

The Morning Email: TERM TEDS & Dirty TEDS

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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.

Treasury Futures and Cash				
	Last Decimal	Last 32	Last Yield*	MDuration
ZT	108.9906	108.3170	0.811	1.96
ZF	118.7406	118.2370	1.404	1.40
ZN	124.2656	124.0850	1.606	6.27
2y	100.1250	100.0400	0.811	1.96
5y	99.1094	99.0350	1.687	4.64
10y	111.0313	111.0100	2.480	8.28

Eurodollars (ED)						
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month	
EDAH09	98.905	1.095	68	0.186	MAR	
EDAM09	98.890	1.110	159	0.435	JUN	White Pack
EDAU09	98.790	1.210	250	0.684	SEP	
EDAZ09	98.610	1.390	341	0.934	DEC	
EDAH10	98.480	1.520	432	1.183	MAR	
EDAM10	98.240	1.760	523	1.432	JUN	Red Pack
EDAU10	98.025	1.975	614	1.682	SEP	
EDAZ10	97.795	2.205	705	1.931	DEC	
EDAH11	97.640	2.360	796	2.180	MAR	
EDAM11	97.485	2.515	887	2.429	JUN	Green Pack
EDAU11	97.375	2.625	985	2.698	SEP	
EDAZ11	97.270	2.730	1076	2.947	DEC	
EDAH12	97.230	2.770	1167	3.197	MAR	
EDAM12	97.160	2.840	1258	3.446	JUN	Blue Pack
EDAU12	97.125	2.875	1349	3.695	SEP	
EDAZ12	97.065	2.935	1440	3.945	DEC	
EDAH13	97.035	2.965	1531	4.194	MAR	
EDAM13	96.930	3.070	1622	4.443	JUN	Gold Pack
EDZU13	96.855	3.145	1713	4.692	SEP	
EDZZ13	96.725	3.275	1804	4.942	DEC	

	Last Yield	Net Yield	Last Price	
White Pack	1.222	1.250	9879.875	
Red Pack	1.900	1.125	9813.500	Pack Prices
Green Pack	2.610	-0.500	9744.250	
Blue Pack	2.915	1.500	9714.500	
Gold Pack		0.000	9687.250	

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

Notes

* Futures use CTD for Last Yield

IF : '#VALUE!', then, no quote being provided by exchange.

If color of cell is orange, it's simply a 'note' for me.

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.

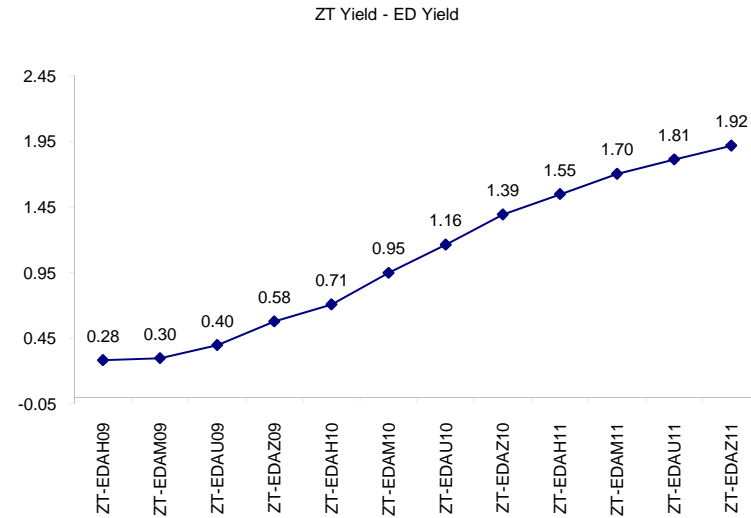
jgoulding@ghco.com

Correlations (Important)

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. So, it's much easier to formulate the correlations based on yield than price.

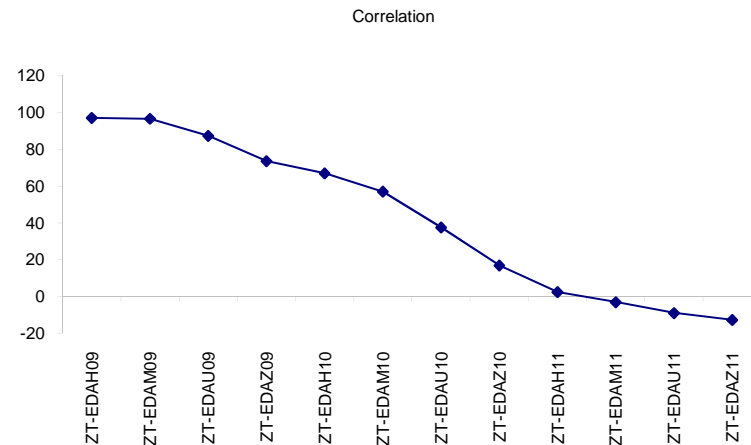
	ZT			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	10.086	0.28	ZT-EDAH09	97.142
EDAM09	10.101	0.30	ZT-EDAM09	96.641
EDAU09	10.201	0.40	ZT-EDAU09	87.379
EDAZ09	10.381	0.58	ZT-EDAZ09	73.655
EDAH10	10.511	0.71	ZT-EDAH10	66.969
EDAM10	10.751	0.95	ZT-EDAM10	57.038
EDAU10	10.966	1.16	ZT-EDAU10	37.568
EDAZ10	11.196	1.39	ZT-EDAZ10	16.926
EDAH11	11.351	1.55	ZT-EDAH11	2.470
EDAM11	11.506	1.70	ZT-EDAM11	-2.972
EDAU11	11.616	1.81	ZT-EDAU11	-8.869
EDAZ11	11.721	1.92	ZT-EDAZ11	-12.642

