

The Morning Email: TERM TEDS & Dirty TEDS

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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	107.1469	107.047	1.622	1.88	
ZF	113.6938	113.222	2.465	4.03	
ZN	118.2500	118.080	3.246	6.62	
2y	100.084	100.0270	1.703	1.96	
5y	99.516	99.1650	2.603	4.59	
10y	99.656	99.2100	3.537	8.25	

Eurodollars (ED)							
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month		
EDAM08	97.705	2.295	80	0.219	JUN	White Pack	
EDAU08	97.830	2.170	171	0.468	SEP		
EDAZ08	97.735	2.265	262	0.717	DEC		
EDAH09	97.680	2.320	353	0.966	MAR	Red Pack	
EDAM09	97.455	2.545	444	1.216	JUN		
EDAU09	97.230	2.770	535	1.465	SEP		
EDAZ09	96.960	3.040	626	1.714	DEC	Green Pack	
EDAH10	96.765	3.235	717	1.964	MAR		
EDAM10	96.550	3.450	808	2.213	JUN		
EDAU10	96.325	3.675	899	2.462	SEP	Blue Pack	
EDAZ10	96.115	3.885	990	2.712	DEC		
EDAH11	95.960	4.040	1081	2.961	MAR		
EDAM11	95.830	4.170	1172	3.210	JUN	Gold Pack	
EDAU11	95.720	4.280	1270	3.479	SEP		
EDAZ11	95.640	4.360	1361	3.728	DEC		
EDAH12	95.540	4.460	1452	3.977	MAR		
EDAM12	95.415	4.585	1543	4.227	JUN		
EDAU12	95.335	4.665	1634	4.476	SEP		
EDAZ12	95.250	4.750	1725	4.725	DEC		
EDAH13	95.185	4.815	1816	4.975	MAR		

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	2.307	-0.375	9773.750	Pack Prices
Q.ED.Red	2.959	-1.625	9710.250	
Q.ED.Green	3.851	-1.875	9623.750	
Q.ED.Blue		-0.625	9567.625	
Q.ED.Gold		0.000	9530.125	

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

3/28/2008 5:50

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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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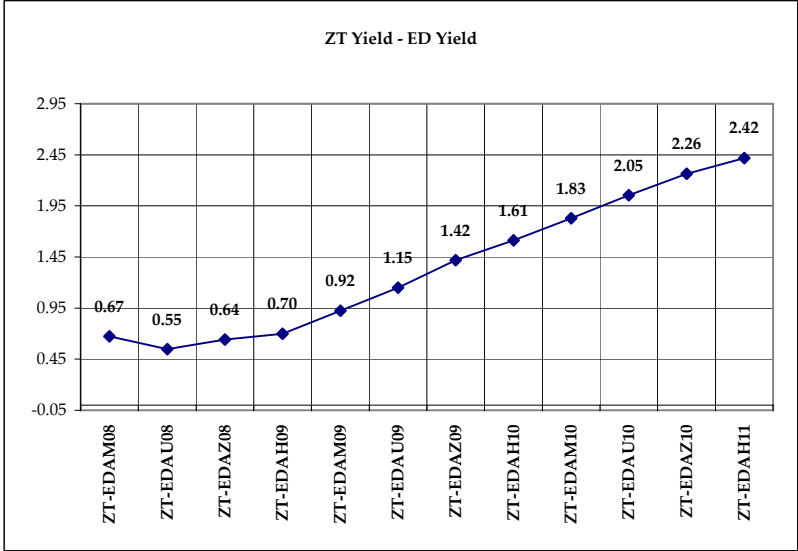
Eurodollar Color Codes for Individual Year Strips:

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	Correlation* (percent)
EDAM08	9.442	0.67	ZT-EDAM08	95.812
EDAU08	9.317	0.55	ZT-EDAU08	97.058
EDAZ08	9.412	0.64	ZT-EDAZ08	97.439
EDAH09	9.467	0.70	ZT-EDAH09	96.115
EDAM09	9.692	0.92	ZT-EDAM09	94.967
EDAU09	9.917	1.15	ZT-EDAU09	95.568
EDAZ09	10.187	1.42	ZT-EDAZ09	94.707
EDAH10	10.382	1.61	ZT-EDAH10	93.821
EDAM10	10.597	1.83	ZT-EDAM10	90.804
EDAU10	10.822	2.05	ZT-EDAU10	86.347
EDAZ10	11.032	2.26	ZT-EDAZ10	81.952
EDAH11	11.187	2.42	ZT-EDAH11	77.645

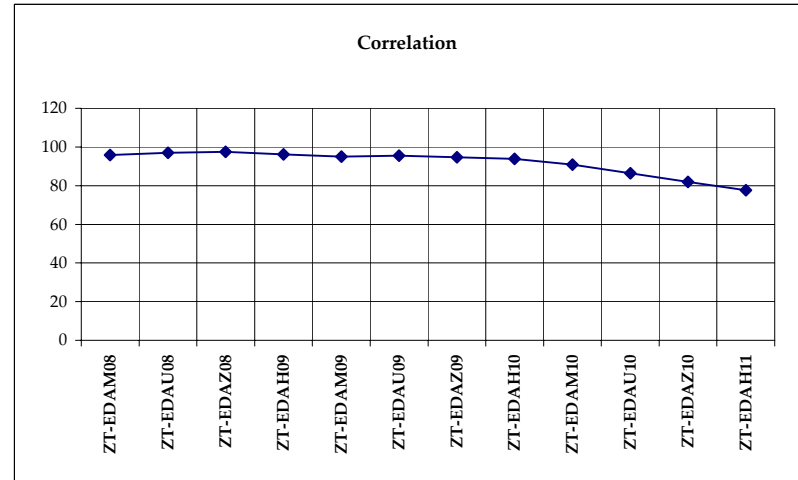
Price = Outright Decimal Price - Euro Contract Price
 Yield = ABS(Proxy Yield - Implied Euro Contract yield)
 *Correlation = ED Correlation to Treasury Future over 10 days



