

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	104.7344	104.235	3.214	1.91	
ZF	109.5000	109.160	3.556	4.00	
ZN	112.2500	112.080	3.867	5.94	
2y	99.819	99.2620	3.217	1.88	
5y	99.225	99.0720	3.545	4.51	
10y	100.500	100.1600	4.184	8.00	

Eurodollars (ED)							
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month		
EDAZ07	95.053	4.948	3	0.008	DEC	White Pack	
EDAH08	95.560	4.440	94	0.257	MAR		
EDAM08	95.985	4.015	185	0.506	JUN		
EDAU08	96.225	3.775	276	0.756	SEP	Red Pack	
EDAZ08	96.325	3.675	367	1.005	DEC		
EDAH09	96.310	3.690	458	1.254	MAR		
EDAM09	96.210	3.790	549	1.503	JUN	Green Pack	
EDAU09	96.080	3.920	640	1.753	SEP		
EDAZ09	95.955	4.045	731	2.002	DEC		
EDAH10	95.835	4.165	822	2.251	MAR	Blue Pack	
EDAM10	95.690	4.310	913	2.501	JUN		
EDAU10	95.590	4.410	1004	2.750	SEP		
EDAZ10	95.490	4.510	1095	2.999	DEC	Gold Pack	
EDAH11	95.405	4.595	1186	3.249	MAR		
EDAM11	95.315	4.685	1277	3.498	JUN		
EDAU11	95.190	4.810	1375	3.766	SEP		
EDAZ11	95.145	4.855	1466	4.016	DEC		
EDAH12	95.075	4.925	1557	4.265	MAR		
EDAM12	95.015	4.985	1648	4.514	JUN		
EDAU12	94.920	5.080	1739	4.764	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	4.402	-3.188	9570.563	Pack Prices
Q.ED.Red	3.857	-2.875	9623.125	
Q.ED.Green	4.337	-2.375	9576.750	
Q.ED.Blue	4.770	-2.250	9535.000	
Q.ED.Gold		0.000	9505.125	

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

12/14/2007 5:38

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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.

jgoulding@ghco.com

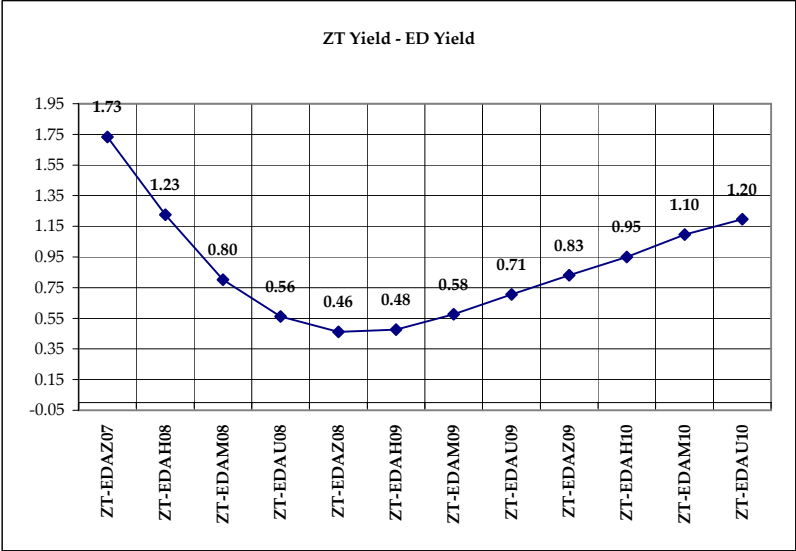
Eurodollar Color Codes for Individual Year Strips:

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

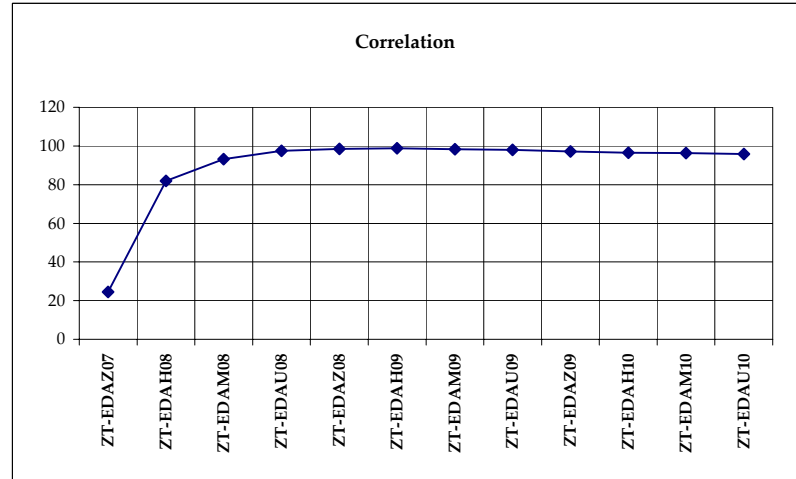
ZT				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAZ07	9.682	1.73	ZT-EDAZ07	24.497
EDAH08	9.174	1.23	ZT-EDAH08	81.927
EDAM08	8.749	0.80	ZT-EDAM08	93.218
EDAU08	8.509	0.56	ZT-EDAU08	97.558
EDAZ08	8.409	0.46	ZT-EDAZ08	98.560
EDAH09	8.424	0.48	ZT-EDAH09	98.785
EDAM09	8.524	0.58	ZT-EDAM09	98.363
EDAU09	8.654	0.71	ZT-EDAU09	97.927
EDAZ09	8.779	0.83	ZT-EDAZ09	97.176
EDAH10	8.899	0.95	ZT-EDAH10	96.517
EDAM10	9.044	1.10	ZT-EDAM10	96.345
EDAU10	9.144	1.20	ZT-EDAU10	95.755

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		
EDAZ07	0.008	1.91	1.91	ZT-EDAZ07
EDAH08	0.257	1.91	1.66	ZT-EDAH08
EDAM08	0.506	1.91	1.41	ZT-EDAM08
EDAU08	0.756	1.91	1.16	ZT-EDAU08
EDAZ08	1.005	1.91	0.91	ZT-EDAZ08
EDAH09	1.254	1.91	0.66	ZT-EDAH09
EDAM09	1.503	1.91	0.41	ZT-EDAM09
EDAU09	1.753	1.91	0.16	ZT-EDAU09
EDAZ09	2.002	1.91	(0.09)	ZT-EDAZ09
EDAH10	2.251	1.91	(0.34)	ZT-EDAH10
EDAM10	2.501	1.91	(0.59)	ZT-EDAM10
EDAU10	2.750	1.91	(0.84)	ZT-EDAU10

