EDAZ09	1.879	1.85	(0.03)	2y-EDAZ09
EDAH10	2.128	1.85	(0.27)	2y-EDAH10
EDAM10	2.377	1.85	(0.52)	2y-EDAM10
EDAU10	2.627	1.85	(0.77)	2y-EDAU10
EDAZ10	2.876	1.85	(1.02)	2y-EDAZ10

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

2yr YIELD, ED PRICE Correlation



TERM TED: 5y vs Eurodollar Contracts

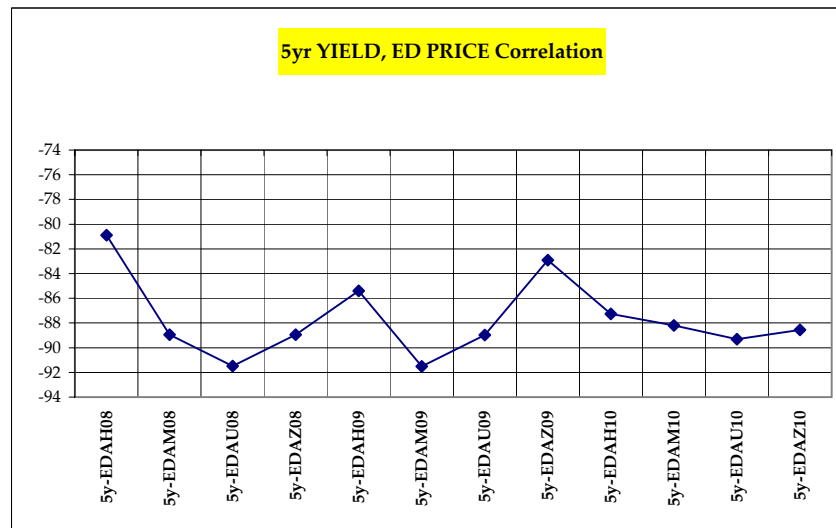
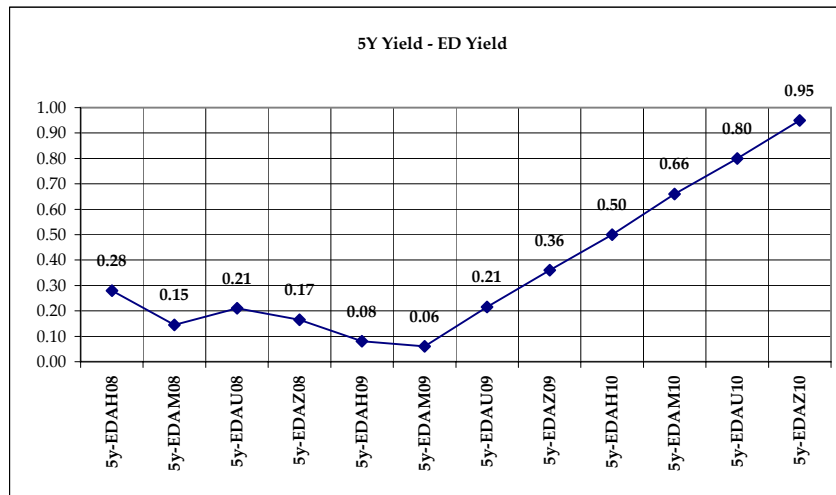
	5y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH08	7.09	0.28	5y-EDAH08	-80.899
EDAM08	6.66	0.15	5y-EDAM08	-88.945
EDAU08	6.60	0.21	5y-EDAU08	-91.496
EDAZ08	6.64	0.17	5y-EDAZ08	-88.945
EDAH09	6.73	0.08	5y-EDAH09	-85.391
EDAM09	6.87	0.06	5y-EDAM09	-91.519
EDAU09	7.02	0.21	5y-EDAU09	-88.963
EDAZ09	7.17	0.36	5y-EDAZ09	-82.915
EDAH10	7.31	0.50	5y-EDAH10	-87.263
EDAM10	7.47	0.66	5y-EDAM10	-88.185
EDAU10	7.61	0.80	5y-EDAU10	-89.323
EDAZ10	7.76	0.95	5y-EDAZ10	-88.554

Price = Outright Decimal Price - Euro Contract Price
 Yield = ABS(Proxy Yield - Implied Euro Contract yield)
 *Correlation = ED Correlation to Treasury Future over 10 days
 These are measuring YIELD correlations.