GE Duration as Fraction of year

	ZT Duration	Spread Duration	
EDAM08	0.219	1.88	1.67 ZT-EDAM08
EDAU08	0.468	1.88	1.42 ZT-EDAU08
EDAZ08	0.717	1.88	1.17 ZT-EDAZ08
EDAH09	0.966	1.88	0.92 ZT-EDAH09
EDAM09	1.216	1.88	0.67 ZT-EDAM09
EDAU09	1.465	1.88	0.42 ZT-EDAU09
EDAZ09	1.714	1.88	0.17 ZT-EDAZ09
EDAH10	1.964	1.88	(0.08) ZT-EDAH10
EDAM10	2.213	1.88	(0.33) ZT-EDAM10
EDAU10	2.462	1.88	(0.58) ZT-EDAU10
EDAZ10	2.712	1.88	(0.83) ZT-EDAZ10
EDAH11	2.961	1.88	(1.08) ZT-EDAH11

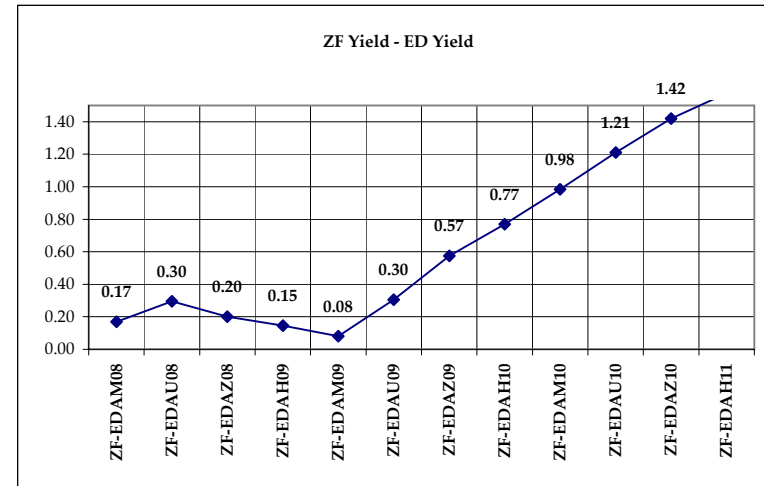
The farther away from 0 the spread duration is the riskier the trade.



Dirty TED: ZF vs Eurodollar Contracts

ZF				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	15.99	0.17	ZF-EDAM08	92.647
EDAU08	15.86	0.30	ZF-EDAU08	92.703
EDAZ08	15.96	0.20	ZF-EDAZ08	95.917
EDAH09	16.01	0.15	ZF-EDAH09	97.829
EDAM09	16.24	0.08	ZF-EDAM09	98.009
EDAU09	16.46	0.30	ZF-EDAU09	97.937
EDAZ09	16.73	0.57	ZF-EDAZ09	97.998
EDAH10	16.93	0.77	ZF-EDAH10	97.703
EDAM10	17.14	0.98	ZF-EDAM10	96.982
EDAU10	17.37	1.21	ZF-EDAU10	95.389
EDAZ10	17.58	1.42	ZF-EDAZ10	93.473
EDAH11	17.73	1.57	ZF-EDAH11	91.299

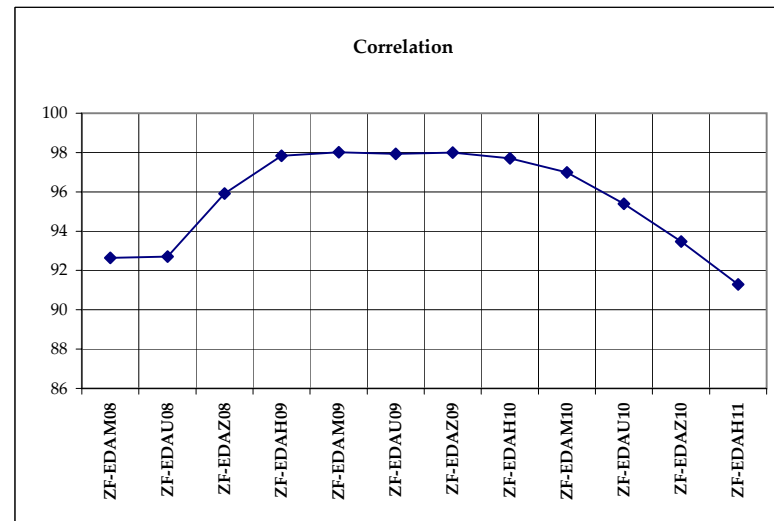
Price = Outright Decimal Price - Euro Contract Price
 Yield = ABS(Proxy Yield - Implied Euro Contract yield)
 *Correlation = ED Correlation to Treasury Future over 10 days



GE Duration as Fraction of year

	GE Duration as Fraction of year	ZF Duration	Spread Duration	
EDAM08	0.219	4.03	3.81	ZF-EDAM08
EDAU08	0.468	4.03	3.57	ZF-EDAU08
EDAZ08	0.717	4.03	3.32	ZF-EDAZ08
EDAH09	0.966	4.03	3.07	ZF-EDAH09
EDAM09	1.216	4.03	2.82	ZF-EDAM09
EDAU09	1.465	4.03	2.57	ZF-EDAU09
EDAZ09	1.714	4.03	2.32	ZF-EDAZ09
EDAH10	1.964	4.03	2.07	ZF-EDAH10
EDAM10	2.213	4.03	1.82	ZF-EDAM10
EDAU10	2.462	4.03	1.57	ZF-EDAU10
EDAZ10	2.712	4.03	1.32	ZF-EDAZ10
EDAH11	2.961	4.03	1.07	ZF-EDAH11

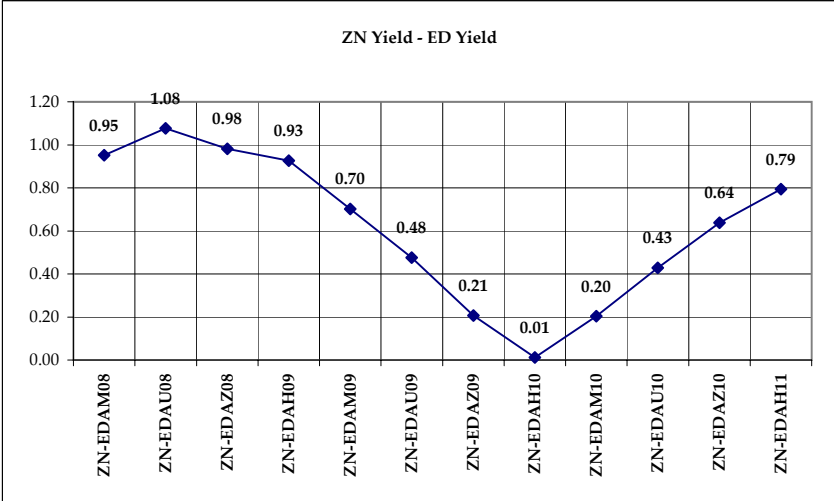
The farther away from 0 the spread duration is the riskier the trade.