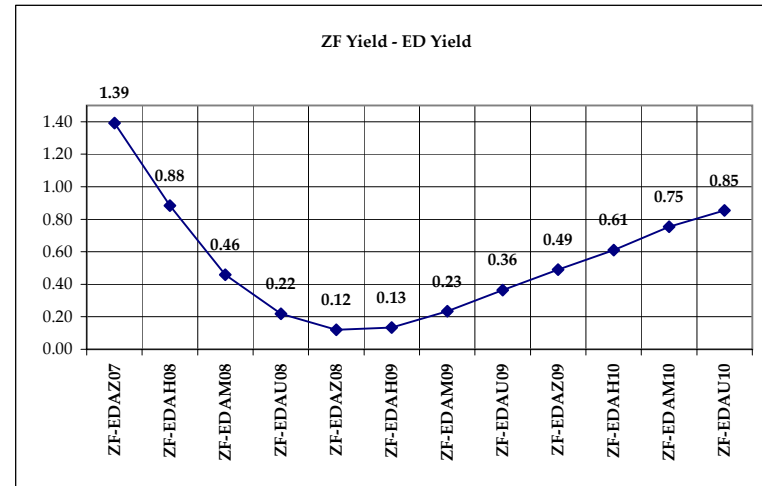
The farther away from 0 the spread duration is the riskier the trade.



Dirty TED: ZF vs Eurodollar Contracts

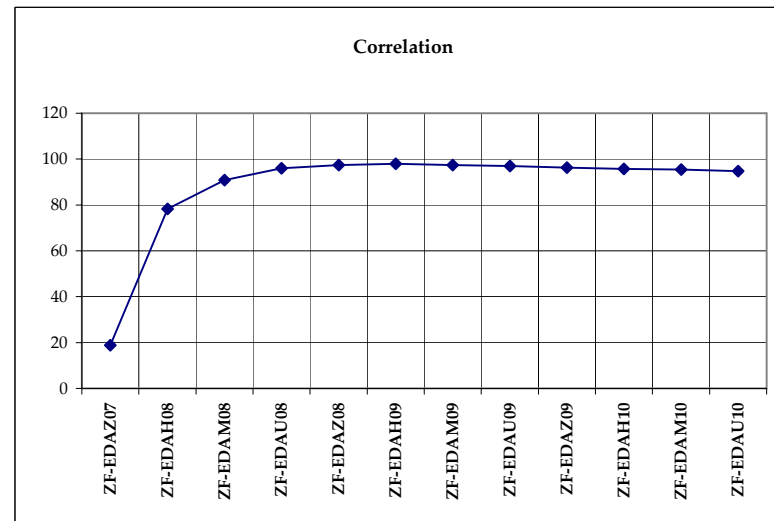
ZF				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAZ07	14.45	1.39	ZF-EDAZ07	18.862
EDAH08	13.94	0.88	ZF-EDAH08	78.255
EDAM08	13.52	0.46	ZF-EDAM08	90.840
EDAU08	13.28	0.22	ZF-EDAU08	96.038
EDAZ08	13.18	0.12	ZF-EDAZ08	97.451
EDAH09	13.19	0.13	ZF-EDAH09	97.920
EDAM09	13.29	0.23	ZF-EDAM09	97.464
EDAU09	13.42	0.36	ZF-EDAU09	97.032
EDAZ09	13.55	0.49	ZF-EDAZ09	96.323
EDAH10	13.67	0.61	ZF-EDAH10	95.682
EDAM10	13.81	0.75	ZF-EDAM10	95.473
EDAU10	13.91	0.85	ZF-EDAU10	94.776

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	ZF Duration	Spread Duration	
EDAZ07	0.008	4.00	3.99	ZF-EDAZ07
EDAH08	0.257	4.00	3.74	ZF-EDAH08
EDAM08	0.506	4.00	3.49	ZF-EDAM08
EDAU08	0.756	4.00	3.24	ZF-EDAU08
EDAZ08	1.005	4.00	2.99	ZF-EDAZ08
EDAH09	1.254	4.00	2.74	ZF-EDAH09
EDAM09	1.503	4.00	2.49	ZF-EDAM09
EDAU09	1.753	4.00	2.25	ZF-EDAU09
EDAZ09	2.002	4.00	2.00	ZF-EDAZ09
EDAH10	2.251	4.00	1.75	ZF-EDAH10
EDAM10	2.501	4.00	1.50	ZF-EDAM10
EDAU10	2.750	4.00	1.25	ZF-EDAU10

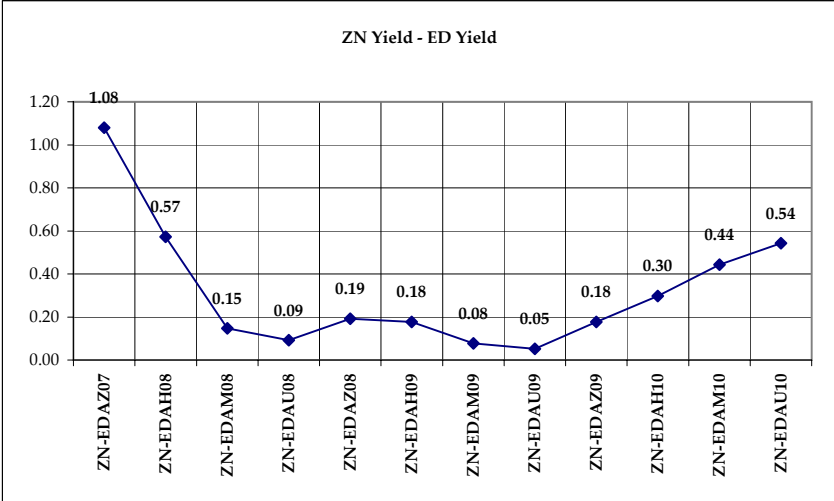
The farther away from 0 the spread duration is the riskier the trade.