GE Duration as Fraction of year

	5Y Duration	Spread Duration	
EDAH08	0.134	4.42	5y-EDAH08
EDAM08	0.383	4.42	5y-EDAM08
EDAU08	0.632	4.42	5y-EDAU08
EDAZ08	0.882	4.42	5y-EDAZ08
EDAH09	1.131	4.42	5y-EDAH09
EDAM09	1.380	4.42	5y-EDAM09
EDAU09	1.629	4.42	5y-EDAU09
EDAZ09	1.879	4.42	5y-EDAZ09
EDAH10	2.128	4.42	5y-EDAH10
EDAM10	2.377	4.42	5y-EDAM10
EDAU10	2.627	4.42	5y-EDAU10
EDAZ10	2.876	4.42	5y-EDAZ10

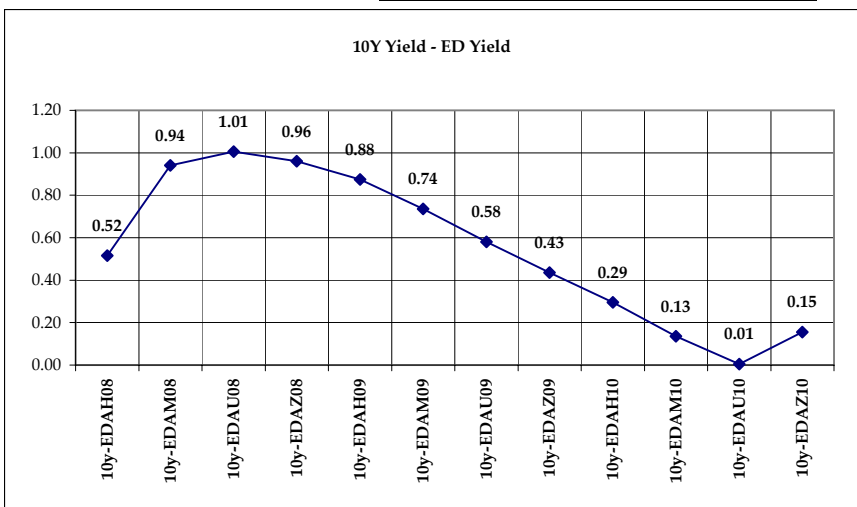
The farther away from 0 the spread duration is the riskier the trade.



TERM TED: 10y vs Eurodollar Contracts

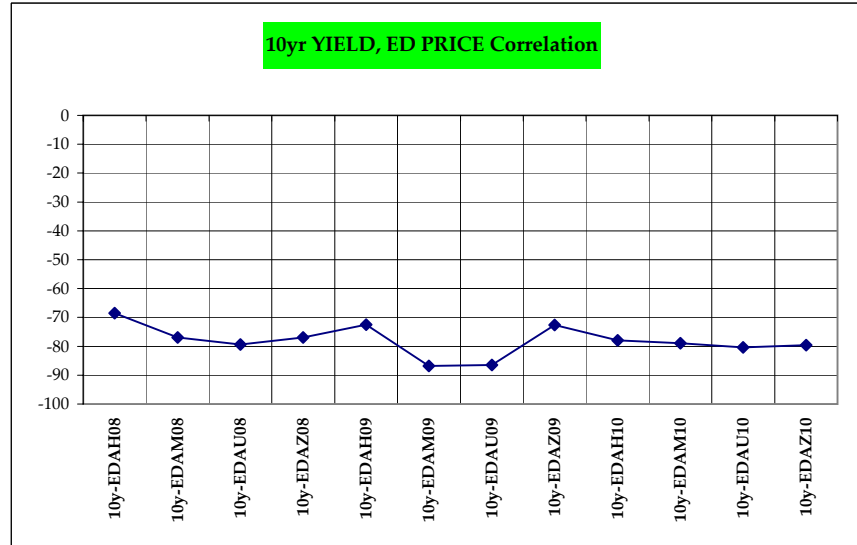
	10y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH08	7.09	0.52	10y-EDAH08	-68.511
EDAM08	6.66	0.94	10y-EDAM08	-76.915
EDAU08	6.60	1.01	10y-EDAU08	-79.335
EDAZ08	6.64	0.96	10y-EDAZ08	-76.915
EDAH09	6.73	0.88	10y-EDAH09	-72.462
EDAM09	6.87	0.74	10y-EDAM09	-86.844
EDAU09	7.02	0.58	10y-EDAU09	-86.432
EDAZ09	7.17	0.43	10y-EDAZ09	-72.659
EDAH10	7.31	0.29	10y-EDAH10	-77.985
EDAM10	7.47	0.13	10y-EDAM10	-78.986
EDAU10	7.61	0.01	10y-EDAU10	-80.429
EDAZ10	7.76	0.15	10y-EDAZ10	-79.592