Dirty TED: ZN vs Eurodollar Contracts

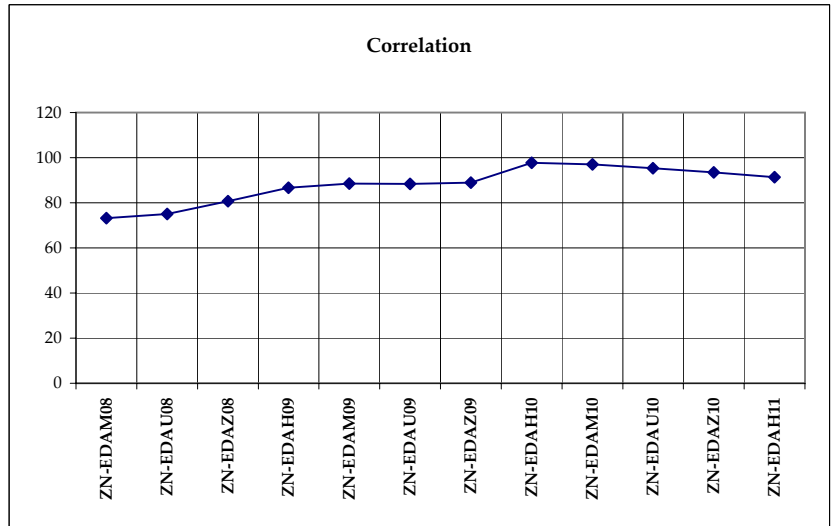
ZN				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	20.55	0.95	ZN-EDAM08	73.14
EDAU08	20.42	1.08	ZN-EDAU08	74.98
EDAZ08	20.52	0.98	ZN-EDAZ08	80.77
EDAH09	20.57	0.93	ZN-EDAH09	86.69
EDAM09	20.80	0.70	ZN-EDAM09	88.48
EDAU09	21.02	0.48	ZN-EDAU09	88.33
EDAZ09	21.29	0.21	ZN-EDAZ09	88.97
EDAH10	21.49	0.01	ZN-EDAH10	97.70
EDAM10	21.70	0.20	ZN-EDAM10	96.98
EDAU10	21.93	0.43	ZN-EDAU10	95.39
EDAZ10	22.14	0.64	ZN-EDAZ10	93.47
EDAH11	22.29	0.79	ZN-EDAH11	91.30

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	
EDAM08	0.219	6.62	6.41	ZN-EDAM08
EDAU08	0.468	6.62	6.16	ZN-EDAU08
EDAZ08	0.717	6.62	5.91	ZN-EDAZ08
EDAH09	0.966	6.62	5.66	ZN-EDAH09
EDAM09	1.216	6.62	5.41	ZN-EDAM09
EDAU09	1.465	6.62	5.16	ZN-EDAU09
EDAZ09	1.714	6.62	4.91	ZN-EDAZ09
EDAH10	1.964	6.62	4.66	ZN-EDAH10
EDAM10	2.213	6.62	4.41	ZN-EDAM10
EDAU10	2.462	6.62	4.16	ZN-EDAU10
EDAZ10	2.712	6.62	3.91	ZN-EDAZ10
EDAH11	2.961	6.62	3.66	ZN-EDAH11

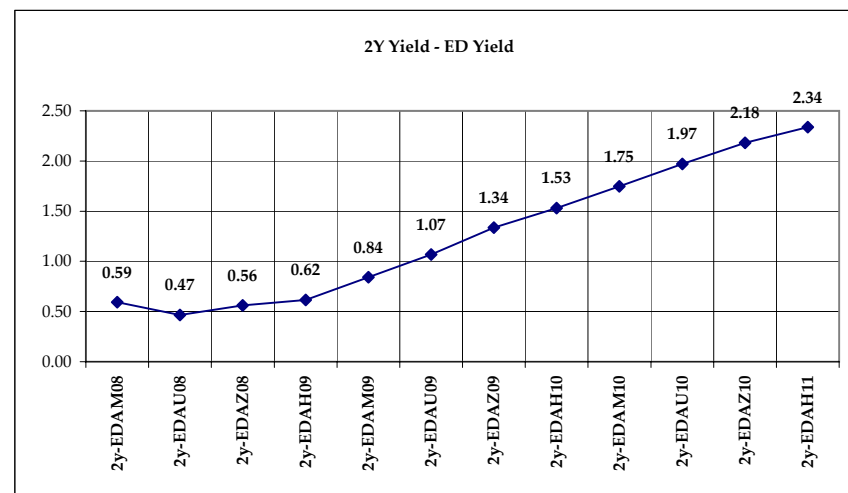
The farther away from 0 the spread duration is the riskier the trade.



TERM TED: 2y vs Eurodollar Contracts

	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	2.38	0.59	2y-EDAM08	-93.737
EDAU08	2.25	0.47	2y-EDAU08	-95.768
EDAZ08	2.35	0.56	2y-EDAZ08	-93.737
EDAH09	2.40	0.62	2y-EDAH09	-95.579
EDAM09	2.63	0.84	2y-EDAM09	-95.062
EDAU09	2.85	1.07	2y-EDAU09	-95.818
EDAZ09	3.12	1.34	2y-EDAZ09	-95.499
EDAH10	3.32	1.53	2y-EDAH10	-95.454
EDAM10	3.53	1.75	2y-EDAM10	-93.596
EDAU10	3.76	1.97	2y-EDAU10	-90.307
EDAZ10	3.97	2.18	2y-EDAZ10	-86.675
EDAH11	4.12	2.34	2y-EDAH11	-83.300

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.