Dirty TED: ZN vs Eurodollar Contracts

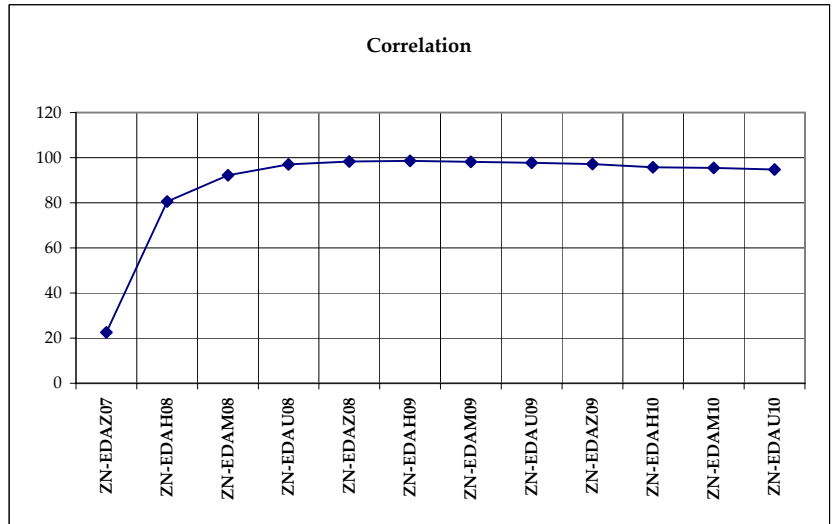
ZN				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAZ07	17.20	1.08	ZN-EDAZ07	22.50
EDAH08	16.69	0.57	ZN-EDAH08	80.59
EDAM08	16.27	0.15	ZN-EDAM08	92.17
EDAU08	16.03	0.09	ZN-EDAU08	96.98
EDAZ08	15.93	0.19	ZN-EDAZ08	98.29
EDAH09	15.94	0.18	ZN-EDAH09	98.59
EDAM09	16.04	0.08	ZN-EDAM09	98.18
EDAU09	16.17	0.05	ZN-EDAU09	97.79
EDAZ09	16.30	0.18	ZN-EDAZ09	97.22
EDAH10	16.42	0.30	ZN-EDAH10	95.68
EDAM10	16.56	0.44	ZN-EDAM10	95.47
EDAU10	16.66	0.54	ZN-EDAU10	94.78

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	
EDAZ07	0.008	5.94	5.93	ZN-EDAZ07
EDAH08	0.257	5.94	5.68	ZN-EDAH08
EDAM08	0.506	5.94	5.43	ZN-EDAM08
EDAU08	0.756	5.94	5.18	ZN-EDAU08
EDAZ08	1.005	5.94	4.93	ZN-EDAZ08
EDAH09	1.254	5.94	4.68	ZN-EDAH09
EDAM09	1.503	5.94	4.43	ZN-EDAM09
EDAU09	1.753	5.94	4.18	ZN-EDAU09
EDAZ09	2.002	5.94	3.94	ZN-EDAZ09
EDAH10	2.251	5.94	3.69	ZN-EDAH10
EDAM10	2.501	5.94	3.44	ZN-EDAM10
EDAU10	2.750	5.94	3.19	ZN-EDAU10

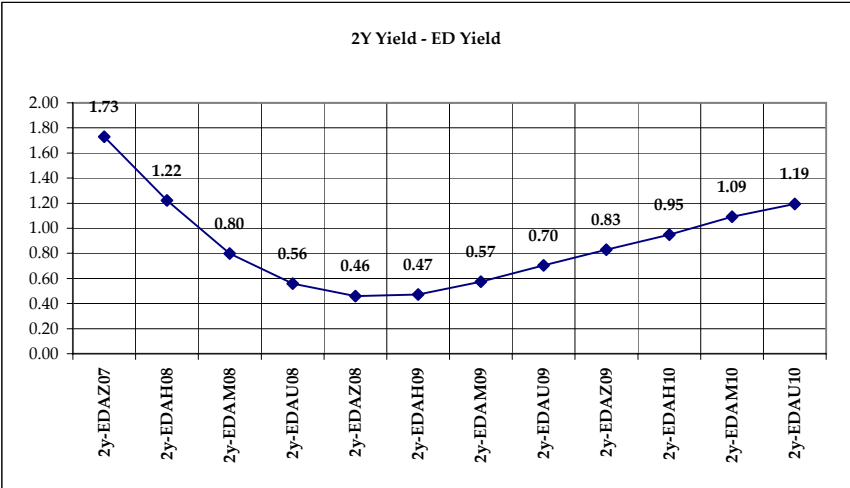
The farther away from 0 the spread duration is the riskier the trade.



TERM TED: 2y vs Eurodollar Contracts

	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAZ07	4.77	1.73	2y-EDAZ07	-6.362
EDAH08	4.26	1.22	2y-EDAH08	-69.563
EDAM08	3.83	0.80	2y-EDAM08	-84.212
EDAU08	3.59	0.56	2y-EDAU08	-90.602
EDAZ08	3.49	0.46	2y-EDAZ08	-84.212
EDAH09	3.51	0.47	2y-EDAH09	-92.671
EDAM09	3.61	0.57	2y-EDAM09	-92.133
EDAU09	3.74	0.70	2y-EDAU09	-91.349
EDAZ09	3.86	0.83	2y-EDAZ09	-89.942
EDAH10	3.98	0.95	2y-EDAH10	-88.930
EDAM10	4.13	1.09	2y-EDAM10	-88.583
EDAU10	4.23	1.19	2y-EDAU10	-87.931

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.