Price = Outright Decimal Price - Euro Contract Price
 Yield = ABS(Proxy Yield - Implied Euro Contract yield)
 *Correlation = ED Correlation to Treasury Future over 10 days
 These are measuring YIELD correlations.



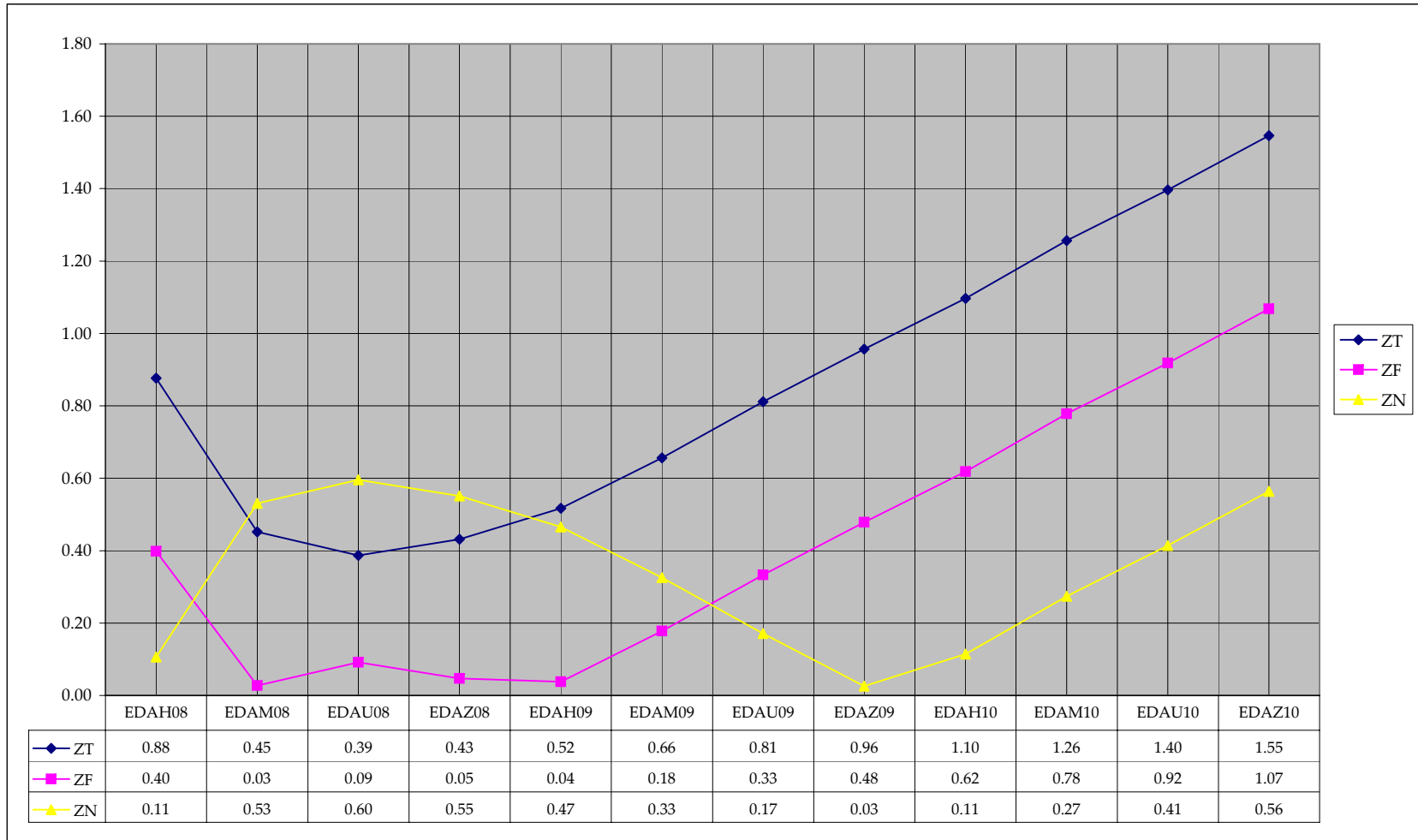
	GE Duration as Fraction of year	10Y Duration	Spread Duration	
EDAH08	0.134	7.96	7.83	10y-EDAH08
EDAM08	0.383	7.96	7.58	10y-EDAM08
EDAU08	0.632	7.96	7.33	10y-EDAU08
EDAZ08	0.882	7.96	7.08	10y-EDAZ08
EDAH09	1.131	7.96	6.83	10y-EDAH09
EDAM09	1.380	7.96	6.58	10y-EDAM09
EDAU09	1.629	7.96	6.33	10y-EDAU09
EDAZ09	1.879	7.96	6.09	10y-EDAZ09
EDAH10	2.128	7.96	5.84	10y-EDAH10
EDAM10	2.377	7.96	5.59	10y-EDAM10
EDAU10	2.627	7.96	5.34	10y-EDAU10
EDAZ10	2.876	7.96	5.09	10y-EDAZ10