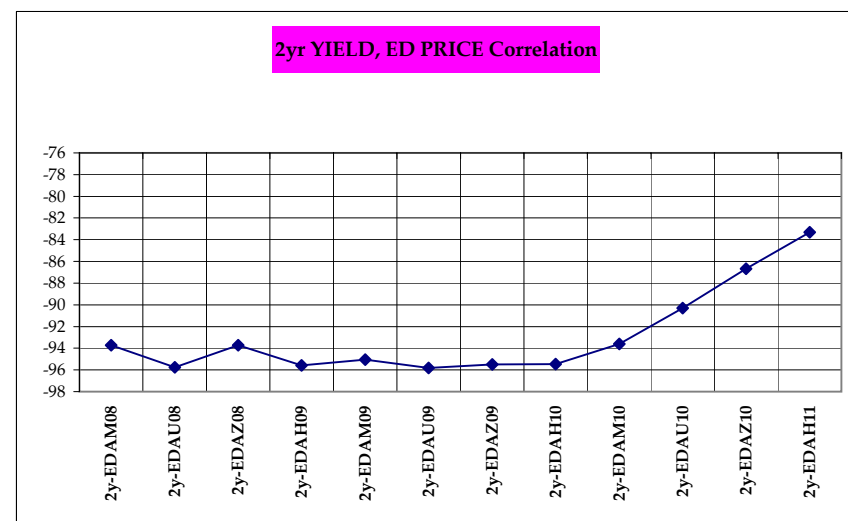


GE Duration as Fraction of year

	2Y Duration	Spread Duration	
EDAM08	0.219	1.96	1.74
EDAU08	0.468	1.96	1.49
EDAZ08	0.717	1.96	1.24
EDAH09	0.966	1.96	0.99
EDAM09	1.216	1.96	0.74
EDAU09	1.465	1.96	0.49
EDAZ09	1.714	1.96	0.24
EDAH10	1.964	1.96	(0.01)
EDAM10	2.213	1.96	(0.26)
EDAU10	2.462	1.96	(0.50)
EDAZ10	2.712	1.96	(0.75)
EDAH11	2.961	1.96	(1.00)

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

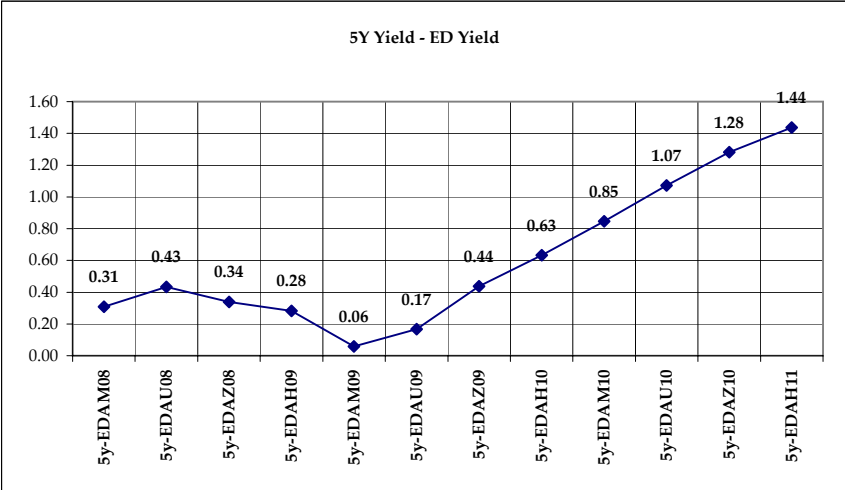
2yr YIELD, ED PRICE Correlation



TERM TED: 5y vs Eurodollar Contracts

	5y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	1.81	0.31	5y-EDAM08	-88.222
EDAU08	1.69	0.43	5y-EDAU08	-90.053
EDAZ08	1.78	0.34	5y-EDAZ08	-88.222
EDAH09	1.84	0.28	5y-EDAH09	-94.723
EDAM09	2.06	0.06	5y-EDAM09	-95.215
EDAU09	2.29	0.17	5y-EDAU09	-95.624
EDAZ09	2.56	0.44	5y-EDAZ09	-95.913
EDAH10	2.75	0.63	5y-EDAH10	-96.742
EDAM10	2.97	0.85	5y-EDAM10	-97.011
EDAU10	3.19	1.07	5y-EDAU10	-96.204
EDAZ10	3.40	1.28	5y-EDAZ10	-94.579
EDAH11	3.56	1.44	5y-EDAH11	-93.219

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.

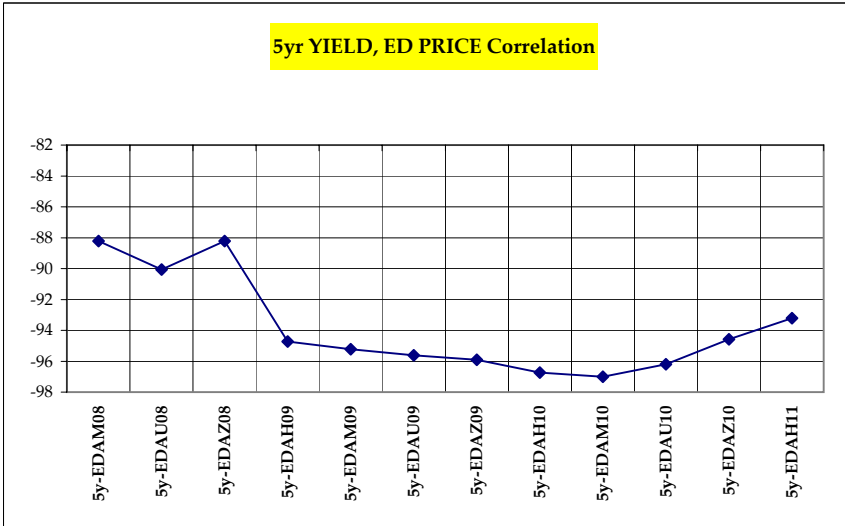


GE Duration as Fraction of year

	5Y Duration	Spread Duration	
EDAM08	0.219	4.59	5y-EDAM08
EDAU08	0.468	4.59	5y-EDAU08
EDAZ08	0.717	4.59	5y-EDAZ08
EDAH09	0.966	4.59	5y-EDAH09
EDAM09	1.216	4.59	5y-EDAM09
EDAU09	1.465	4.59	5y-EDAU09
EDAZ09	1.714	4.59	5y-EDAZ09
EDAH10	1.964	4.59	5y-EDAH10
EDAM10	2.213	4.59	5y-EDAM10
EDAU10	2.462	4.59	5y-EDAU10
EDAZ10	2.712	4.59	5y-EDAZ10
EDAH11	2.961	4.59	5y-EDAH11

