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	103.7500	103.240	3.810	1.91
ZF	107.7500	107.240	4.006	3.87
ZN	110.5000	110.160	4.204	5.80
2y	99.616	99.1970	3.823	1.82
5y	99.131	99.0420	4.069	4.50
10y	102.750	102.2400	4.400	7.72

Eurodollars (ED)	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month	
EDAZ07	95.290	4.710	47	0.128	DEC	White Pack
EDAH08	95.600	4.400	138	0.377	MAR	
EDAM08	95.730	4.270	229	0.627	JUN	
EDAU08	95.800	4.200	320	0.876	SEP	
EDAZ08	95.810	4.190	411	1.125	DEC	Red Pack
EDAH09	95.760	4.240	502	1.375	MAR	
EDAM09	95.665	4.335	593	1.624	JUN	
EDAU09	95.560	4.440	684	1.873	SEP	
EDAZ09	95.455	4.545	775	2.123	DEC	Green Pack
EDAH10	95.380	4.620	866	2.372	MAR	
EDAM10	95.300	4.700	957	2.621	JUN	
EDAU10	95.240	4.760	1048	2.871	SEP	
EDAZ10	95.160	4.840	1139	3.120	DEC	Blue Pack
EDAH11	95.105	4.895	1230	3.369	MAR	
EDAM11	95.040	4.960	1321	3.619	JUN	
EDAU11	94.980	5.020	1419	3.887	SEP	
EDAZ11	94.915	5.085	1510	4.136	DEC	Gold Pack
EDAH12	94.900	5.100	1601	4.386	MAR	
EDAM12	94.830	5.170	1692	4.635	JUN	
EDAU12	94.785	5.215	1783	4.884	SEP	

	Last Yield	Net Yield	Last Price	
Q.ED.White	4.506	-1.875	9560.500	Pack Prices
Q.ED.Red	4.408	-3.000	9569.875	
Q.ED.Green	4.777	-1.750	9534.375	
Q.ED.Blue	5.060	0.000	9507.125	
Q.ED.Gold		0.000	9484.375	

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

Notes
Futures use CTD for Last Yield
Mduration = Modified Macaulay Duration
#VALUE! = no quote being provided by exchange.

Overview of Hedging

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

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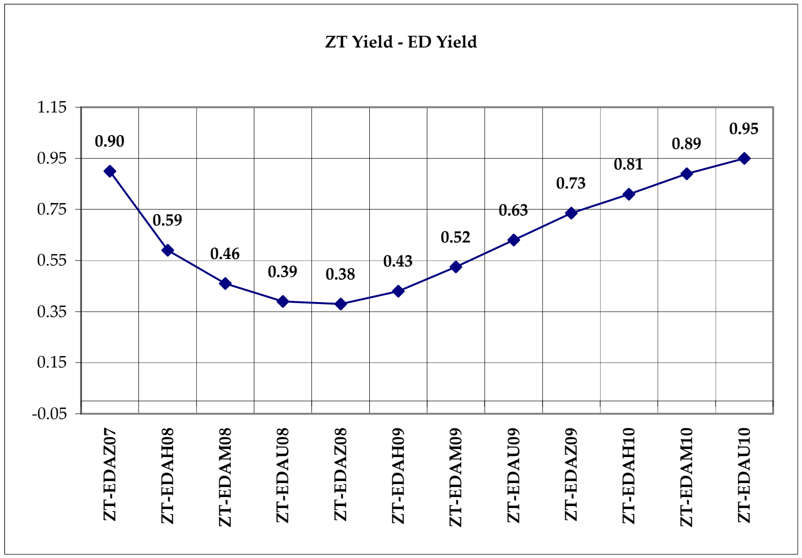
Dirty TED: ZT vs Eurodollar Contracts

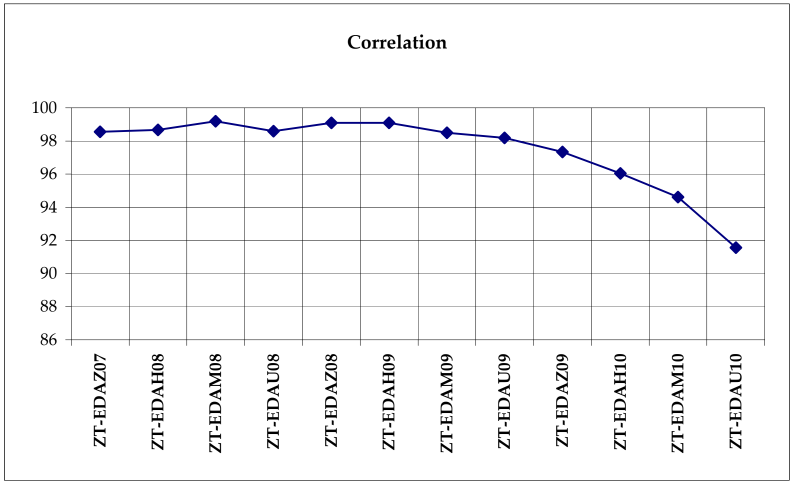
	ZT Spread Price	ZT Spread Yield	ZT Spread Name	Correlation* (percent)
EDAZ07	8.460	0.90	ZT-EDAZ07	98.544
EDAH08	8.150	0.59	ZT-EDAH08	98.660
EDAM08	8.020	0.46	ZT-EDAM08	99.186
EDAU08	7.950	0.39	ZT-EDAU08	98.582
EDAZ08	7.940	0.38	ZT-EDAZ08	99.093
EDAH09	7.990	0.43	ZT-EDAH09	99.084
EDAM09	8.085	0.52	ZT-EDAM09	98.496
EDAU09	8.190	0.63	ZT-EDAU09	98.178
EDAZ09	8.295	0.73	ZT-EDAZ09	97.326
EDAH10	8.370	0.81	ZT-EDAH10	96.041
EDAM10	8.450	0.89	ZT-EDAM10	94.621
EDAU10	8.510	0.95	ZT-EDAU10	91.559

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	0.128	1.91	1.78	ZT-EDAZ07
EDAH08	0.377	1.91	1.53	ZT-EDAH08
EDAM08	0.627	1.91	1.28	ZT-EDAM08
EDAU08	0.876	1.91	1.03	ZT-EDAU08
EDAZ08	1.125	1.91	0.78	ZT-EDAZ08
EDAH09	1.375	1.91	0.53	ZT-EDAH09
EDAM09	1.624	1.91	0.28	ZT-EDAM09
EDAU09	1.873	1.91	0.03	ZT-EDAU09
EDAZ09	2.123	1.91	(0.21)	ZT-EDAZ09
EDAH10	2.372	1.91	(0.46)	ZT-EDAH10
EDAM10	2.621	1.91	(0.71)	ZT-EDAM10
EDAU10	2.871	1.91	(0.96)	ZT-EDAU10