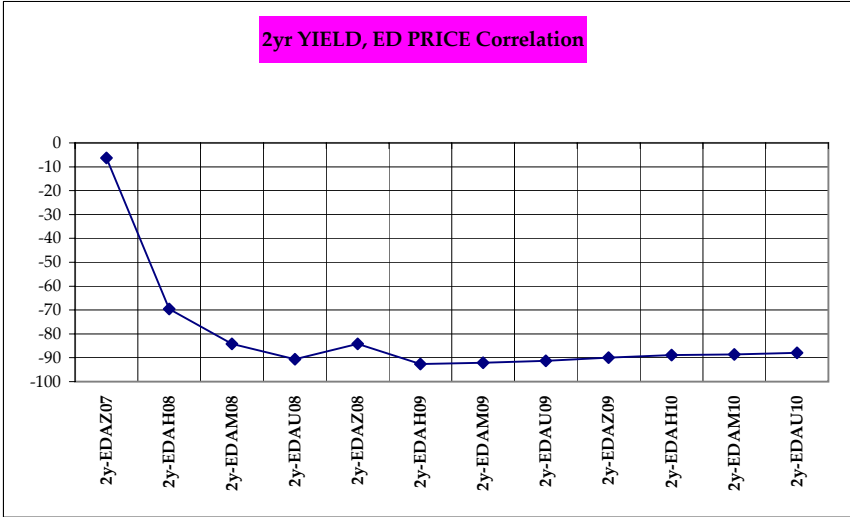


GE Duration as Fraction of year

	2Y Duration	Spread Duration	
EDAZ07	0.008	1.88	2y-EDAZ07
EDAH08	0.257	1.88	2y-EDAH08
EDAM08	0.506	1.88	2y-EDAM08
EDAU08	0.756	1.88	2y-EDAU08
EDAZ08	1.005	1.88	2y-EDAZ08
EDAH09	1.254	1.88	2y-EDAH09
EDAM09	1.503	1.88	2y-EDAM09
EDAU09	1.753	1.88	2y-EDAU09
EDAZ09	2.002	1.88	2y-EDAZ09
EDAH10	2.251	1.88	2y-EDAH10
EDAM10	2.501	1.88	2y-EDAM10
EDAU10	2.750	1.88	2y-EDAU10

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

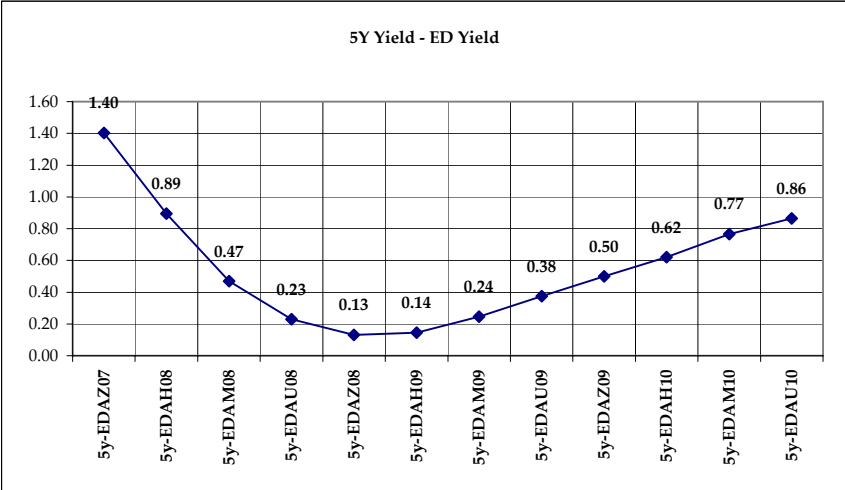
2yr YIELD, ED PRICE Correlation



TERM TED: 5y vs Eurodollar Contracts

	5y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAZ07	4.17	1.40	5y-EDAZ07	-10.468
EDAH08	3.67	0.89	5y-EDAH08	-72.223
EDAM08	3.24	0.47	5y-EDAM08	-85.741
EDAU08	3.00	0.23	5y-EDAU08	-92.195
EDAZ08	2.90	0.13	5y-EDAZ08	-85.741
EDAH09	2.92	0.14	5y-EDAH09	-94.621
EDAM09	3.02	0.24	5y-EDAM09	-94.215
EDAU09	3.15	0.38	5y-EDAU09	-93.649
EDAZ09	3.27	0.50	5y-EDAZ09	-92.809
EDAH10	3.39	0.62	5y-EDAH10	-92.233
EDAM10	3.54	0.77	5y-EDAM10	-91.950
EDAU10	3.64	0.86	5y-EDAU10	-91.425

Price = Outright Decimal Price - Euro Contract Price
 Yield = ABS(Proxy Yield - Implied Euro Contract yield)
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 These are measuring YIELD correlations.

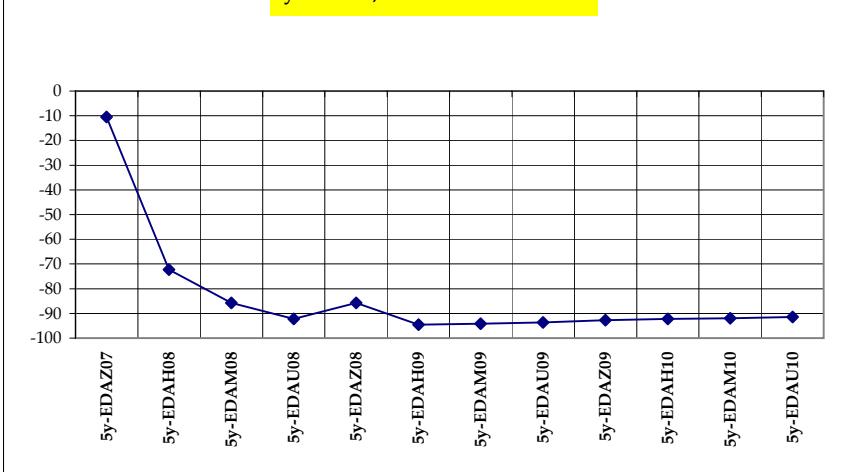


GE Duration as

	Fraction of year	5Y Duration	Spread Duration	
EDAZ07	0.008	4.51	4.51	5y-EDAZ07
EDAH08	0.257	4.51	4.26	5y-EDAH08
EDAM08	0.506	4.51	4.01	5y-EDAM08
EDAU08	0.756	4.51	3.76	5y-EDAU08
EDAZ08	1.005	4.51	3.51	5y-EDAZ08
EDAH09	1.254	4.51	3.26	5y-EDAH09
EDAM09	1.503	4.51	3.01	5y-EDAM09
EDAU09	1.753	4.51	2.76	5y-EDAU09
EDAZ09	2.002	4.51	2.51	5y-EDAZ09
EDAH10	2.251	4.51	2.26	5y-EDAH10
EDAM10	2.501	4.51	2.01	5y-EDAM10
EDAU10	2.750	4.51	1.76	5y-EDAU10