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

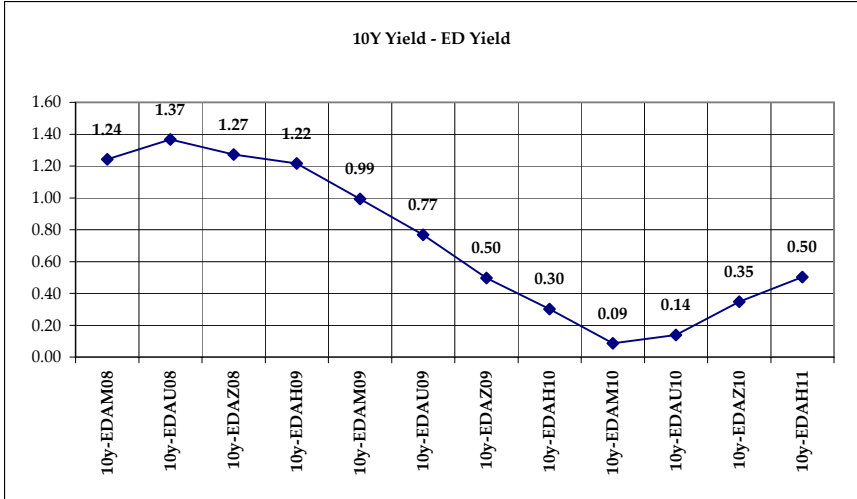
5yr YIELD, ED PRICE Correlation



TERM TED: 10y vs Eurodollar Contracts

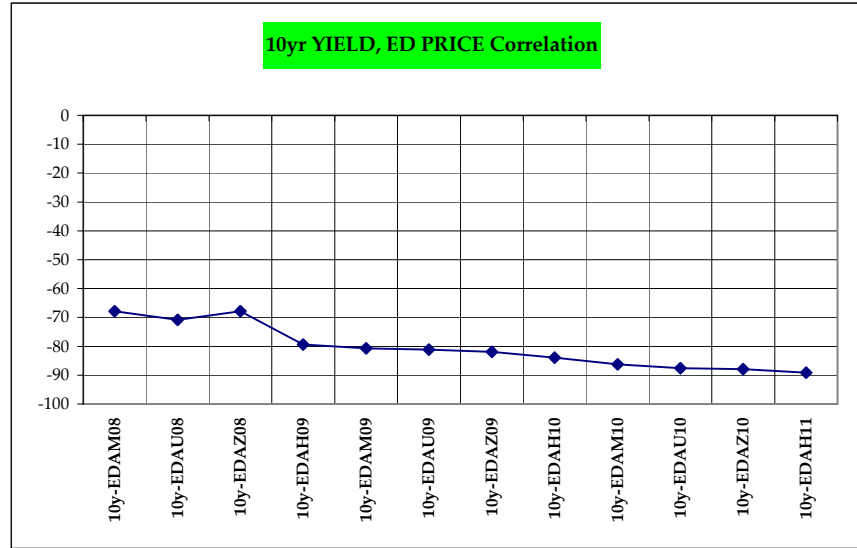
	10y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	1.81	1.24	10y-EDAM08	-67.859
EDAU08	1.69	1.37	10y-EDAU08	-70.872
EDAZ08	1.78	1.27	10y-EDAZ08	-67.859
EDAH09	1.84	1.22	10y-EDAH09	-79.410
EDAM09	2.06	0.99	10y-EDAM09	-80.678
EDAU09	2.29	0.77	10y-EDAU09	-81.166
EDAZ09	2.56	0.50	10y-EDAZ09	-81.901
EDAH10	2.75	0.30	10y-EDAH10	-83.882
EDAM10	2.97	0.09	10y-EDAM10	-86.221
EDAU10	3.19	0.14	10y-EDAU10	-87.568
EDAZ10	3.40	0.35	10y-EDAZ10	-87.939
EDAH11	3.56	0.50	10y-EDAH11	-89.120

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.