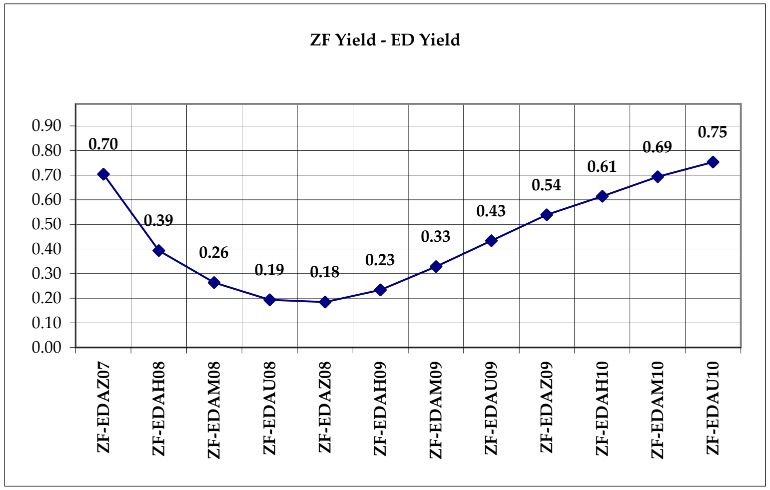
The farther away from 0 the spread duration is the riskier the trade.



Dirty TED: ZF vs Eurodollar Contracts

	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAZ07	12.46	0.70	ZF-EDAZ07	96.045
EDAH08	12.15	0.39	ZF-EDAH08	94.743
EDAM08	12.02	0.26	ZF-EDAM08	96.958
EDAU08	11.95	0.19	ZF-EDAU08	97.247
EDAZ08	11.94	0.18	ZF-EDAZ08	97.371
EDAH09	11.99	0.23	ZF-EDAH09	97.736
EDAM09	12.09	0.33	ZF-EDAM09	97.357
EDAU09	12.19	0.43	ZF-EDAU09	97.665
EDAZ09	12.30	0.54	ZF-EDAZ09	98.374
EDAH10	12.37	0.61	ZF-EDAH10	98.432
EDAM10	12.45	0.69	ZF-EDAM10	97.836
EDAU10	12.51	0.75	ZF-EDAU10	96.325

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	ZF Duration	Spread Duration	
EDAZ07	0.128	3.87	3.74	ZF-EDAZ07
EDAH08	0.377	3.87	3.49	ZF-EDAH08
EDAM08	0.627	3.87	3.25	ZF-EDAM08
EDAU08	0.876	3.87	3.00	ZF-EDAU08
EDAZ08	1.125	3.87	2.75	ZF-EDAZ08
EDAH09	1.375	3.87	2.50	ZF-EDAH09
EDAM09	1.624	3.87	2.25	ZF-EDAM09
EDAU09	1.873	3.87	2.00	ZF-EDAU09
EDAZ09	2.123	3.87	1.75	ZF-EDAZ09
EDAH10	2.372	3.87	1.50	ZF-EDAH10
EDAM10	2.621	3.87	1.25	ZF-EDAM10
EDAU10	2.871	3.87	1.00	ZF-EDAU10

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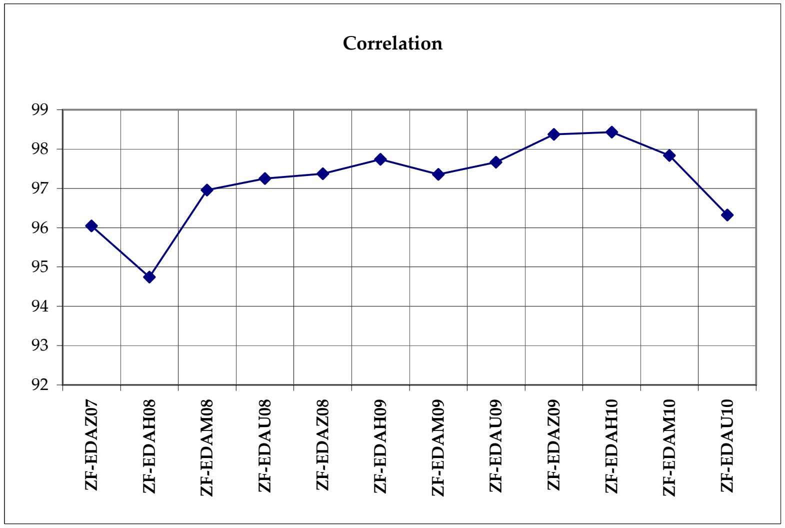

Dirty TED: ZN vs Eurodollar Contracts

	ZN			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAZ07	15.21	0.51	ZN-EDAZ07	94.72
EDAH08	14.90	0.20	ZN-EDAH08	93.90
EDAM08	14.77	0.07	ZN-EDAM08	94.91
EDAU08	14.70	0.00	ZN-EDAU08	94.73
EDAZ08	14.69	0.01	ZN-EDAZ08	95.08
EDAH09	14.74	0.04	ZN-EDAH09	96.21
EDAM09	14.84	0.13	ZN-EDAM09	96.21
EDAU09	14.94	0.24	ZN-EDAU09	96.54
EDAZ09	15.05	0.34	ZN-EDAZ09	97.24
EDAH10	15.12	0.42	ZN-EDAH10	98.43
EDAM10	15.20	0.50	ZN-EDAM10	97.84
EDAU10	15.26	0.56	ZN-EDAU10	96.32

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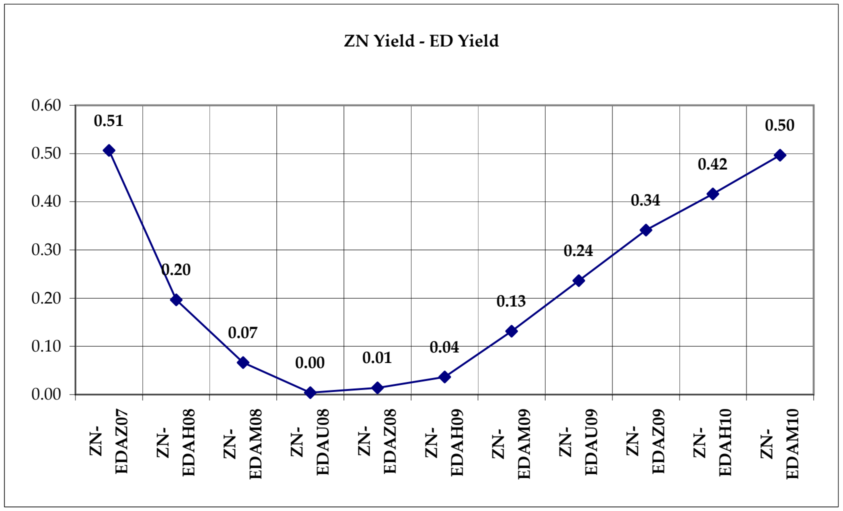