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

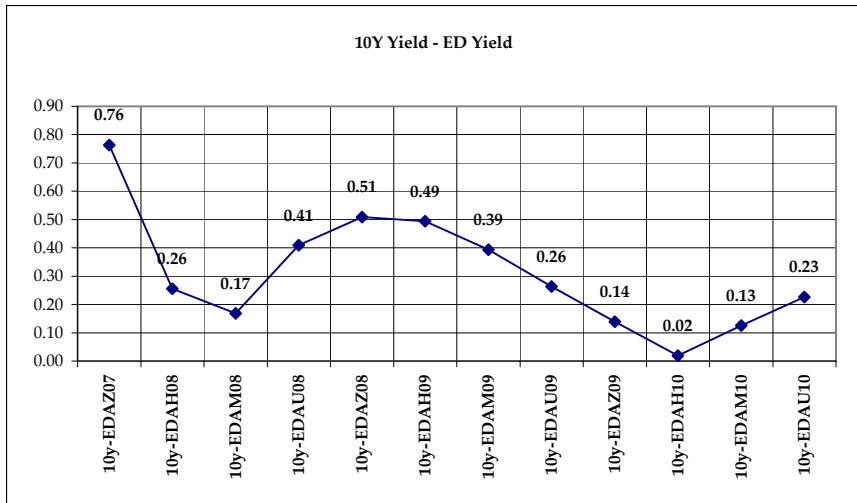
5yr YIELD, ED PRICE Correlation



TERM TED: 10y vs Eurodollar Contracts

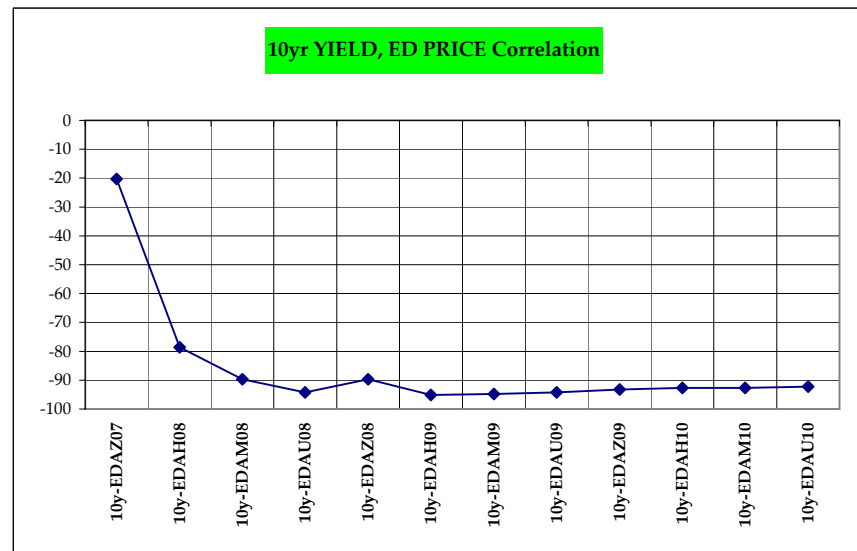
	10y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAZ07	4.17	0.76	10y-EDAZ07	-20.244
EDAH08	3.67	0.26	10y-EDAH08	-78.618
EDAM08	3.24	0.17	10y-EDAM08	-89.720
EDAU08	3.00	0.41	10y-EDAU08	-94.213
EDAZ08	2.90	0.51	10y-EDAZ08	-89.720
EDAH09	2.92	0.49	10y-EDAH09	-95.084
EDAM09	3.02	0.39	10y-EDAM09	-94.758
EDAU09	3.15	0.26	10y-EDAU09	-94.195
EDAZ09	3.27	0.14	10y-EDAZ09	-93.269
EDAH10	3.39	0.02	10y-EDAH10	-92.713
EDAM10	3.54	0.13	10y-EDAM10	-92.629
EDAU10	3.64	0.23	10y-EDAU10	-92.265

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.



