

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	0.701	1.75
ZF	119.0531	119.0170	1.408	1.41
ZN	124.6875	124.2200	1.611	6.15
2y	99.9906	99.3170	0.879	1.93
5y	100.4531	100.1450	1.651	4.72
10y	101.0781	101.0250	2.623	8.69

Eurodollars (ED)						
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month	
EDAH09	98.660	1.340	26	0.071	MAR	
EDAM09	98.665	1.335	117	0.320	JUN	White Pack
EDAU09	98.620	1.380	208	0.569	SEP	
EDAZ09	98.495	1.505	299	0.819	DEC	
EDAH10	98.415	1.585	390	1.068	MAR	
EDAM10	98.240	1.760	481	1.317	JUN	Red Pack
EDAU10	98.045	1.955	572	1.566	SEP	
EDAZ10	97.815	2.185	663	1.816	DEC	
EDAH11	97.645	2.355	754	2.065	MAR	
EDAM11	97.435	2.565	845	2.314	JUN	Green Pack
EDAU11	97.240	2.760	943	2.583	SEP	
EDAZ11	97.060	2.940	1034	2.832	DEC	
EDAH12	96.970	3.030	1125	3.082	MAR	
EDAM12	96.855	3.145	1216	3.331	JUN	Blue Pack
EDAU12	96.790	3.210	1307	3.580	SEP	
EDAZ12	96.665	3.335	1398	3.829	DEC	
EDAH13	96.615	3.385	1489	4.079	MAR	
EDAM13	96.580	3.420	1580	4.328	JUN	Gold Pack
EDZU13	96.505	3.495	1671	4.577	SEP	
EDZZ13	96.395	3.605	1762	4.827	DEC	

	Last Yield	Net Yield	Last Price	
White Pack	1.414	-4.500	9861.000	Pack Prices
Red Pack	1.906	-3.875	9812.875	
Green Pack	2.710	-2.250	9734.500	
Blue Pack	3.250	-1.750	9682.000	
Gold Pack		-0.625	9651.125	

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

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.

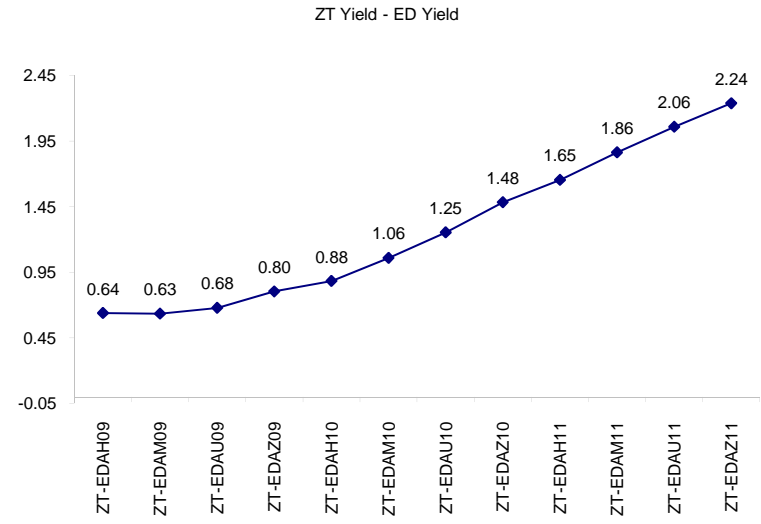
jgoulding@ghco.com

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.