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



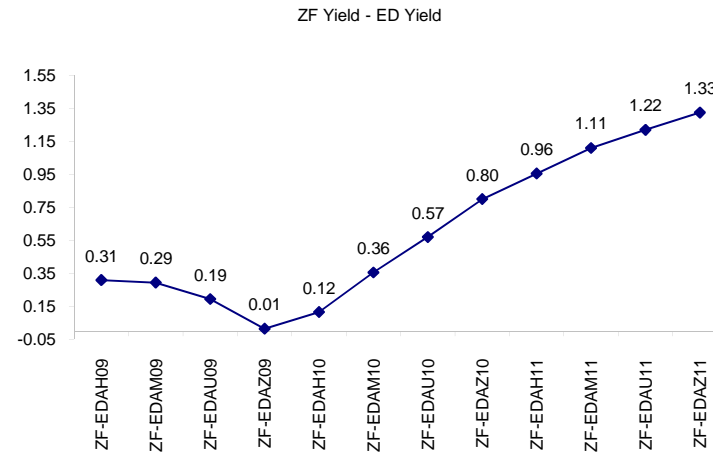
	ED Duration as Fraction of year			ZT Duration	Spread Duration	
EDAH09	0.186	1.96	1.77	ZT-EDAH09		
EDAM09	0.435	1.96	1.52	ZT-EDAM09		
EDAU09	0.684	1.96	1.27	ZT-EDAU09		
EDAZ09	0.934	1.96	1.02	ZT-EDAZ09		
EDAH10	1.183	1.96	0.77	ZT-EDAH10		
EDAM10	1.432	1.96	0.52	ZT-EDAM10		
EDAU10	1.682	1.96	0.28	ZT-EDAU10		
EDAZ10	1.931	1.96	0.03	ZT-EDAZ10		
EDAH11	2.180	1.96	(0.22)	ZT-EDAH11		
EDAM11	2.429	1.96	(0.47)	ZT-EDAM11		
EDAU11	2.698	1.96	(0.74)	ZT-EDAU11		
EDAZ11	2.947	1.96	(0.99)	ZT-EDAZ11		

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



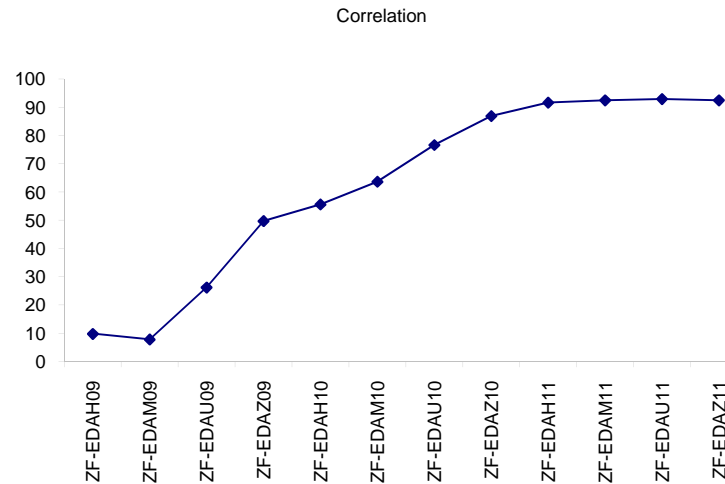
	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	19.836	0.31	ZF-EDAH09	9.867
EDAM09	19.851	0.29	ZF-EDAM09	7.874
EDAU09	19.951	0.19	ZF-EDAU09	26.287
EDAZ09	20.131	0.01	ZF-EDAZ09	49.755
EDAH10	20.261	0.12	ZF-EDAH10	55.654
EDAM10	20.501	0.36	ZF-EDAM10	63.683
EDAU10	20.716	0.57	ZF-EDAU10	76.682
EDAZ10	20.946	0.80	ZF-EDAZ10	86.943
EDAH11	21.101	0.96	ZF-EDAH11	91.668
EDAM11	21.256	1.11	ZF-EDAM11	92.502
EDAU11	21.366	1.22	ZF-EDAU11	92.966
EDAZ11	21.471	1.33	ZF-EDAZ11	92.508

Price = Outright Decimal Price - Euro Contract Price
 Yield = ABS (Proxy Yield - Implied Euro Contract yield)
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	ED Duration as Fraction of year			ZF Duration	Spread Duration	
EDAH09	0.186	1.40	1.22	ZF-EDAH09		
EDAM09	0.435	1.40	0.97	ZF-EDAM09		
EDAU09	0.684	1.40	0.72	ZF-EDAU09		
EDAZ09	0.934	1.40	0.47	ZF-EDAZ09		
EDAH10	1.183	1.40	0.22	ZF-EDAH10		
EDAM10	1.432	1.40	(0.03)	ZF-EDAM10		
EDAU10	1.682	1.40	(0.28)	ZF-EDAU10		
EDAZ10	1.931	1.40	(0.53)	ZF-EDAZ10		
EDAH11	2.180	1.40	(0.78)	ZF-EDAH11		
EDAM11	2.429	1.40	(1.03)	ZF-EDAM11		
EDAU11	2.698	1.40	(1.29)	ZF-EDAU11		
EDAZ11	2.947	1.40	(1.54)	ZF-EDAZ11		