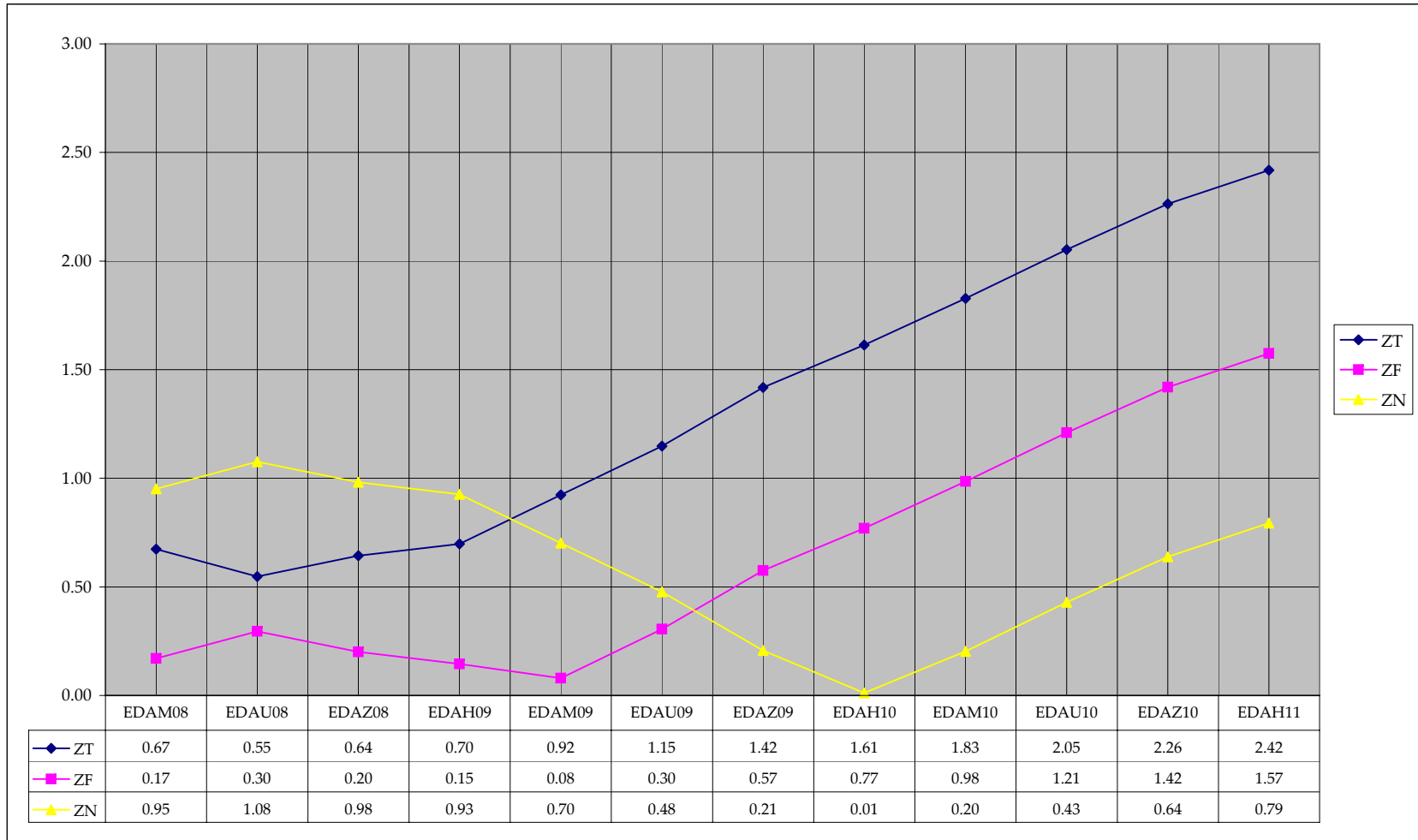
	GE Duration as Fraction of year	10Y Duration	Spread Duration	
EDAM08	0.219	8.25	8.03	10y-EDAM08
EDAU08	0.468	8.25	7.78	10y-EDAU08
EDAZ08	0.717	8.25	7.53	10y-EDAZ08
EDAH09	0.966	8.25	7.28	10y-EDAH09
EDAM09	1.216	8.25	7.03	10y-EDAM09
EDAU09	1.465	8.25	6.79	10y-EDAU09
EDAZ09	1.714	8.25	6.54	10y-EDAZ09
EDAH10	1.964	8.25	6.29	10y-EDAH10
EDAM10	2.213	8.25	6.04	10y-EDAM10
EDAU10	2.462	8.25	5.79	10y-EDAU10
EDAZ10	2.712	8.25	5.54	10y-EDAZ10
EDAH11	2.961	8.25	5.29	10y-EDAH11

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



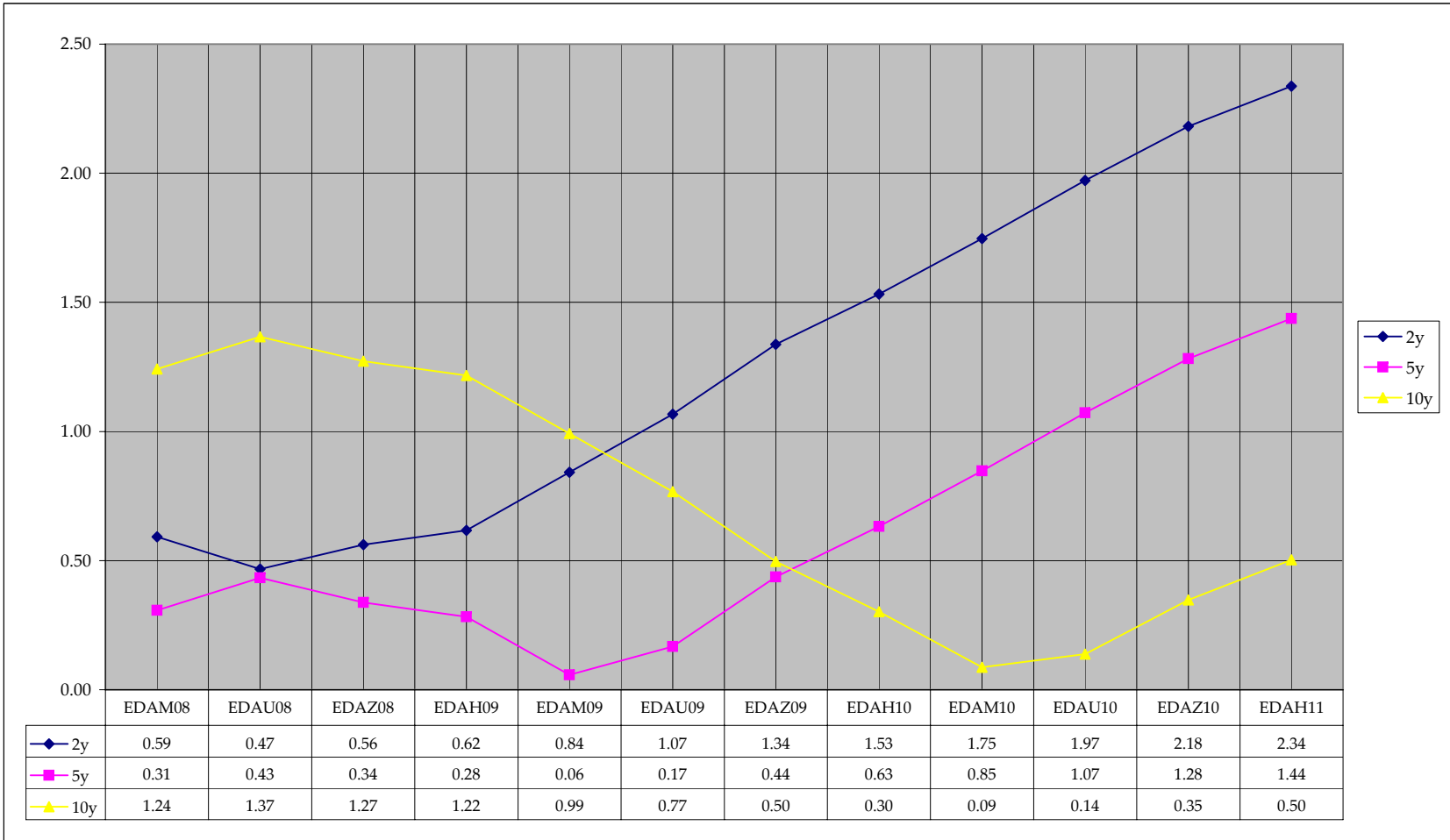
Dirty TED Curve

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.