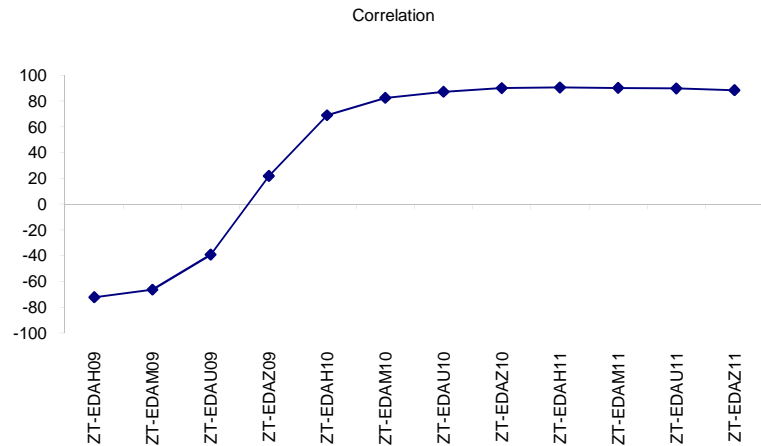
	ZT			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	10.331	0.64	ZT-EDAH09	-72.207
EDAM09	10.326	0.63	ZT-EDAM09	-66.286
EDAU09	10.371	0.68	ZT-EDAU09	-39.142
EDAZ09	10.496	0.80	ZT-EDAZ09	21.846
EDAH10	10.576	0.88	ZT-EDAH10	68.979
EDAM10	10.751	1.06	ZT-EDAM10	82.441
EDAU10	10.946	1.25	ZT-EDAU10	87.134
EDAZ10	11.176	1.48	ZT-EDAZ10	90.039
EDAH11	11.346	1.65	ZT-EDAH11	90.526
EDAM11	11.556	1.86	ZT-EDAM11	90.145
EDAU11	11.751	2.06	ZT-EDAU11	89.801
EDAZ11	11.931	2.24	ZT-EDAZ11	88.358

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



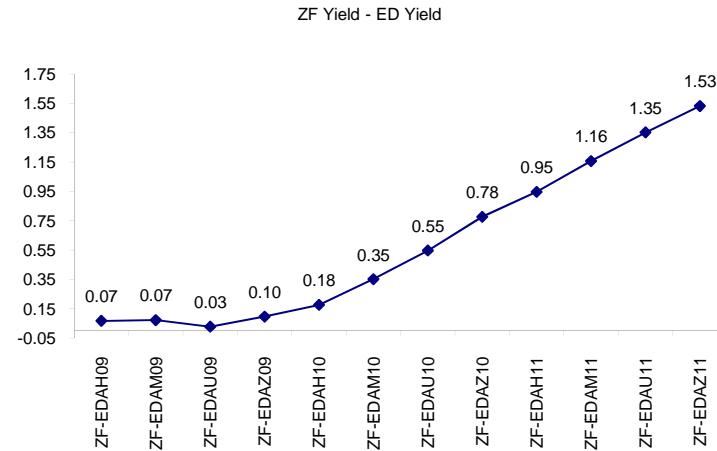
	ED Duration as Fraction of year		ZT Duration	Spread Duration	
EDAH09	0.071	1.75	1.68		ZT-EDAH09
EDAM09	0.320	1.75	1.43		ZT-EDAM09
EDAU09	0.569	1.75	1.18		ZT-EDAU09
EDAZ09	0.819	1.75	0.93		ZT-EDAZ09
EDAH10	1.068	1.75	0.68		ZT-EDAH10
EDAM10	1.317	1.75	0.43		ZT-EDAM10
EDAU10	1.566	1.75	0.19		ZT-EDAU10
EDAZ10	1.816	1.75	(0.06)		ZT-EDAZ10
EDAH11	2.065	1.75	(0.31)		ZT-EDAH11
EDAM11	2.314	1.75	(0.56)		ZT-EDAM11
EDAU11	2.583	1.75	(0.83)		ZT-EDAU11
EDAZ11	2.832	1.75	(1.08)		ZT-EDAZ11