	GE Duration as Fraction of year	ZN Duration	Spread Duration	
EDAZ07	0.128	5.80	5.67	ZN-EDAZ07
EDAH08	0.377	5.80	5.42	ZN-EDAH08
EDAM08	0.627	5.80	5.17	ZN-EDAM08
EDAU08	0.876	5.80	4.92	ZN-EDAU08
EDAZ08	1.125	5.80	4.67	ZN-EDAZ08
EDAH09	1.375	5.80	4.42	ZN-EDAH09
EDAM09	1.624	5.80	4.17	ZN-EDAM09
EDAU09	1.873	5.80	3.92	ZN-EDAU09
EDAZ09	2.123	5.80	3.67	ZN-EDAZ09
EDAH10	2.372	5.80	3.42	ZN-EDAH10
EDAM10	2.621	5.80	3.17	ZN-EDAM10
EDAU10	2.871	5.80	2.92	ZN-EDAU10

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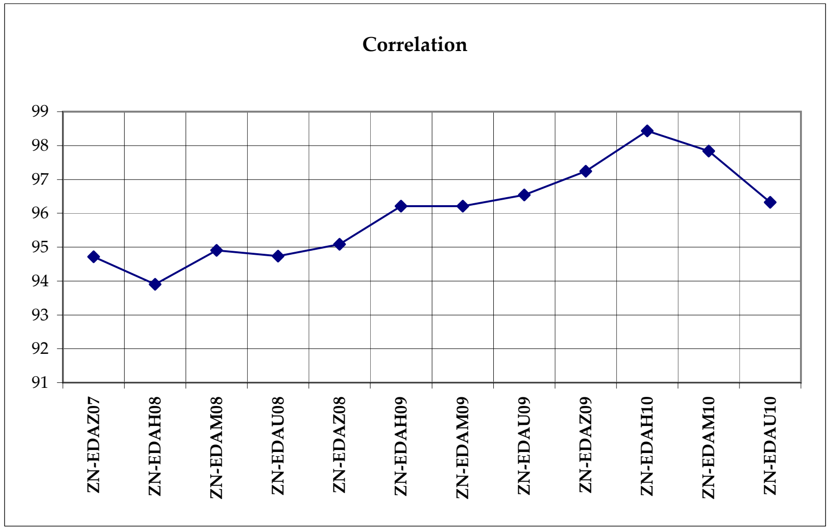

TERM TED: 2y vs Eurodollar Contracts

	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAZ07	4.33	0.89	2y-EDAZ07	-94.036
EDAH08	4.02	0.58	2y-EDAH08	-91.784
EDAM08	3.89	0.45	2y-EDAM08	-91.685
EDAU08	3.82	0.38	2y-EDAU08	-91.068
EDAZ08	3.81	0.37	2y-EDAZ08	-91.685
EDAH09	3.86	0.42	2y-EDAH09	-91.856
EDAM09	3.95	0.51	2y-EDAM09	-91.074
EDAU09	4.06	0.62	2y-EDAU09	-90.732
EDAZ09	4.16	0.72	2y-EDAZ09	-89.445
EDAH10	4.24	0.80	2y-EDAH10	-88.416
EDAM10	4.32	0.88	2y-EDAM10	-87.038
EDAU10	4.38	0.94	2y-EDAU10	-84.408

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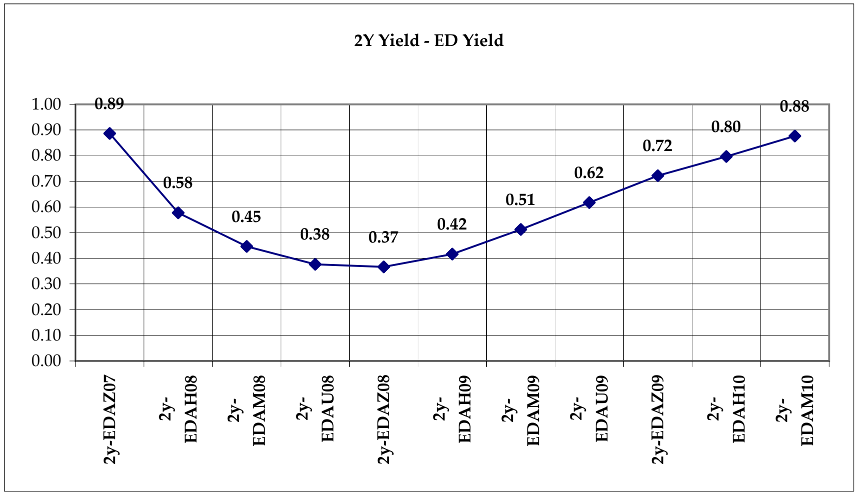
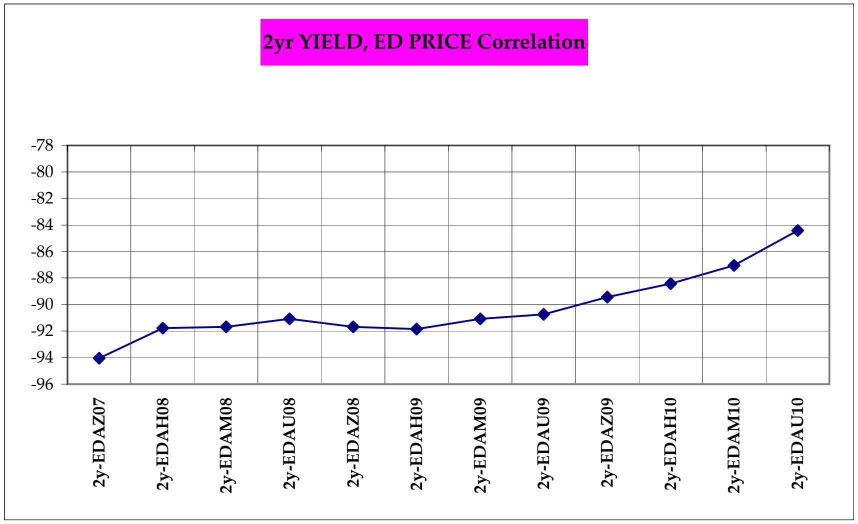