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

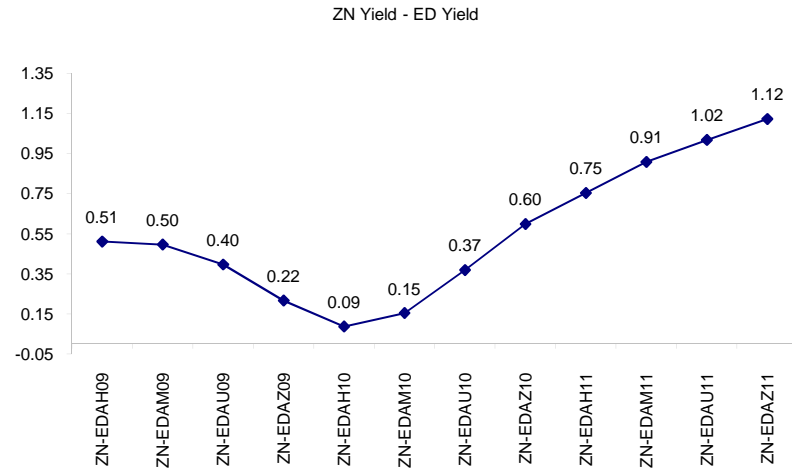


ZN				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	25.361	0.51	ZN-EDAH09	-13.556
EDAM09	25.376	0.50	ZN-EDAM09	-21.129
EDAU09	25.476	0.40	ZN-EDAU09	-4.293
EDAZ09	25.656	0.22	ZN-EDAZ09	21.908
EDAH10	25.786	0.09	ZN-EDAH10	30.656
EDAM10	26.026	0.15	ZN-EDAM10	42.138
EDAU10	26.241	0.37	ZN-EDAU10	60.532
EDAZ10	26.471	0.60	ZN-EDAZ10	77.206
EDAH11	26.626	0.75	ZN-EDAH11	86.209
EDAM11	26.781	0.91	ZN-EDAM11	89.167
EDAU11	26.891	1.02	ZN-EDAU11	91.482
EDAZ11	26.996	1.12	ZN-EDAZ11	92.442

Price = Outright Decimal Price - Euro Contract Price

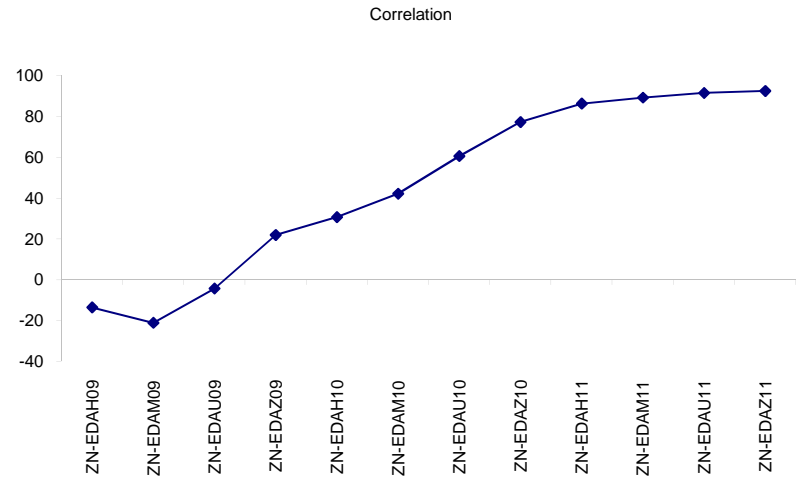
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



ED Duration as Fraction of year				ZN Duration	Spread Duration	
EDAH09	0.186	6.27	6.08	ZN-EDAH09		
EDAM09	0.435	6.27	5.83	ZN-EDAM09		
EDAU09	0.684	6.27	5.58	ZN-EDAU09		
EDAZ09	0.934	6.27	5.33	ZN-EDAZ09		
EDAH10	1.183	6.27	5.08	ZN-EDAH10		
EDAM10	1.432	6.27	4.83	ZN-EDAM10		
EDAU10	1.682	6.27	4.59	ZN-EDAU10		
EDAZ10	1.931	6.27	4.34	ZN-EDAZ10		
EDAH11	2.180	6.27	4.09	ZN-EDAH11		
EDAM11	2.429	6.27	3.84	ZN-EDAM11		
EDAU11	2.698	6.27	3.57	ZN-EDAU11		
EDAZ11	2.947	6.27	3.32	ZN-EDAZ11		

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

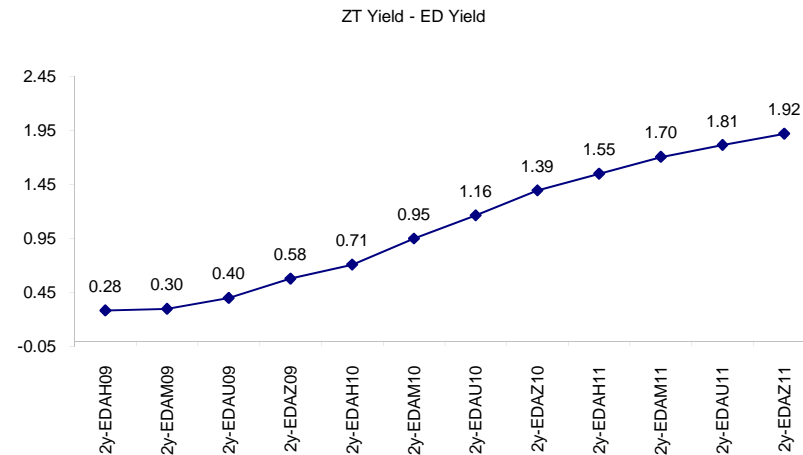


	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	1.220	0.28	2y-EDAH09	-92.869
EDAM09	1.235	0.30	2y-EDAM09	-85.960
EDAU09	1.335	0.40	2y-EDAU09	-73.803
EDAZ09	1.515	0.58	2y-EDAZ09	-62.116
EDAH10	1.645	0.71	2y-EDAH10	-58.465
EDAM10	1.885	0.95	2y-EDAM10	-51.247
EDAU10	2.100	1.16	2y-EDAU10	-34.979
EDAZ10	2.330	1.39	2y-EDAZ10	-18.215
EDAH11	2.485	1.55	2y-EDAH11	-5.969
EDAM11	2.640	1.70	2y-EDAM11	-1.693
EDAU11	2.750	1.81	2y-EDAU11	3.540
EDAZ11	2.855	1.92	2y-EDAZ11	6.888