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



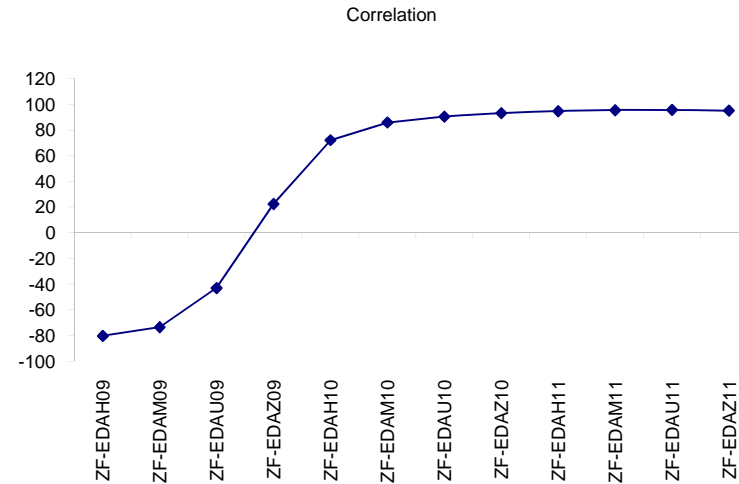
	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	20.393	0.07	ZF-EDAH09	-80.181
EDAM09	20.388	0.07	ZF-EDAM09	-73.376
EDAU09	20.433	0.03	ZF-EDAU09	-42.943
EDAZ09	20.558	0.10	ZF-EDAZ09	22.424
EDAH10	20.638	0.18	ZF-EDAH10	72.041
EDAM10	20.813	0.35	ZF-EDAM10	85.786
EDAU10	21.008	0.55	ZF-EDAU10	90.329
EDAZ10	21.238	0.78	ZF-EDAZ10	93.109
EDAH11	21.408	0.95	ZF-EDAH11	94.556
EDAM11	21.618	1.16	ZF-EDAM11	95.355
EDAU11	21.813	1.35	ZF-EDAU11	95.644
EDAZ11	21.993	1.53	ZF-EDAZ11	95.010

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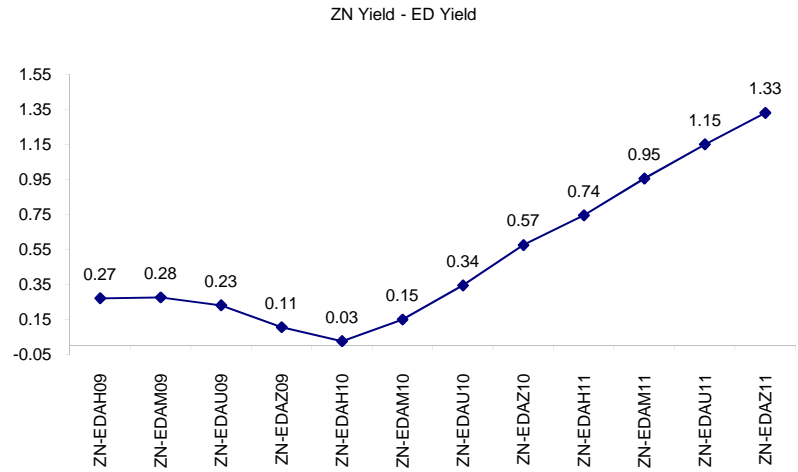
	ED Duration as Fraction of year		ZF Duration	Spread Duration	
EDAH09	0.071	1.41	1.34	1.34	ZF-EDAH09
EDAM09	0.320	1.41	1.09	1.09	ZF-EDAM09
EDAU09	0.569	1.41	0.84	0.84	ZF-EDAU09
EDAZ09	0.819	1.41	0.59	0.59	ZF-EDAZ09
EDAH10	1.068	1.41	0.34	0.34	ZF-EDAH10
EDAM10	1.317	1.41	0.09	0.09	ZF-EDAM10
EDAU10	1.566	1.41	(0.16)	(0.16)	ZF-EDAU10
EDAZ10	1.816	1.41	(0.41)	(0.41)	ZF-EDAZ10
EDAH11	2.065	1.41	(0.66)	(0.66)	ZF-EDAH11
EDAM11	2.314	1.41	(0.91)	(0.91)	ZF-EDAM11
EDAU11	2.583	1.41	(1.18)	(1.18)	ZF-EDAU11
EDAZ11	2.832	1.41	(1.42)	(1.42)	ZF-EDAZ11