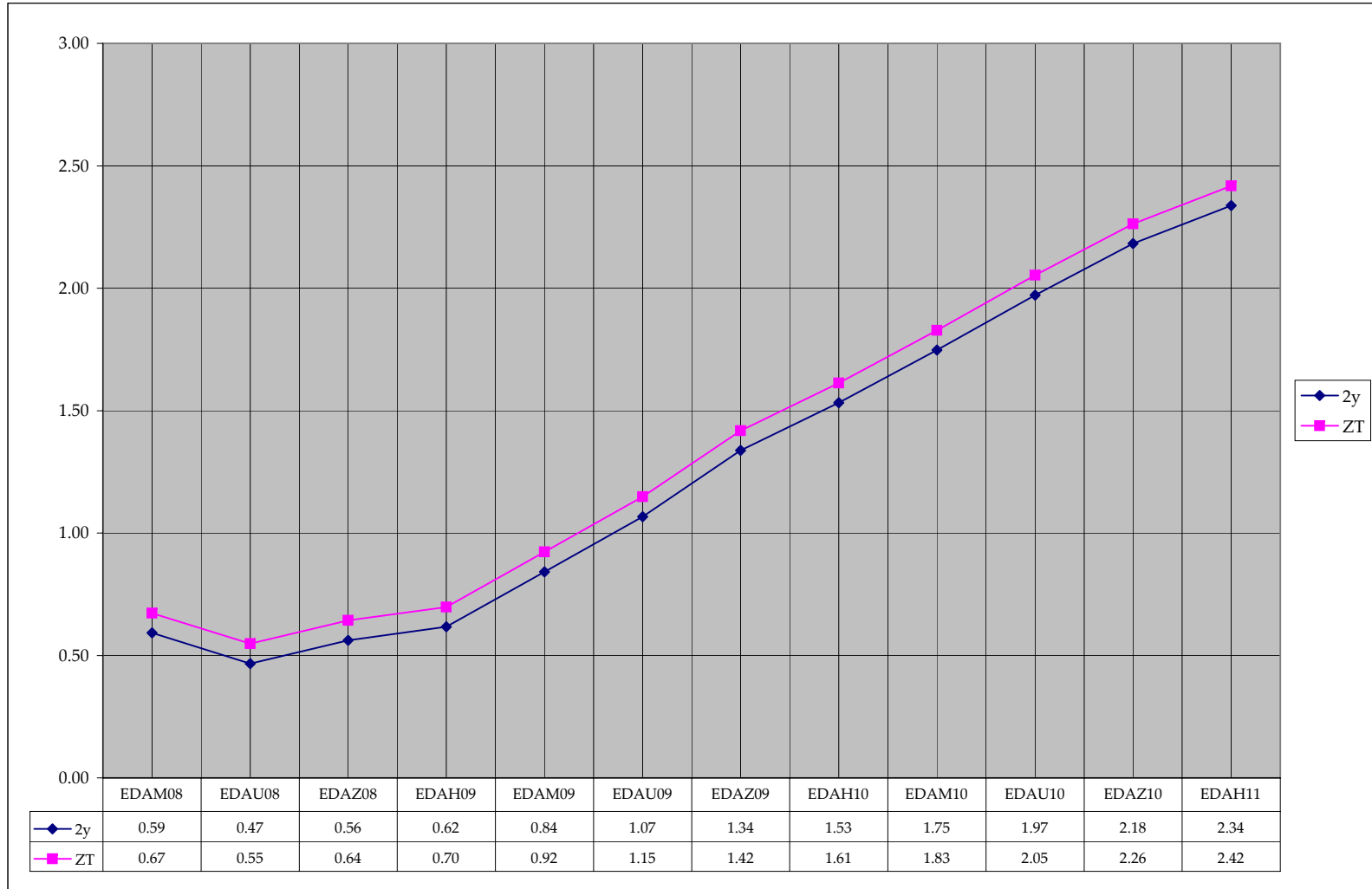


TED Curve

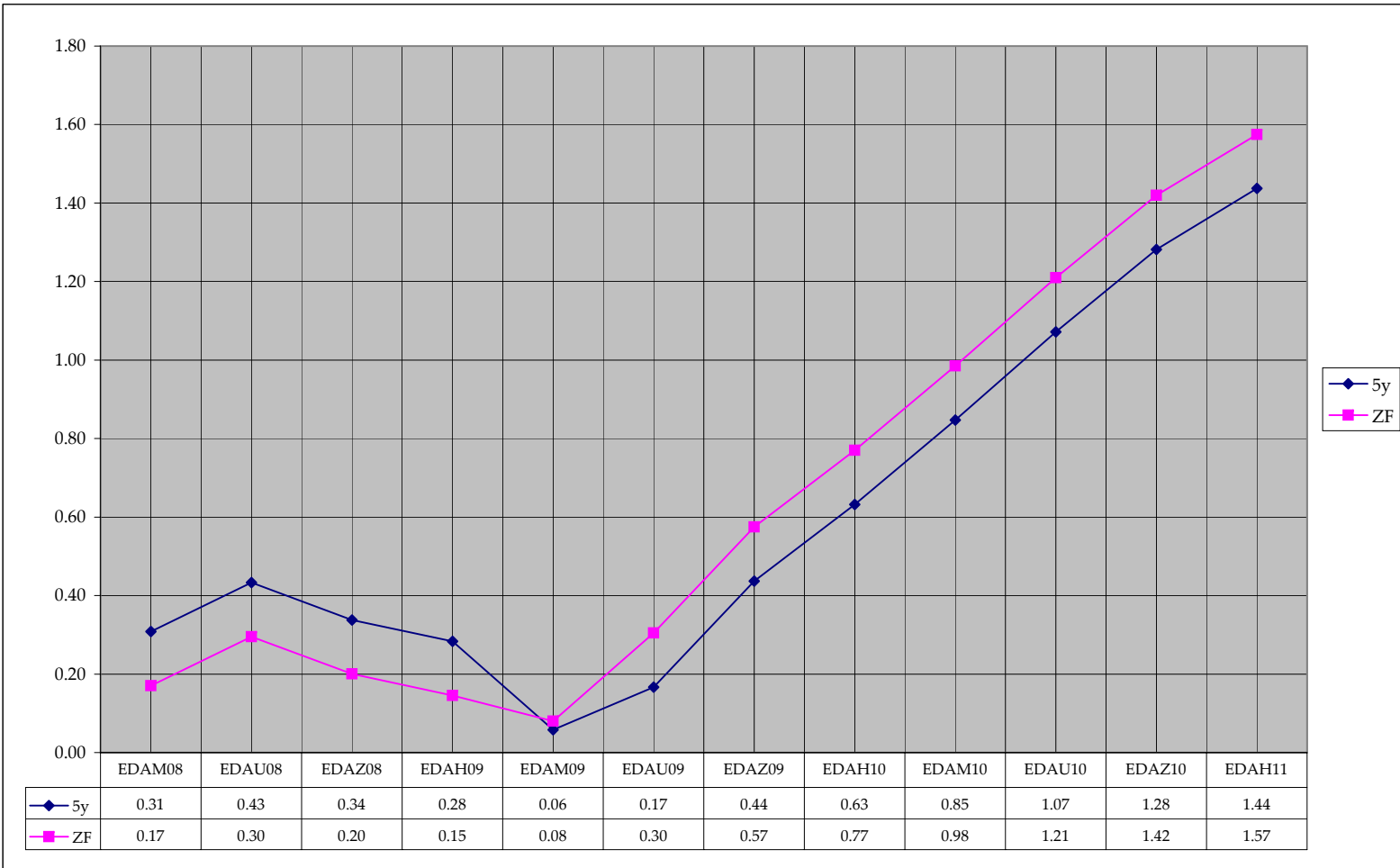
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



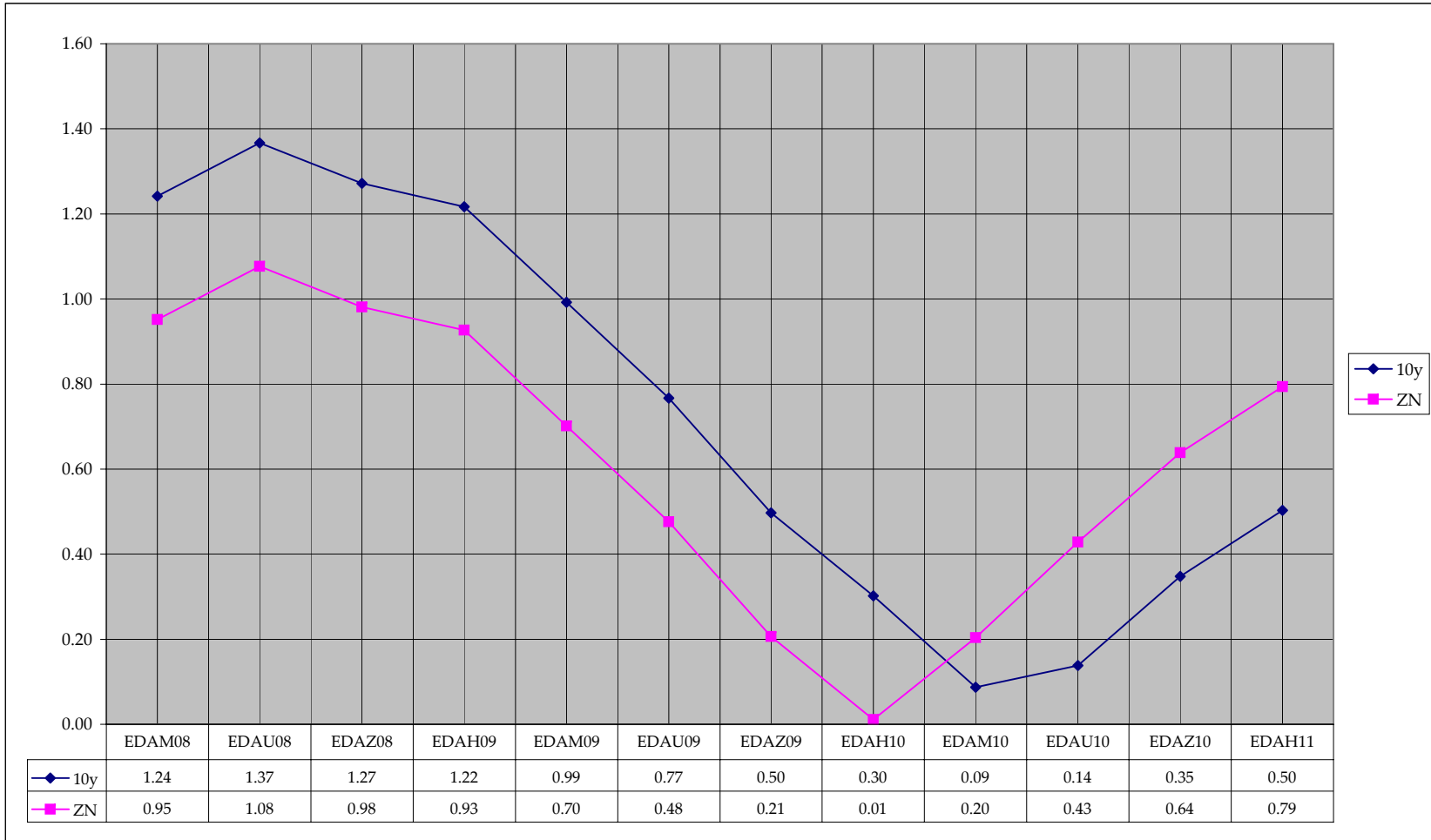
2y Basis TED Curve



5y Basis TED Curve



10y Basis TED Curve



Packs

	last Yield	Net Last Yield	Last Price
Q.ED.White	2.307	-0.375	9773.750
Q.ED.Red	2.959	-1.625	9710.250
Q.ED.Green	3.851	-1.875	9623.750
Q.ED.Blue		-0.625	9567.625
Q.ED.Gold		0.000	9530.125