Price = Outright Decimal Price - Euro Contract Price

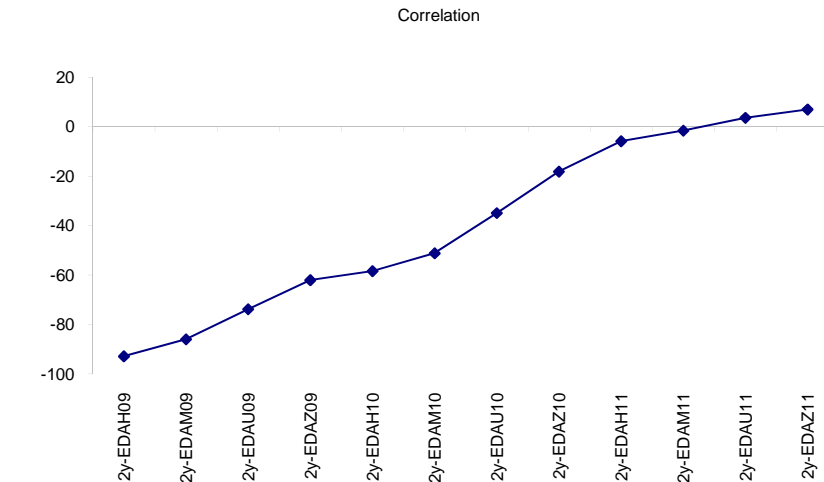
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days.



	ED Duration as Fraction of year		2Y Duration	Spread Duration	
EDAH09	0.186	1.96	1.77	2y-EDAH09	
EDAM09	0.435	1.96	1.52	2y-EDAM09	
EDAU09	0.684	1.96	1.27	2y-EDAU09	
EDAZ09	0.934	1.96	1.02	2y-EDAZ09	
EDAH10	1.183	1.96	0.77	2y-EDAH10	
EDAM10	1.432	1.96	0.52	2y-EDAM10	
EDAU10	1.682	1.96	0.28	2y-EDAU10	
EDAZ10	1.931	1.96	0.03	2y-EDAZ10	
EDAH11	2.180	1.96	(0.22)	2y-EDAH11	
EDAM11	2.429	1.96	(0.47)	2y-EDAM11	
EDAU11	2.698	1.96	(0.74)	2y-EDAU11	
EDAZ11	2.947	1.96	(0.99)	2y-EDAZ11	

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

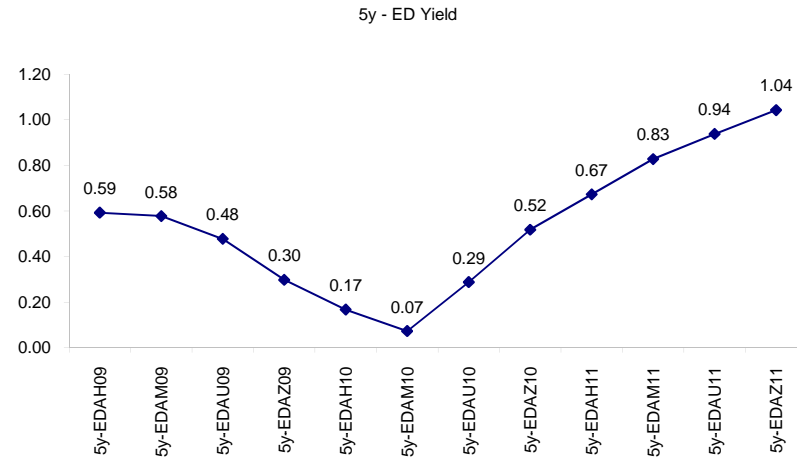


	5y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	0.204	0.59	5y-EDAH09	1.284
EDAM09	0.219	0.58	5y-EDAM09	10.786
EDAU09	0.319	0.48	5y-EDAU09	-2.625
EDAZ09	0.499	0.30	5y-EDAZ09	-27.658
EDAH10	0.629	0.17	5y-EDAH10	-37.085
EDAM10	0.869	0.07	5y-EDAM10	-48.732
EDAU10	1.084	0.29	5y-EDAU10	-66.213
EDAZ10	1.314	0.52	5y-EDAZ10	-81.110
EDAH11	1.469	0.67	5y-EDAH11	-88.714
EDAM11	1.624	0.83	5y-EDAM11	-90.868
EDAU11	1.734	0.94	5y-EDAU11	-92.354
EDAZ11	1.839	1.04	5y-EDAZ11	-93.112