	GE Duration as Fraction of year	2Y Duration	Spread Duration	
EDAZ07	0.128	1.82	1.69	2y-EDAZ07
EDAH08	0.377	1.82	1.44	2y-EDAH08
EDAM08	0.627	1.82	1.19	2y-EDAM08
EDAU08	0.876	1.82	0.94	2y-EDAU08
EDAZ08	1.125	1.82	0.69	2y-EDAZ08
EDAH09	1.375	1.82	0.45	2y-EDAH09
EDAM09	1.624	1.82	0.20	2y-EDAM09
EDAU09	1.873	1.82	(0.05)	2y-EDAU09
EDAZ09	2.123	1.82	(0.30)	2y-EDAZ09
EDAH10	2.372	1.82	(0.55)	2y-EDAH10
EDAM10	2.621	1.82	(0.80)	2y-EDAM10
EDAU10	2.871	1.82	(1.05)	2y-EDAU10

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



TERM TED: 5y vs Eurodollar Contracts

	5y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAZ07	3.84	0.64	5y-EDAZ07	-88.762
EDAH08	3.53	0.33	5y-EDAH08	-85.677
EDAM08	3.40	0.20	5y-EDAM08	-88.733
EDAU08	3.33	0.13	5y-EDAU08	-89.522
EDAZ08	3.32	0.12	5y-EDAZ08	-88.733
EDAH09	3.37	0.17	5y-EDAH09	-89.836
EDAM09	3.47	0.27	5y-EDAM09	-89.331
EDAU09	3.57	0.37	5y-EDAU09	-89.996
EDAZ09	3.68	0.48	5y-EDAZ09	-91.398
EDAH10	3.75	0.55	5y-EDAH10	-92.313
EDAM10	3.83	0.63	5y-EDAM10	-92.259
EDAU10	3.89	0.69	5y-EDAU10	-91.716

Price = Outright Decimal Price - Euro Contract Price
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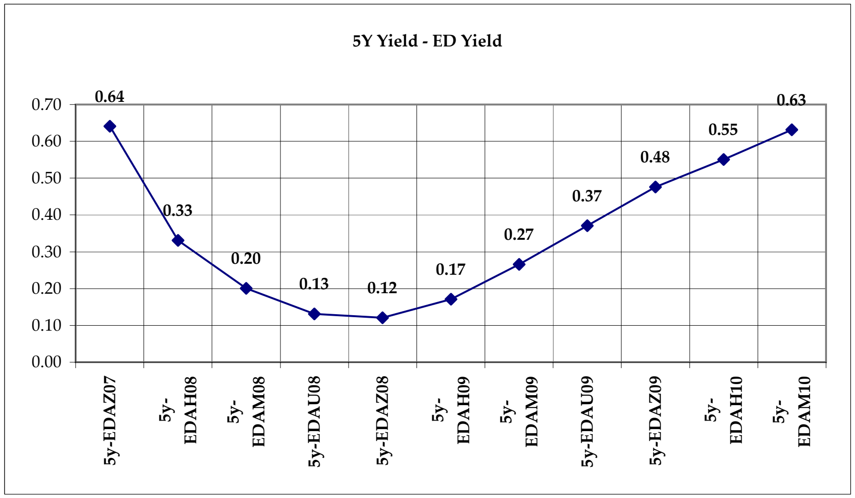
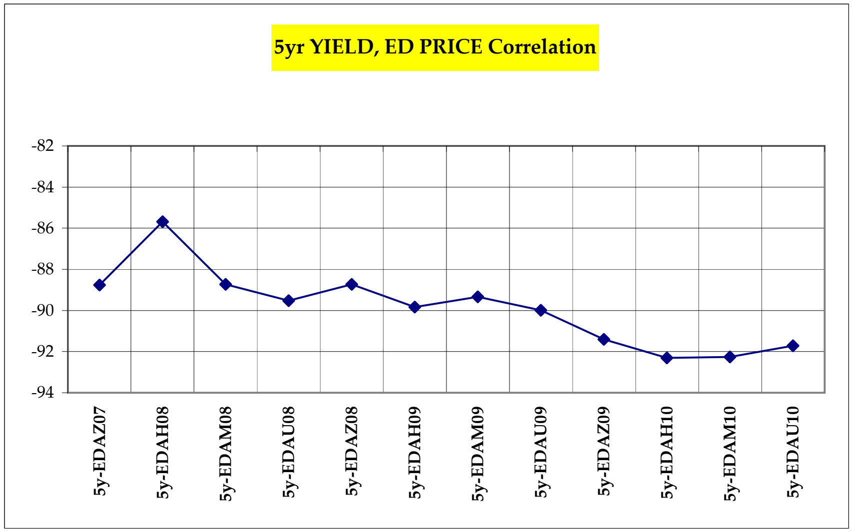


	GE Duration as Fraction of year	5Y Duration	Spread Duration	
EDAZ07	0.128	4.50	4.37	5y-EDAZ07
EDAH08	0.377	4.50	4.12	5y-EDAH08
EDAM08	0.627	4.50	3.87	5y-EDAM08
EDAU08	0.876	4.50	3.62	5y-EDAU08
EDAZ08	1.125	4.50	3.37	5y-EDAZ08
EDAH09	1.375	4.50	3.12	5y-EDAH09
EDAM09	1.624	4.50	2.87	5y-EDAM09
EDAU09	1.873	4.50	2.62	5y-EDAU09
EDAZ09	2.123	4.50	2.37	5y-EDAZ09
EDAH10	2.372	4.50	2.12	5y-EDAH10
EDAM10	2.621	4.50	1.88	5y-EDAM10
EDAU10	2.871	4.50	1.63	5y-EDAU10

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)
EDAZ07	3.84	0.31	10y-EDAZ07	-88.416
EDAH08	3.53	0.00	10y-EDAH08	-86.062
EDAM08	3.40	0.13	10y-EDAM08	-85.435
EDAU08	3.33	0.20	10y-EDAU08	-84.843
EDAZ08	3.32	0.21	10y-EDAZ08	-85.435
EDAH09	3.37	0.16	10y-EDAH09	-87.904
EDAM09	3.47	0.07	10y-EDAM09	-88.398
EDAU09	3.57	0.04	10y-EDAU09	-88.775
EDAZ09	3.68	0.15	10y-EDAZ09	-89.380
EDAH10	3.75	0.22	10y-EDAH10	-89.543
EDAM10	3.83	0.30	10y-EDAM10	-89.120
EDAU10	3.89	0.36	10y-EDAU10	-88.548