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



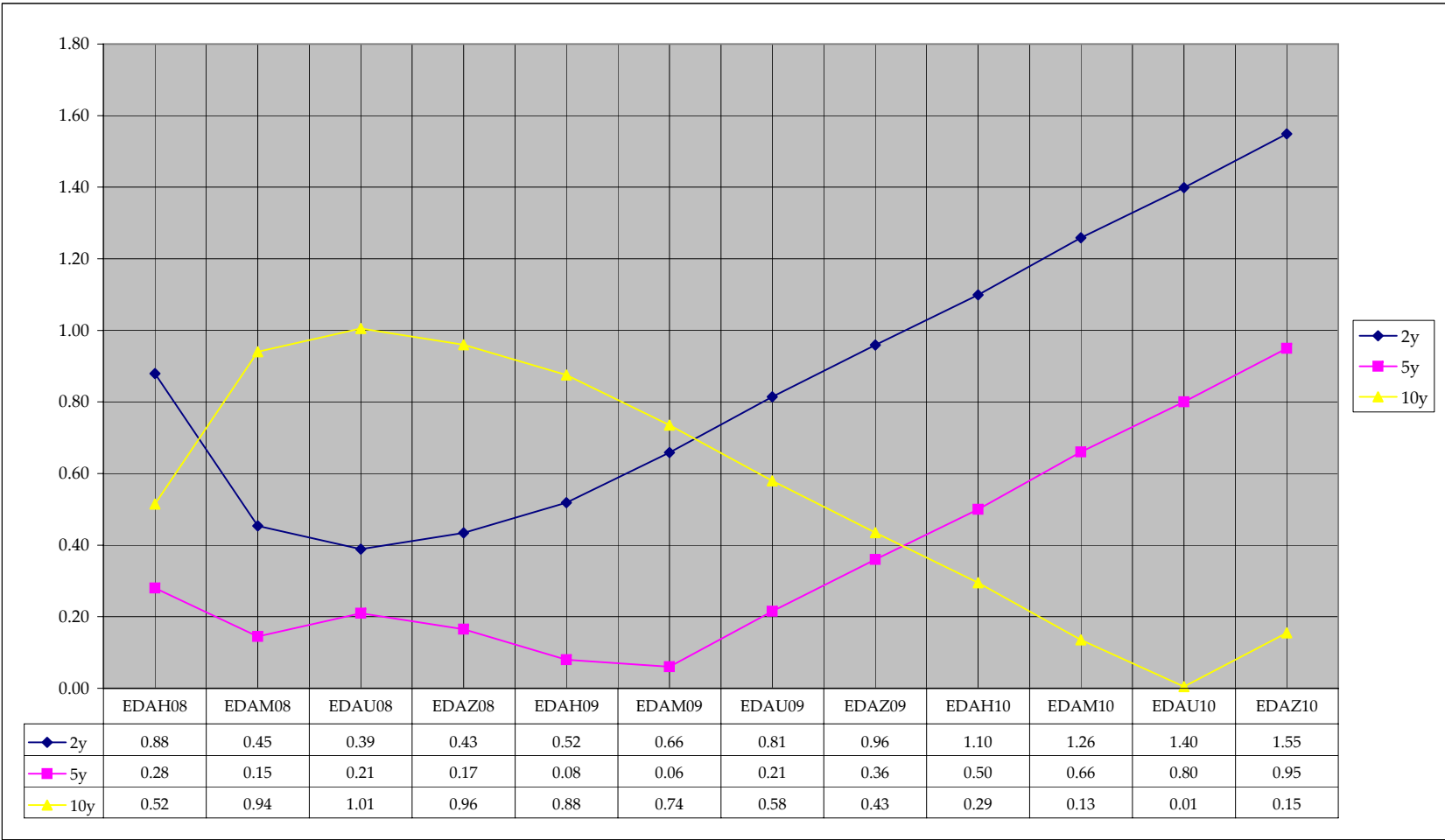
Dirty TED Curve

Chart values show the differences between ED contract and Treasury Futures contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.