Price = Outright Decimal Price - Euro Contract Price

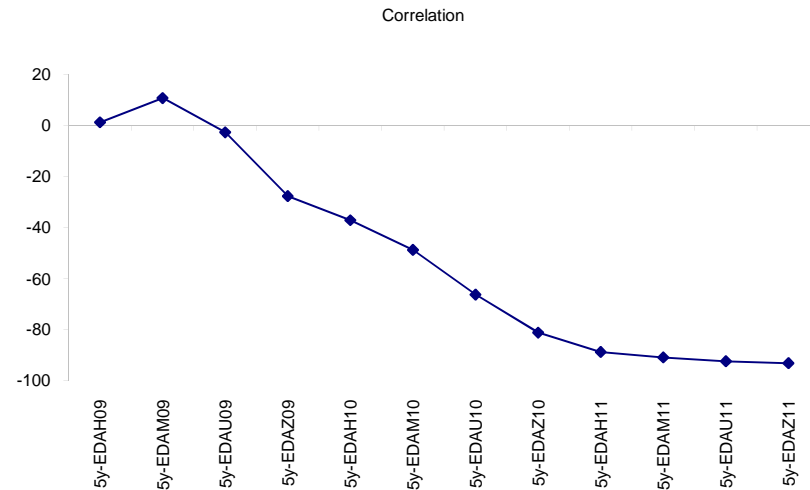
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year			
	Fraction of year	5Y Duration	Spread Duration	
EDAH09	0.186	4.64	4.46	5y-EDAH09
EDAM09	0.435	4.64	4.21	5y-EDAM09
EDAU09	0.684	4.64	3.96	5y-EDAU09
EDAZ09	0.934	4.64	3.71	5y-EDAZ09
EDAH10	1.183	4.64	3.46	5y-EDAH10
EDAM10	1.432	4.64	3.21	5y-EDAM10
EDAU10	1.682	4.64	2.96	5y-EDAU10
EDAZ10	1.931	4.64	2.71	5y-EDAZ10
EDAH11	2.180	4.64	2.46	5y-EDAH11
EDAM11	2.429	4.64	2.21	5y-EDAM11
EDAU11	2.698	4.64	1.94	5y-EDAU11
EDAZ11	2.947	4.64	1.69	5y-EDAZ11

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

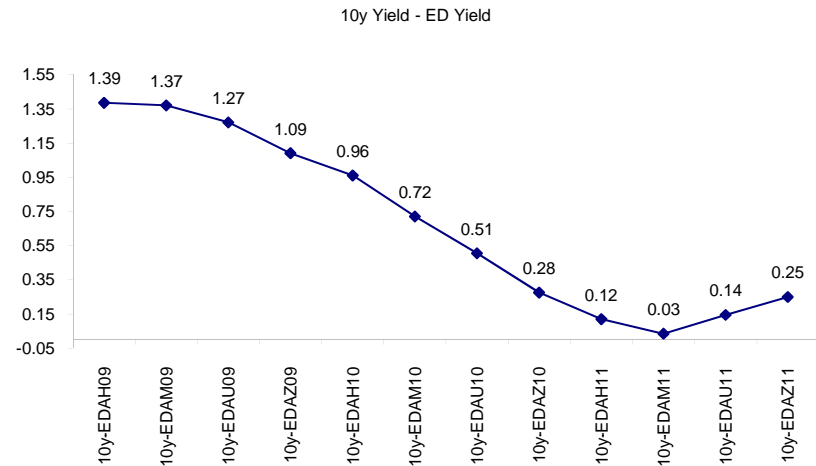


	10y			Correlation*
	Spread Price	Spread Yield	Spread Name	(percent)
EDAH09	0.204	1.39	10y-EDAH09	6.095
EDAM09	0.219	1.37	10y-EDAM09	21.655
EDAU09	0.319	1.27	10y-EDAU09	9.672
EDAZ09	0.499	1.09	10y-EDAZ09	-15.755
EDAH10	0.629	0.96	10y-EDAH10	-26.070
EDAM10	0.869	0.72	10y-EDAM10	-38.816
EDAU10	1.084	0.51	10y-EDAU10	-57.044
EDAZ10	1.314	0.28	10y-EDAZ10	-73.919
EDAH11	1.469	0.12	10y-EDAH11	-82.589
EDAM11	1.624	0.03	10y-EDAM11	-86.099
EDAU11	1.734	0.14	10y-EDAU11	-88.439
EDAZ11	1.839	0.25	10y-EDAZ11	-89.805

Price = Outright Decimal Price - Euro Contract Price

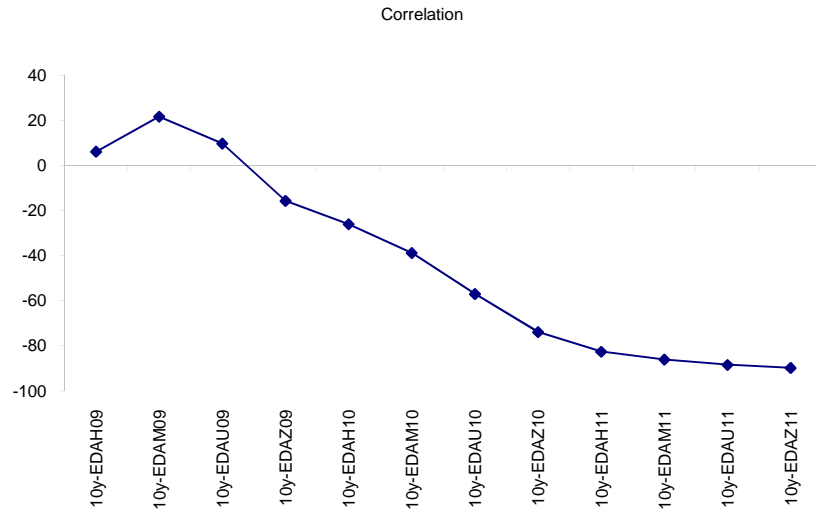
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year			10Y Duration	Spread Duration	
EDAH09	0.186	8.28	8.09	10y-EDAH09		
EDAM09	0.435	8.28	7.84	10y-EDAM09		
EDAU09	0.684	8.28	7.59	10y-EDAU09		
EDAZ09	0.934	8.28	7.34	10y-EDAZ09		
EDAH10	1.183	8.28	7.09	10y-EDAH10		
EDAM10	1.432	8.28	6.84	10y-EDAM10		
EDAU10	1.682	8.28	6.59	10y-EDAU10		
EDAZ10	1.931	8.28	6.35	10y-EDAZ10		
EDAH11	2.180	8.28	6.10	10y-EDAH11		
EDAM11	2.429	8.28	5.85	10y-EDAM11		
EDAU11	2.698	8.28	5.58	10y-EDAU11		
EDAZ11	2.947	8.28	5.33	10y-EDAZ11		