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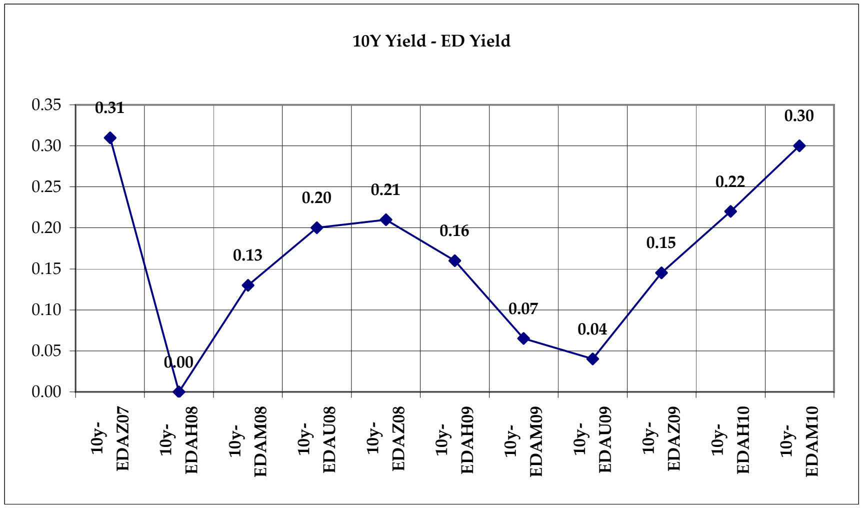
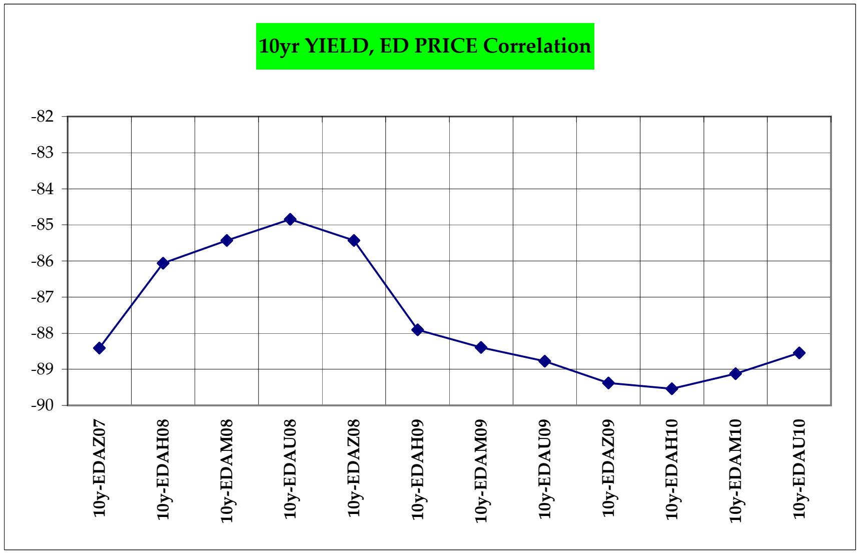


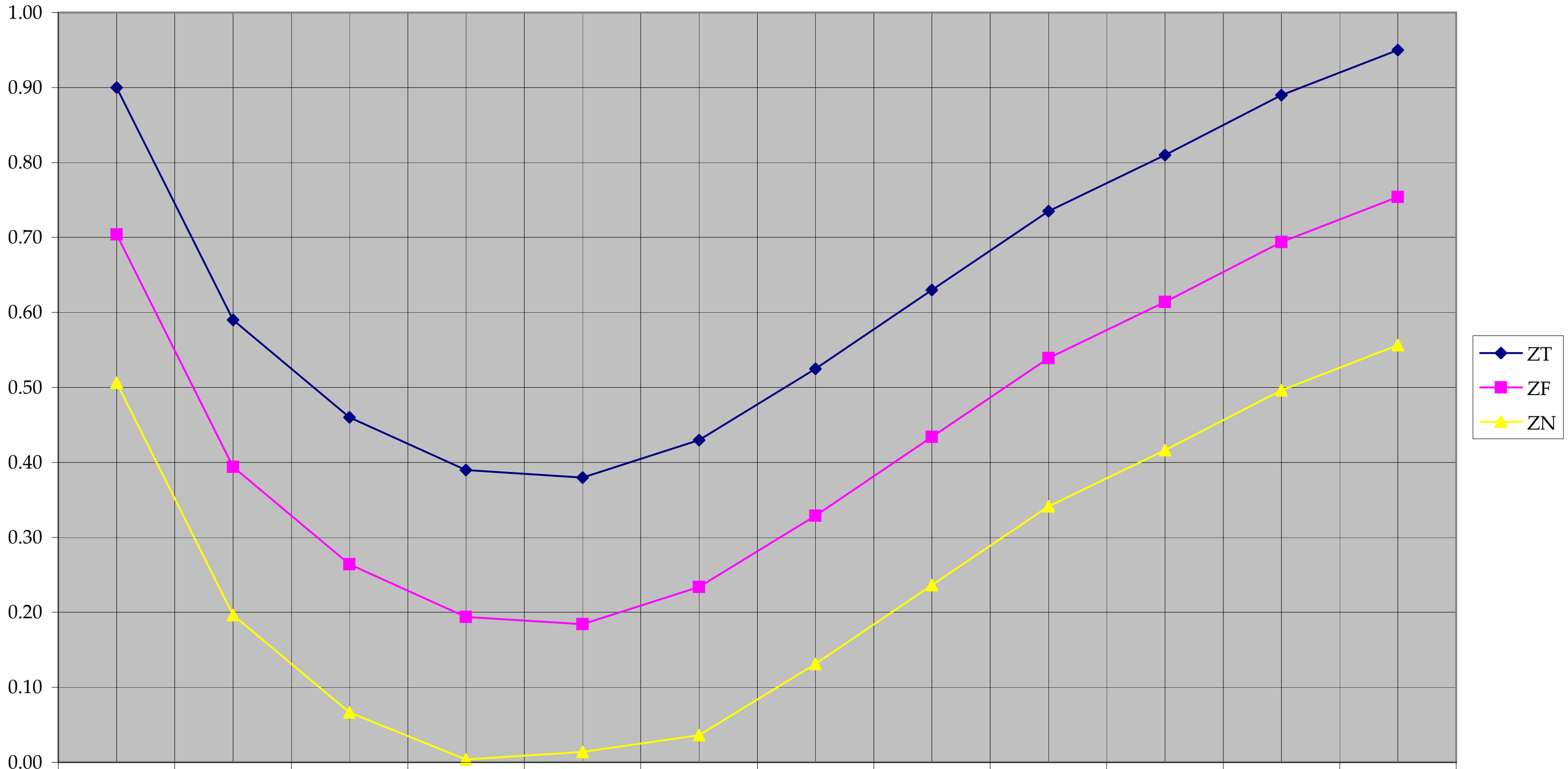
	GE Duration as Fraction of year	10Y Duration	Spread Duration	
EDAZ07	0.128	7.72	7.60	10y-EDAZ07
EDAH08	0.377	7.72	7.35	10y-EDAH08
EDAM08	0.627	7.72	7.10	10y-EDAM08
EDAU08	0.876	7.72	6.85	10y-EDAU08
EDAZ08	1.125	7.72	6.60	10y-EDAZ08
EDAH09	1.375	7.72	6.35	10y-EDAH09
EDAM09	1.624	7.72	6.10	10y-EDAM09
EDAU09	1.873	7.72	5.85	10y-EDAU09
EDAZ09	2.123	7.72	5.60	10y-EDAZ09
EDAH10	2.372	7.72	5.35	10y-EDAH10
EDAM10	2.621	7.72	5.10	10y-EDAM10
EDAU10	2.871	7.72	4.85	10y-EDAU10