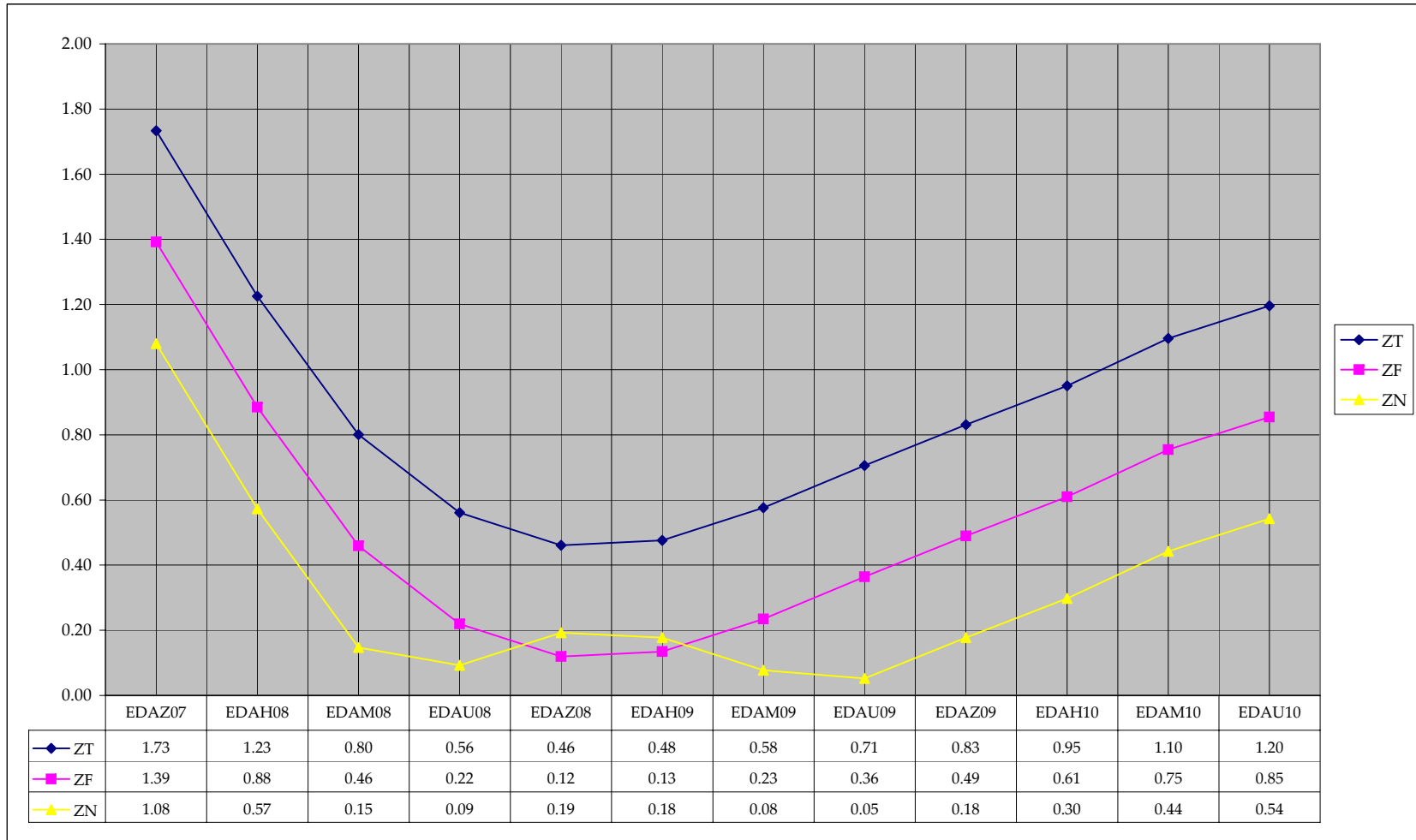
	GE Duration as Fraction of year	10Y Duration	Spread Duration	
EDAZ07	0.008	8.00	7.99	10y-EDAZ07
EDAH08	0.257	8.00	7.74	10y-EDAH08
EDAM08	0.506	8.00	7.49	10y-EDAM08
EDAU08	0.756	8.00	7.24	10y-EDAU08
EDAZ08	1.005	8.00	6.99	10y-EDAZ08
EDAH09	1.254	8.00	6.75	10y-EDAH09
EDAM09	1.503	8.00	6.50	10y-EDAM09
EDAU09	1.753	8.00	6.25	10y-EDAU09
EDAZ09	2.002	8.00	6.00	10y-EDAZ09
EDAH10	2.251	8.00	5.75	10y-EDAH10
EDAM10	2.501	8.00	5.50	10y-EDAM10
EDAU10	2.750	8.00	5.25	10y-EDAU10

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



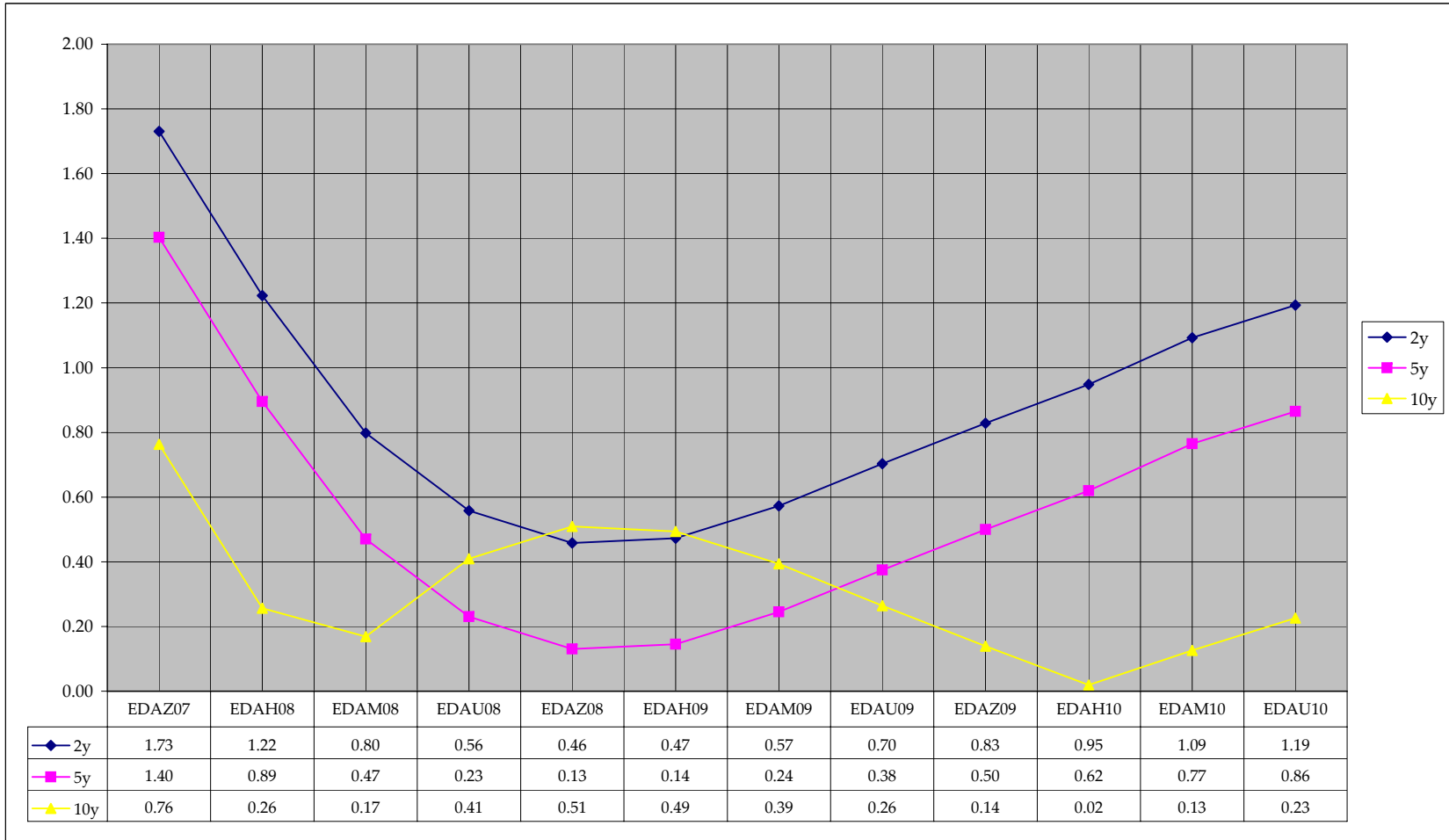
Dirty TED Curve

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.