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.

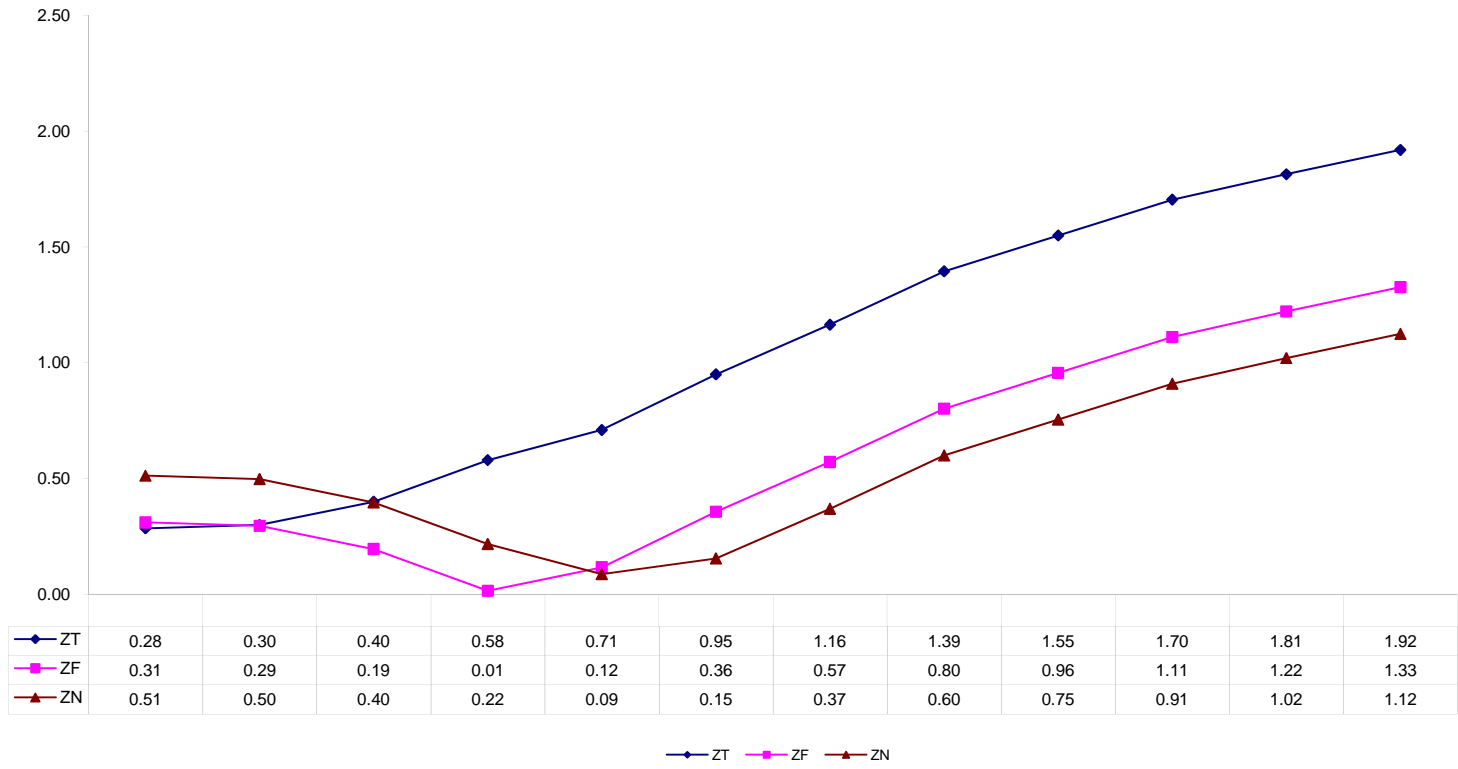