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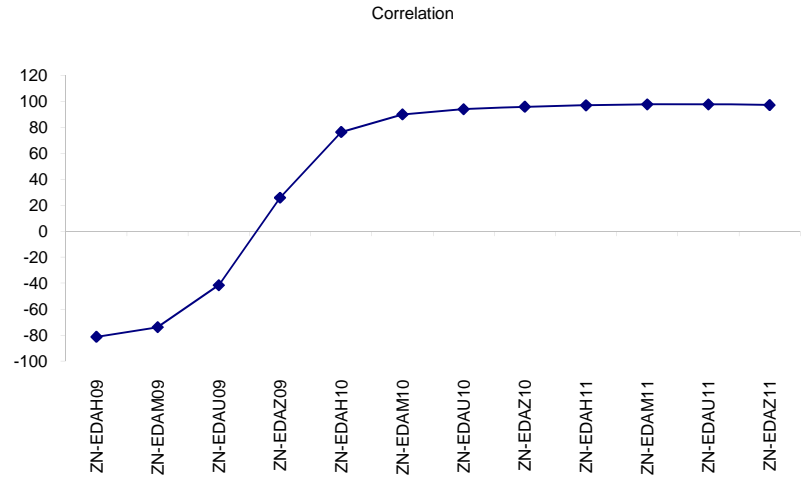
ZN				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	26.028	0.27	ZN-EDAH09	-81.366
EDAM09	26.023	0.28	ZN-EDAM09	-73.940
EDAU09	26.068	0.23	ZN-EDAU09	-41.584
EDAZ09	26.193	0.11	ZN-EDAZ09	25.784
EDAH10	26.273	0.03	ZN-EDAH10	76.329
EDAM10	26.448	0.15	ZN-EDAM10	89.860
EDAU10	26.643	0.34	ZN-EDAU10	93.869
EDAZ10	26.873	0.57	ZN-EDAZ10	95.788
EDAH11	27.043	0.74	ZN-EDAH11	96.955
EDAM11	27.253	0.95	ZN-EDAM11	97.685
EDAU11	27.448	1.15	ZN-EDAU11	97.621
EDAZ11	27.628	1.33	ZN-EDAZ11	97.075

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				ZN Duration	Spread Duration	
EDAH09	0.071	6.15	6.08	ZN-EDAH09		
EDAM09	0.320	6.15	5.83	ZN-EDAM09		
EDAU09	0.569	6.15	5.58	ZN-EDAU09		
EDAZ09	0.819	6.15	5.33	ZN-EDAZ09		
EDAH10	1.068	6.15	5.08	ZN-EDAH10		
EDAM10	1.317	6.15	4.83	ZN-EDAM10		
EDAU10	1.566	6.15	4.59	ZN-EDAU10		
EDAZ10	1.816	6.15	4.34	ZN-EDAZ10		
EDAH11	2.065	6.15	4.09	ZN-EDAH11		
EDAM11	2.314	6.15	3.84	ZN-EDAM11		
EDAU11	2.583	6.15	3.57	ZN-EDAU11		
EDAZ11	2.832	6.15	3.32	ZN-EDAZ11		