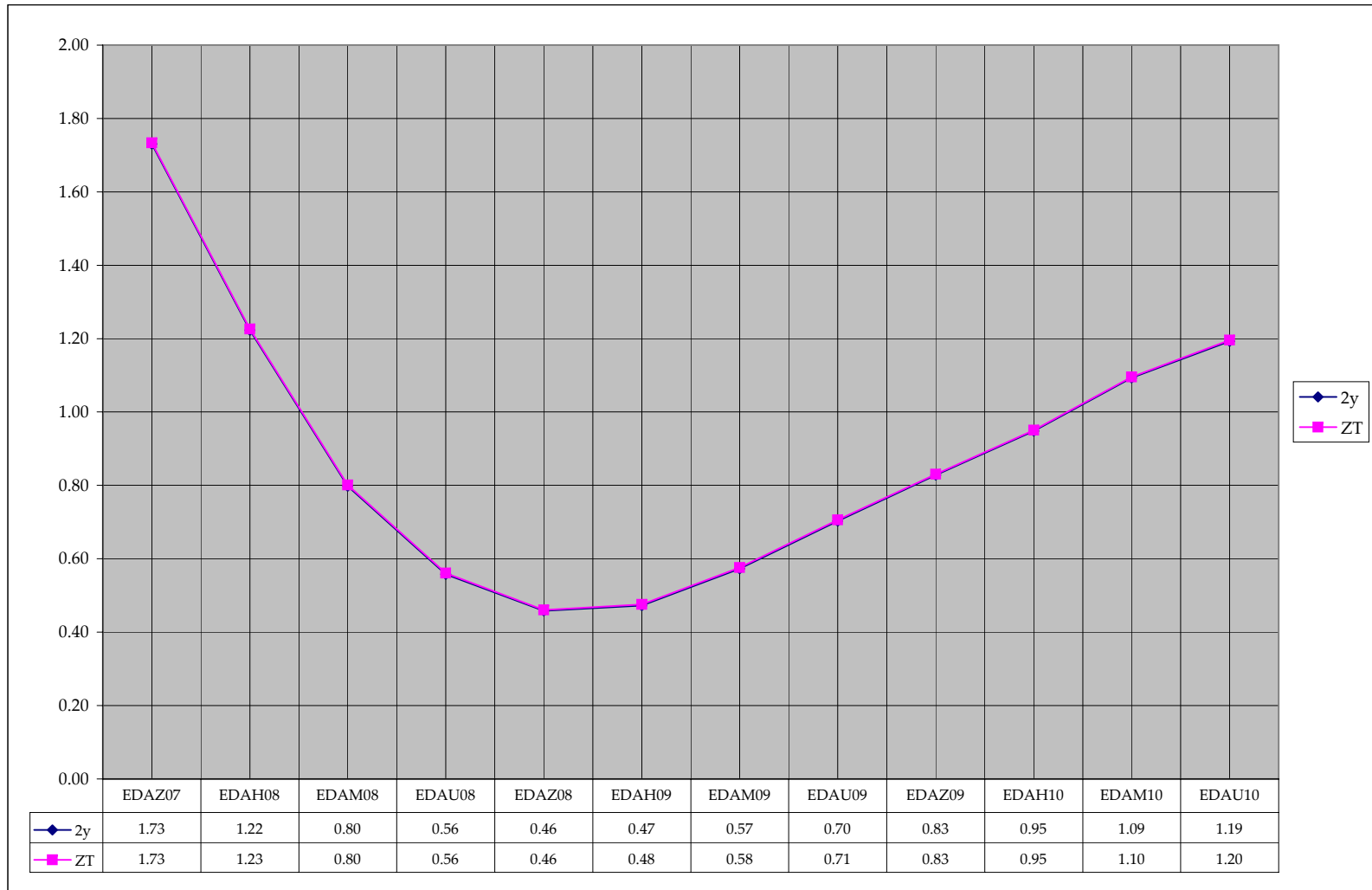


TED Curve

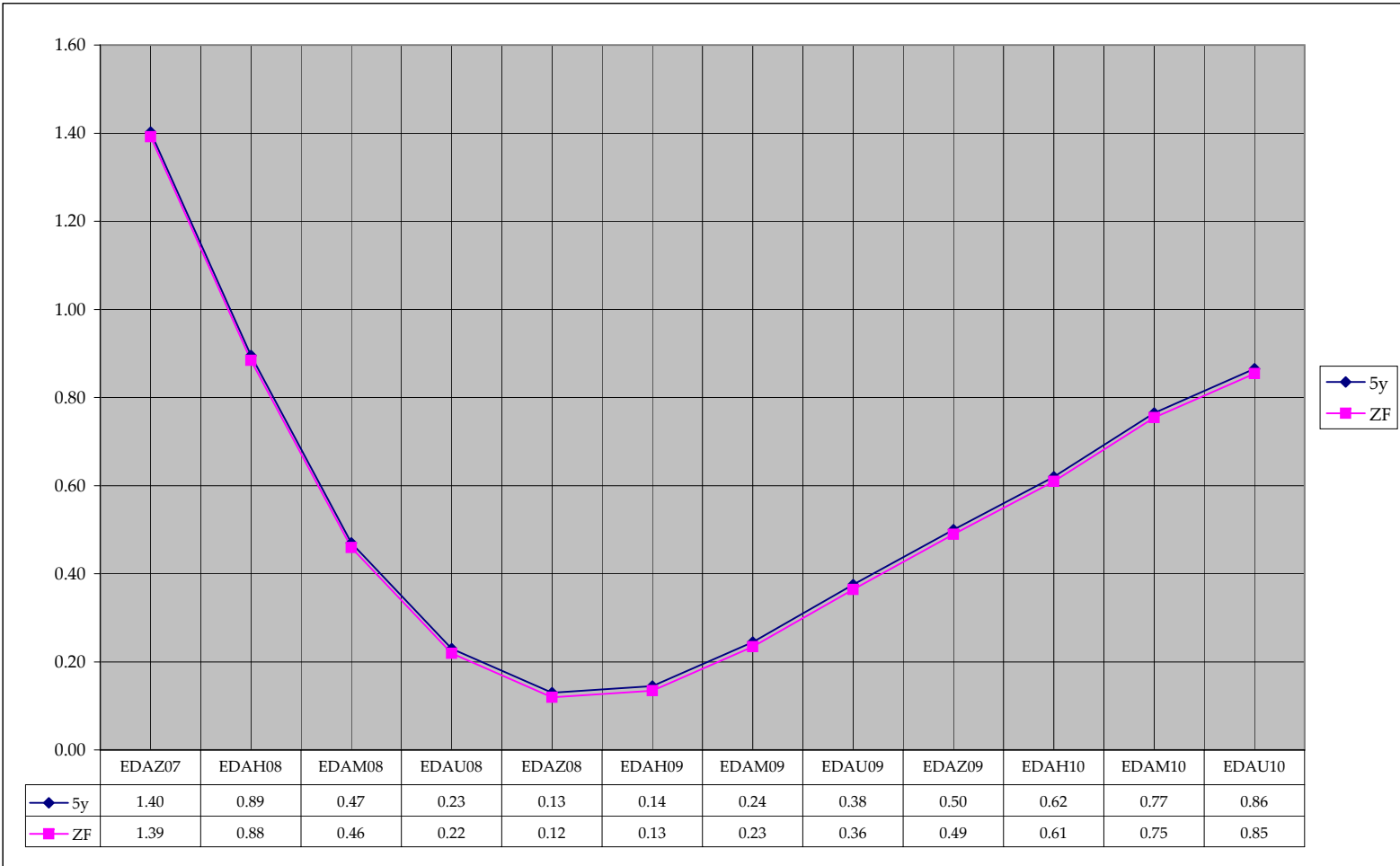
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



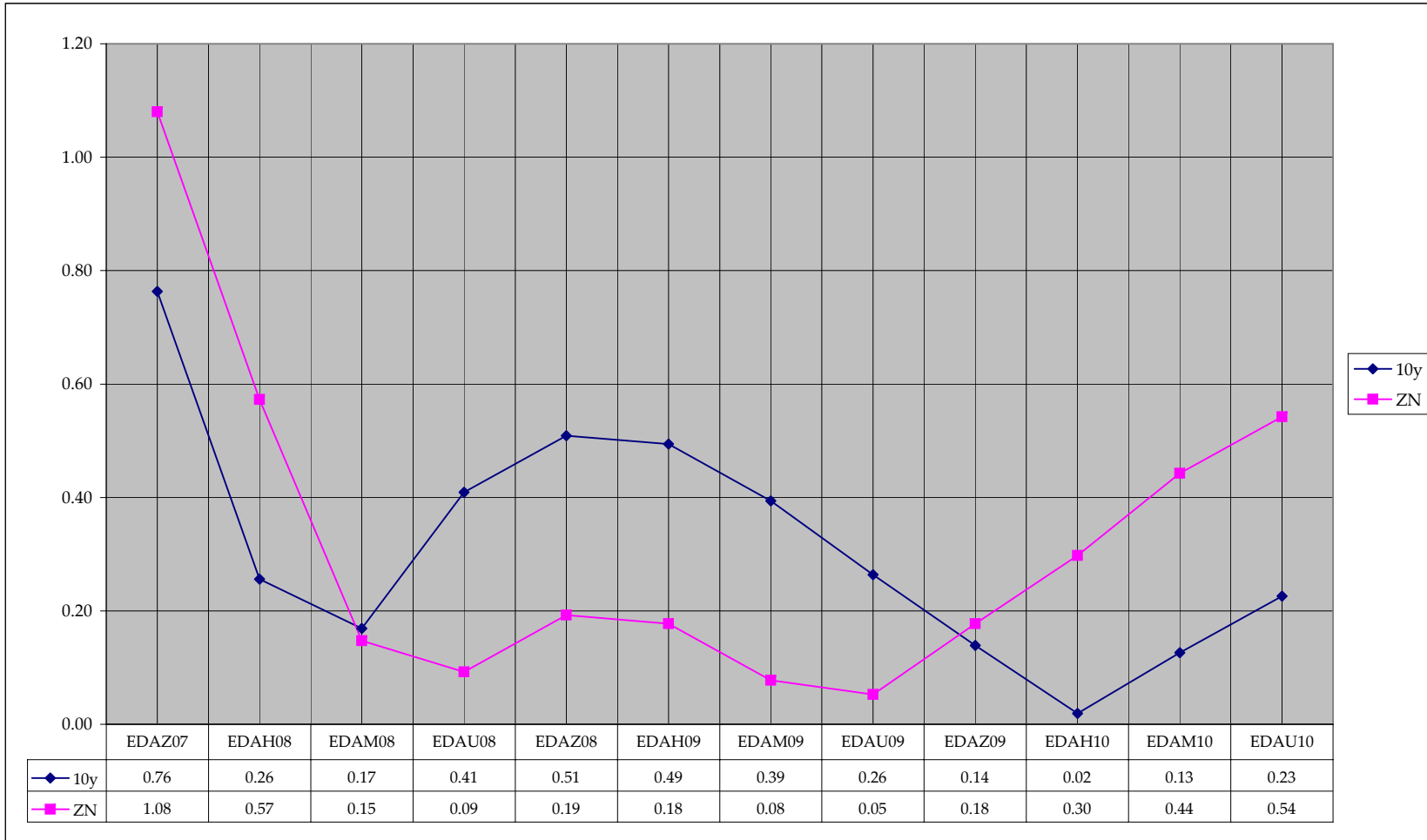
2y Basis TED Curve



5y Basis TED Curve



10y Basis TED Curve



Packs

	last Yield	Net Last Yield	Last Price
Q.ED.White	4.402	-3.188	9570.563
Q.ED.Red	3.857	-2.875	9623.125
Q.ED.Green	4.337	-2.375	9576.750
Q.ED.Blue	4.770	-2.250	9535.000
Q.ED.Gold		0.000	9505.125