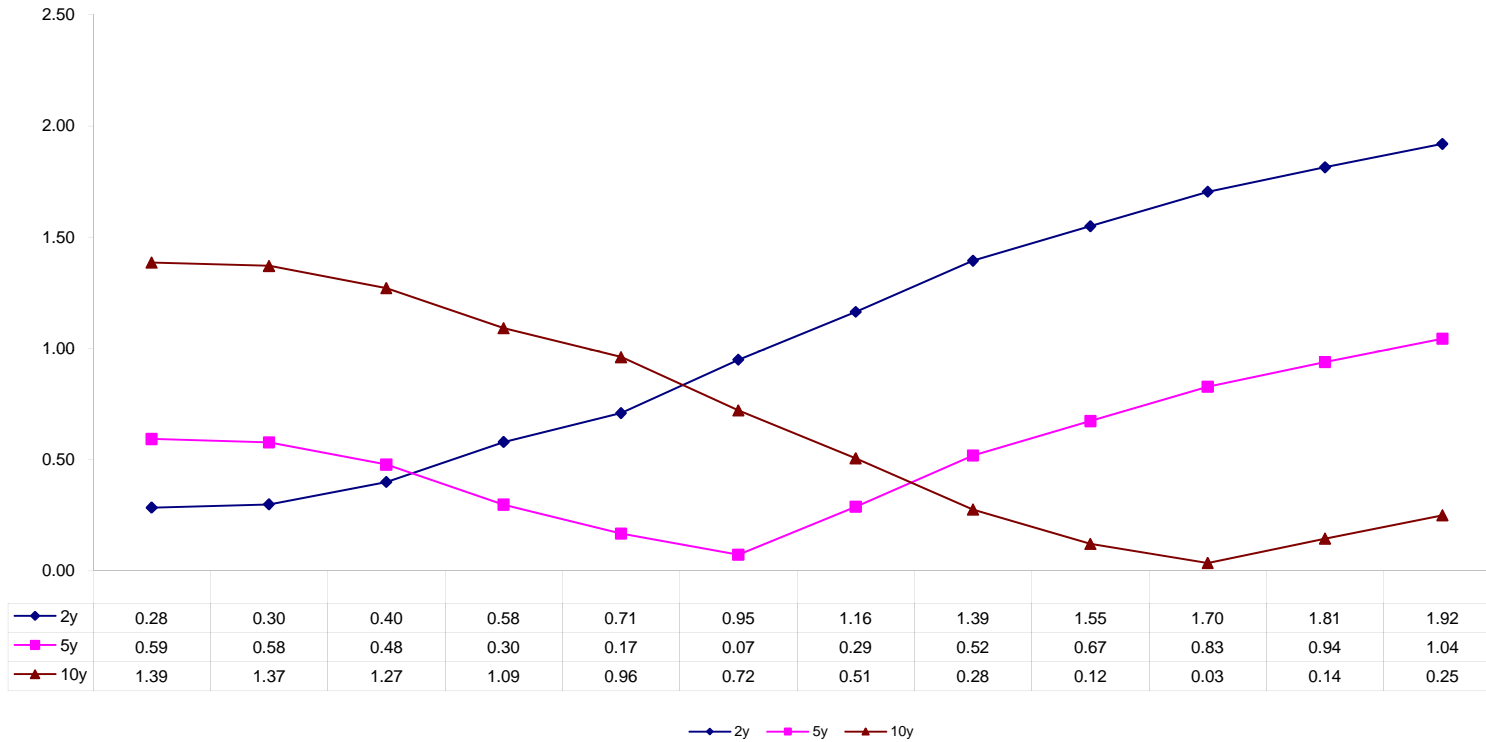
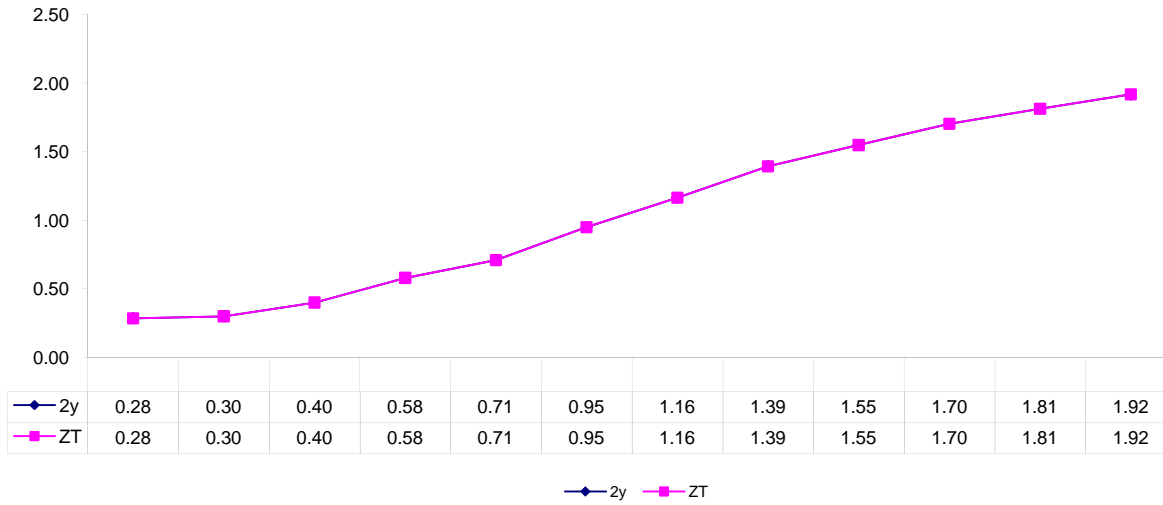