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



Dirty TED Curve

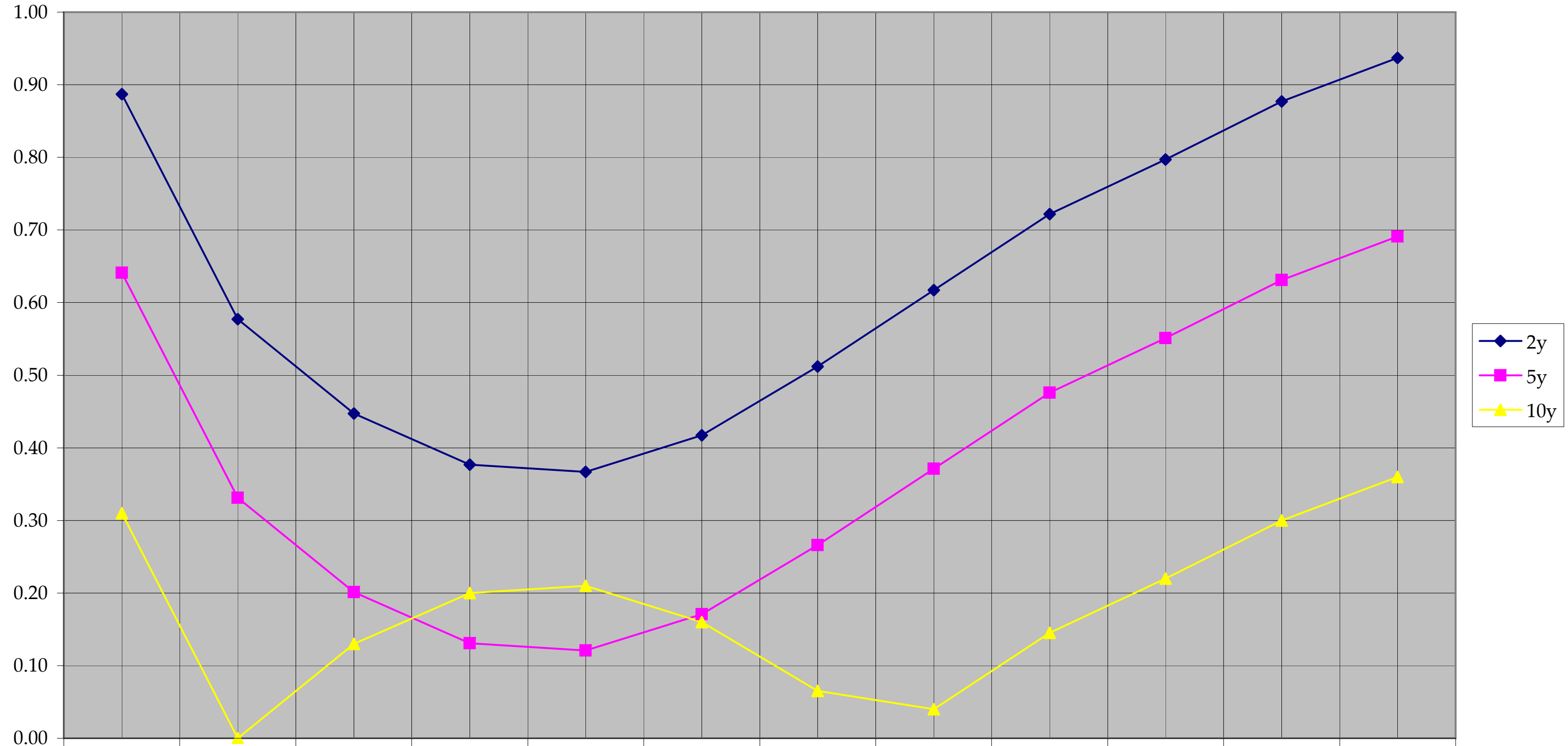
Chart values show the differences between ED contract and Treasury Futures conctract. Those values can be seen in the table at the bottom of the chart.
Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10	EDAM10	EDAU10
ZT	0.90	0.59	0.46	0.39	0.38	0.43	0.52	0.63	0.73	0.81	0.89	0.95
ZF	0.70	0.39	0.26	0.19	0.18	0.23	0.33	0.43	0.54	0.61	0.69	0.75
ZN	0.51	0.20	0.07	0.00	0.01	0.04	0.13	0.24	0.34	0.42	0.50	0.56