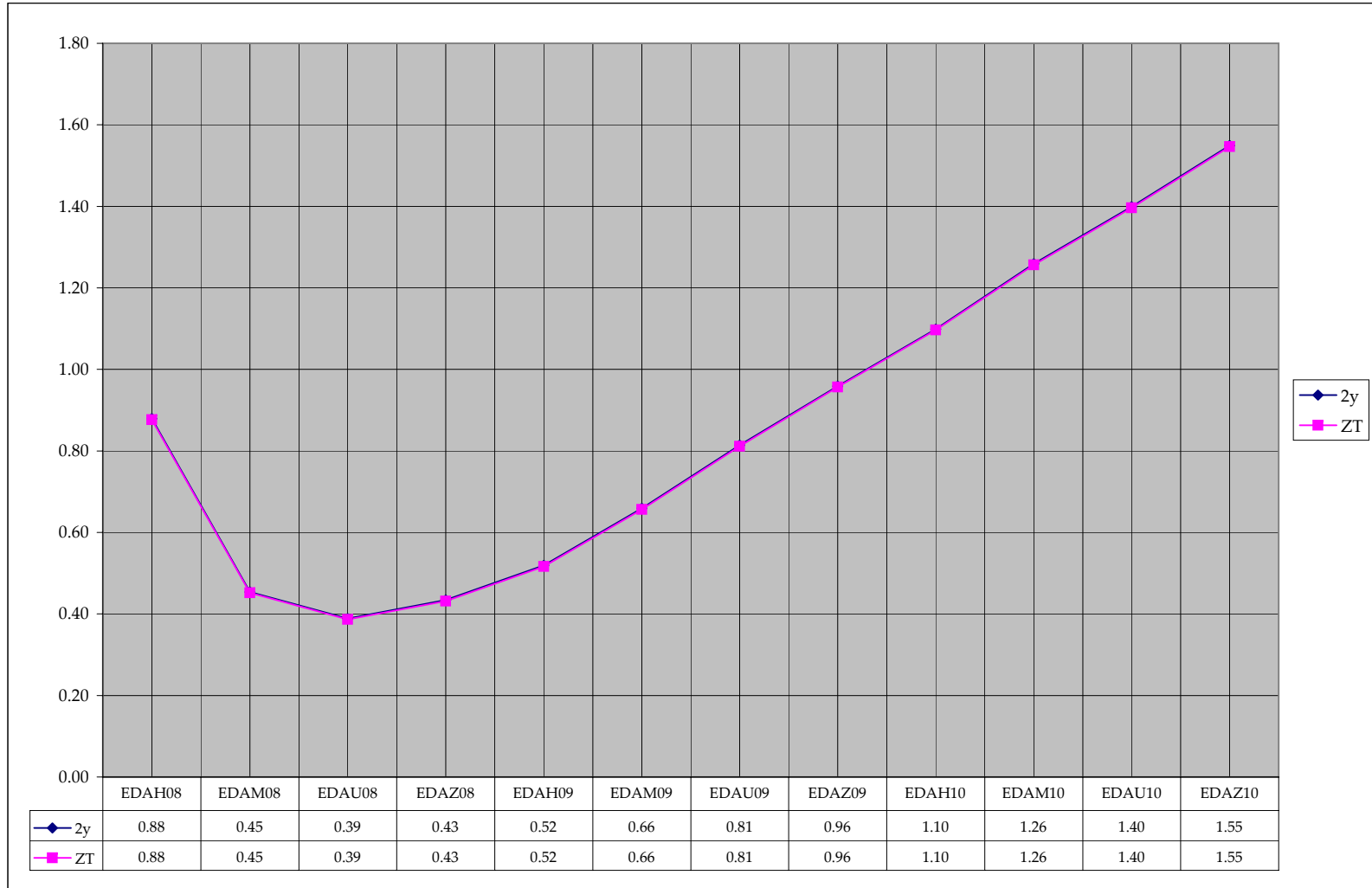


TED Curve

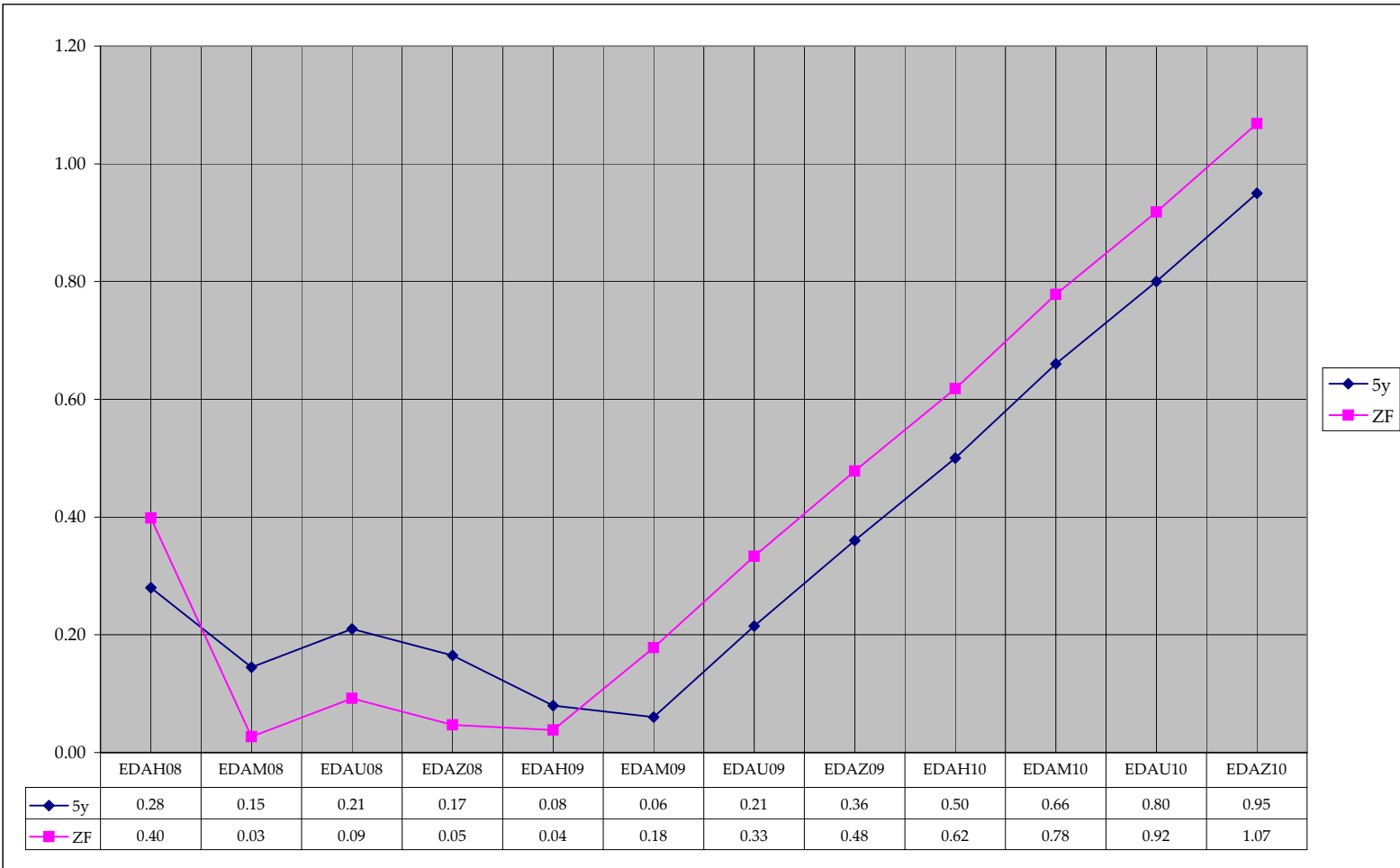
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