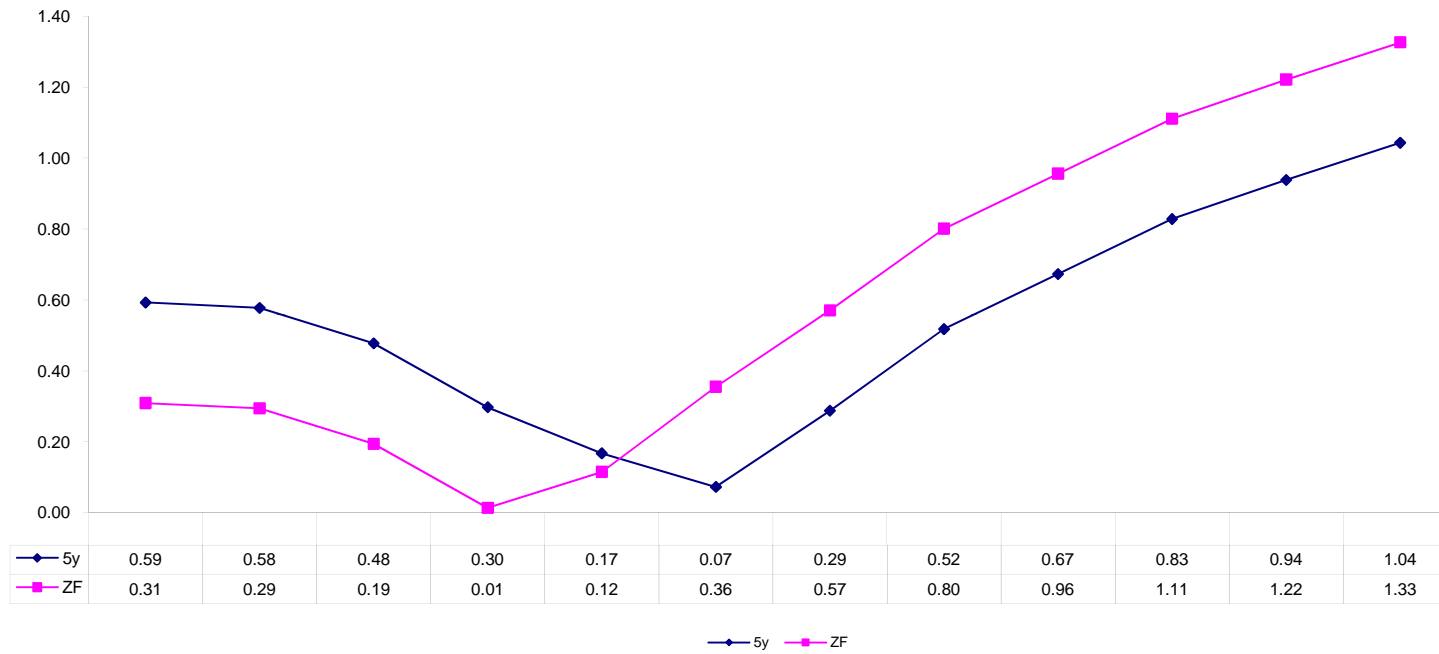
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



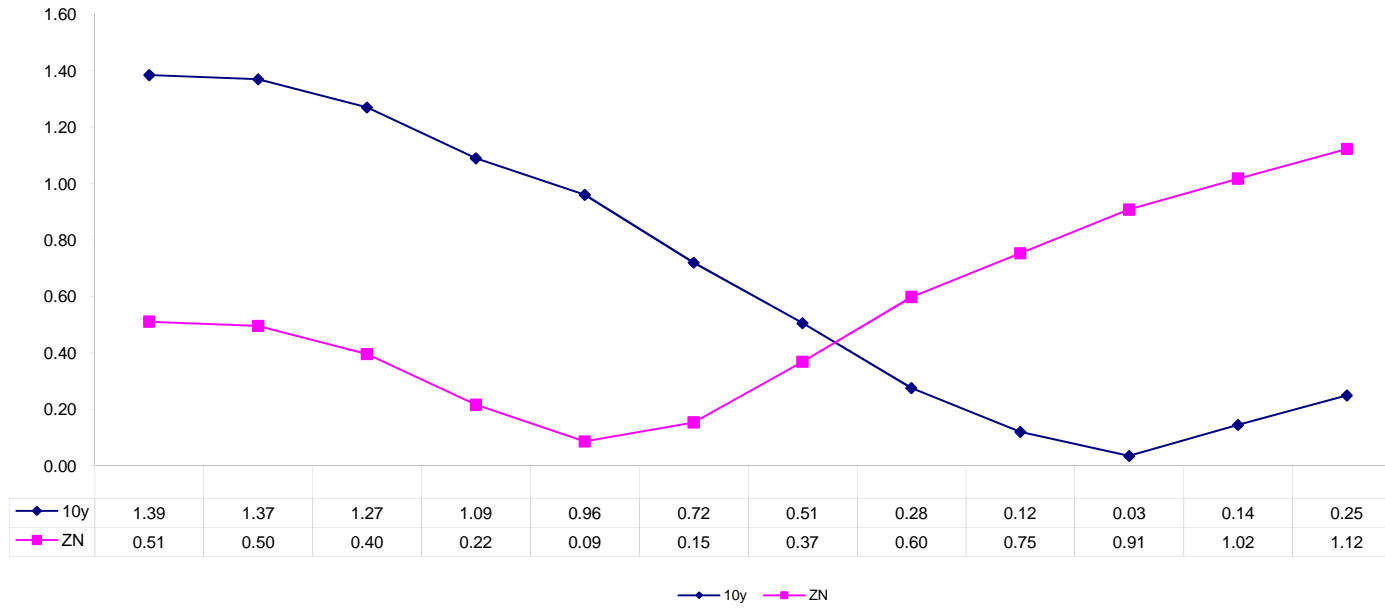
2y Basis TED Curve



5y Basis TED Curve



10y Basis TED Curve



	Last Yield	Net Last Yield	Last Price
White Pack	1.222	1.250	9879.875
Red Pack	1.900	1.125	9813.500
Green Pack	2.610	-0.500	9744.250
Blue Pack	2.915	1.500	9714.500
Gold Pack		0.000	9687.250