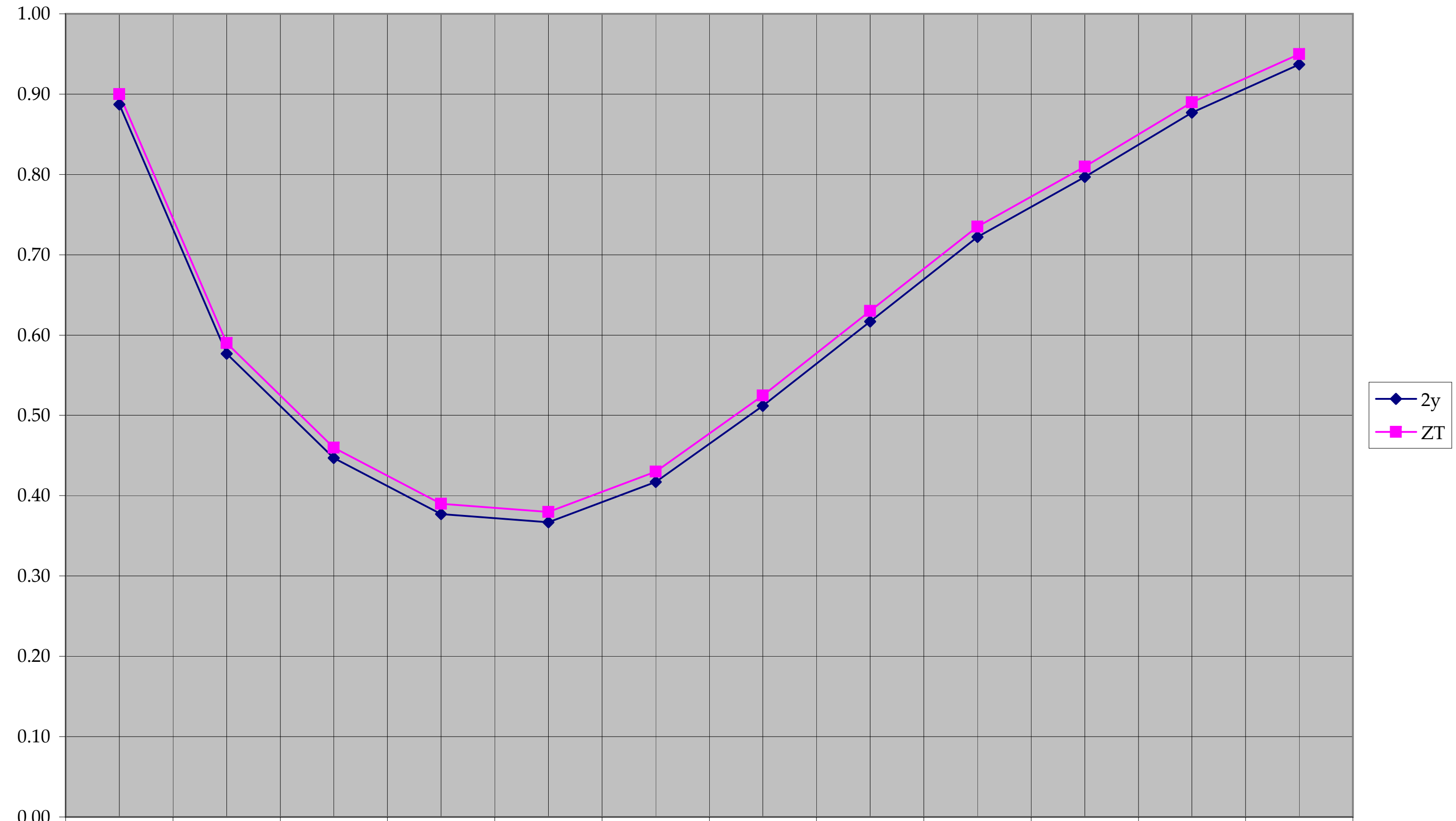
TED Curve

Chart values show the differences between ED contract and Treasury Cash conctract. 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.



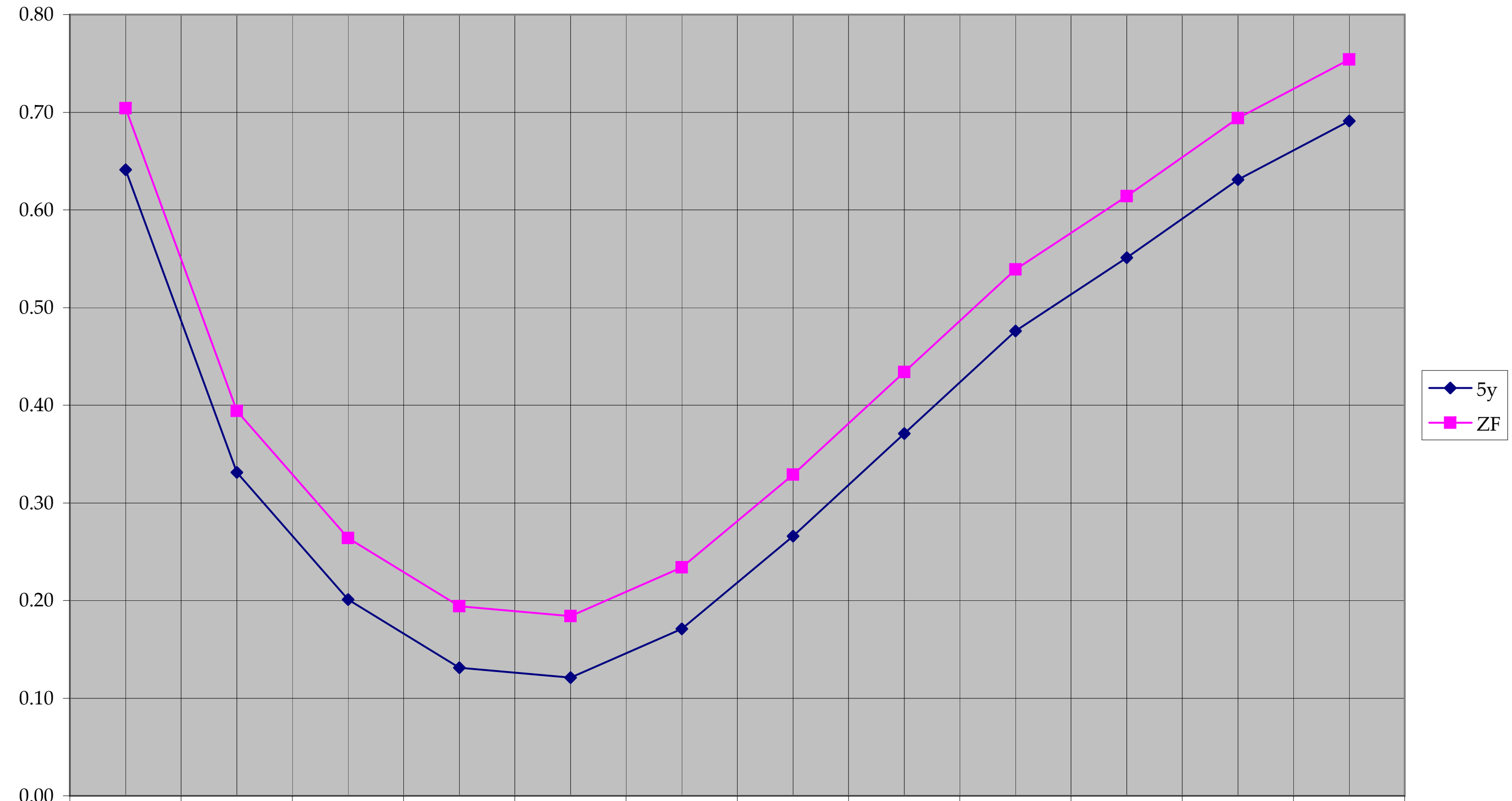
	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10	EDAM10	EDAU10
2y	0.89	0.58	0.45	0.38	0.37	0.42	0.51	0.62	0.72	0.80	0.88	0.94
5y	0.64	0.33	0.20	0.13	0.12	0.17	0.27	0.37	0.48	0.55	0.63	0.69
10y	0.31	0.00	0.13	0.20	0.21	0.16	0.07	0.04	0.15	0.22	0.30	0.36