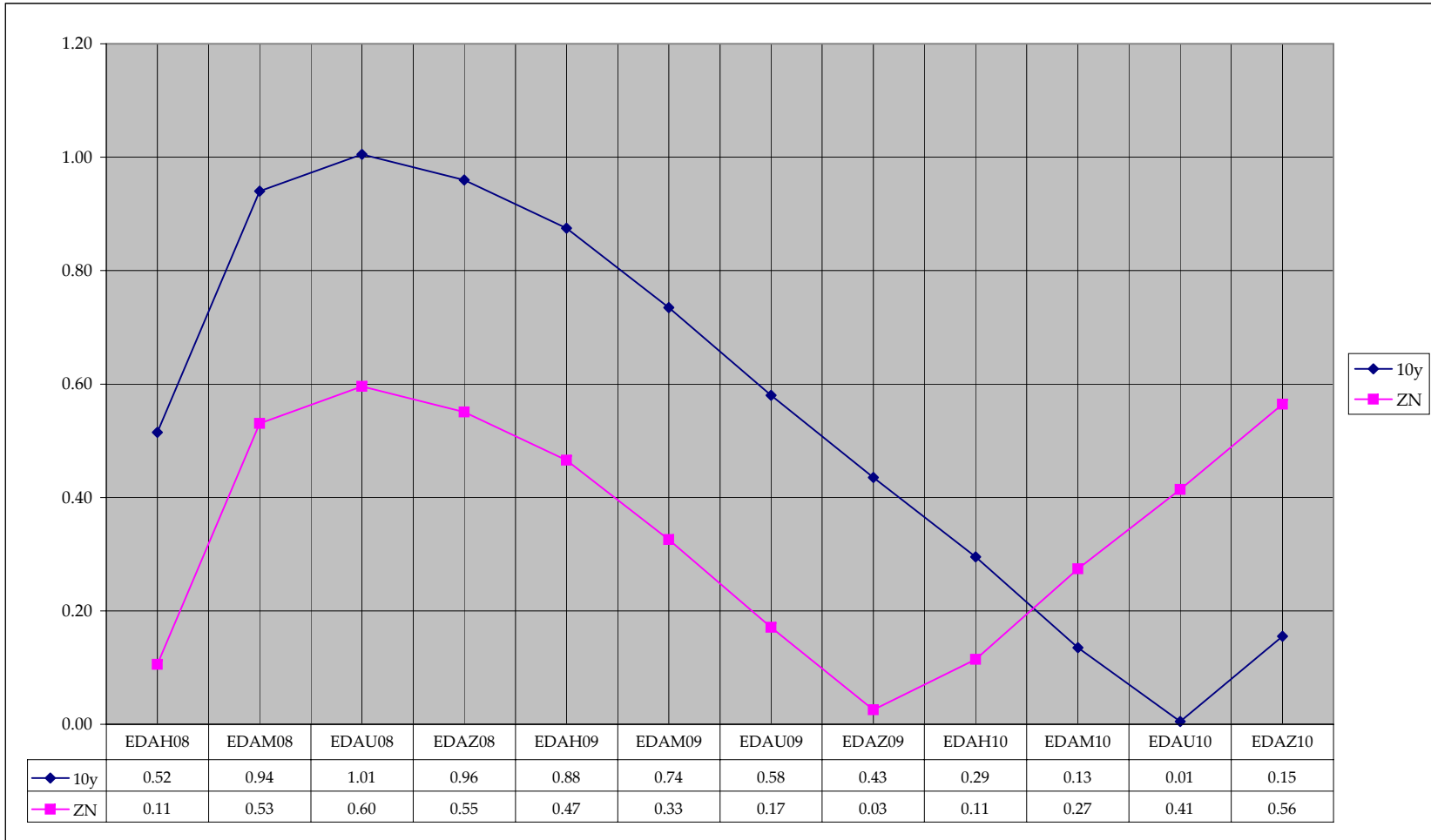
2y Basis TED Curve



5y Basis TED Curve



10y Basis TED Curve



Packs

	last Yield	Net Last Yield	Last Price
Q.ED.White	2.725	5.500	9733.000
Q.ED.Red	2.930	4.000	9713.125
Q.ED.Green	3.536	4.500	9654.250
Q.ED.Blue	4.161	0.000	9593.750
Q.ED.Gold		0.000	9547.250