2y Basis TED Curve



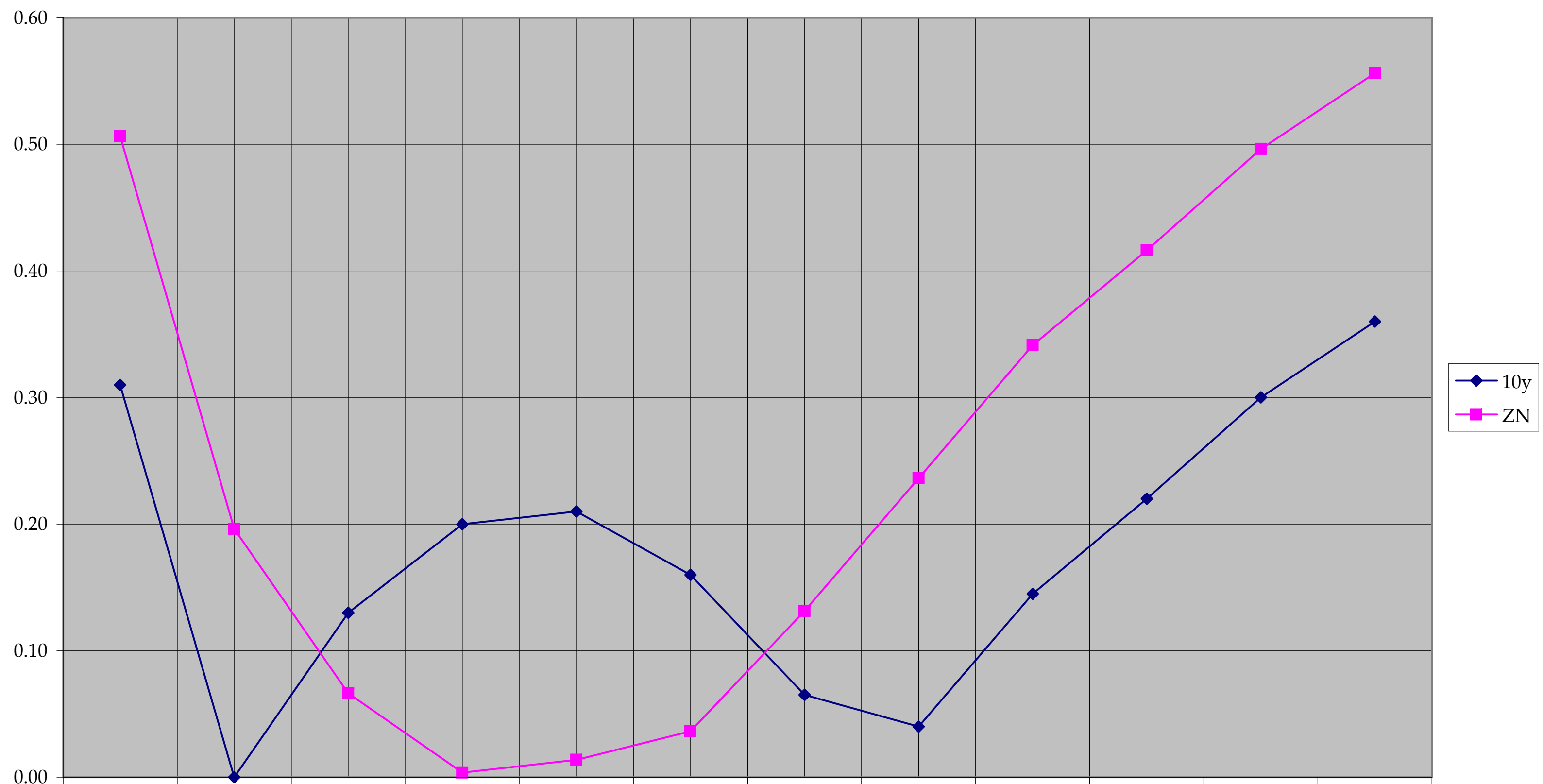
	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10	EDAM10	EDAU10
2y	0.89	0.58	0.45	0.38	0.37	0.42	0.51	0.62	0.72	0.80	0.88	0.94
ZT	0.90	0.59	0.46	0.39	0.38	0.43	0.52	0.63	0.73	0.81	0.89	0.95

5y Basis TED Curve



	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10	EDAM10	EDAU10
5y	0.64	0.33	0.20	0.13	0.12	0.17	0.27	0.37	0.48	0.55	0.63	0.69
ZF	0.70	0.39	0.26	0.19	0.18	0.23	0.33	0.43	0.54	0.61	0.69	0.75

10y Basis TED Curve



	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10	EDAM10	EDAU10
10y	0.31	0.00	0.13	0.20	0.21	0.16	0.07	0.04	0.15	0.22	0.30	0.36
ZN	0.51	0.20	0.07	0.00	0.01	0.04	0.13	0.24	0.34	0.42	0.50	0.56

Packs

	last Yield	Net Last Yield	Last Price
Q.ED.White	4.506	-1.875	9560.500
Q.ED.Red	4.408	-3.000	9569.875
Q.ED.Green	4.777	-1.750	9534.375
Q.ED.Blue	5.060	0.000	9507.125
Q.ED.Gold		0.000	9484.375