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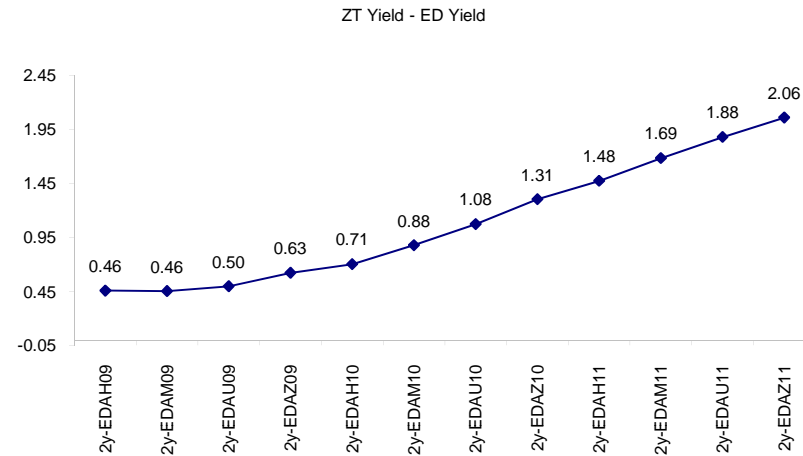


	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	1.331	0.46	2y-EDAH09	68.800
EDAM09	1.326	0.46	2y-EDAM09	61.777
EDAU09	1.371	0.50	2y-EDAU09	32.490
EDAZ09	1.496	0.63	2y-EDAZ09	-28.744
EDAH10	1.576	0.71	2y-EDAH10	-69.023
EDAM10	1.751	0.88	2y-EDAM10	-79.557
EDAU10	1.946	1.08	2y-EDAU10	-83.567
EDAZ10	2.176	1.31	2y-EDAZ10	-86.708
EDAH11	2.346	1.48	2y-EDAH11	-88.580
EDAM11	2.556	1.69	2y-EDAM11	-90.085
EDAU11	2.751	1.88	2y-EDAU11	-91.057
EDAZ11	2.931	2.06	2y-EDAZ11	-90.456

Price = Outright Decimal Price - Euro Contract Price

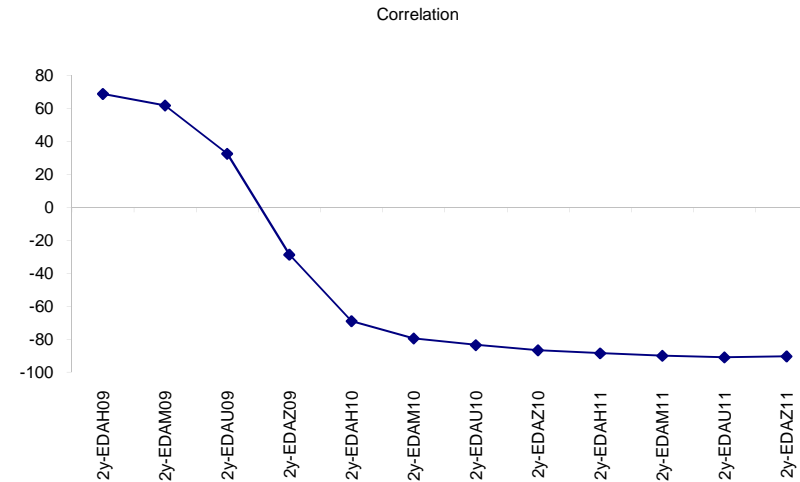
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

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



	ED Duration as Fraction of year		2Y Duration	Spread Duration	
EDAH09	0.071	1.93	1.86	2y-EDAH09	
EDAM09	0.320	1.93	1.61	2y-EDAM09	
EDAU09	0.569	1.93	1.36	2y-EDAU09	
EDAZ09	0.819	1.93	1.11	2y-EDAZ09	
EDAH10	1.068	1.93	0.86	2y-EDAH10	
EDAM10	1.317	1.93	0.61	2y-EDAM10	
EDAU10	1.566	1.93	0.36	2y-EDAU10	
EDAZ10	1.816	1.93	0.11	2y-EDAZ10	
EDAH11	2.065	1.93	(0.14)	2y-EDAH11	
EDAM11	2.314	1.93	(0.39)	2y-EDAM11	
EDAU11	2.583	1.93	(0.66)	2y-EDAU11	
EDAZ11	2.832	1.93	(0.91)	2y-EDAZ11	

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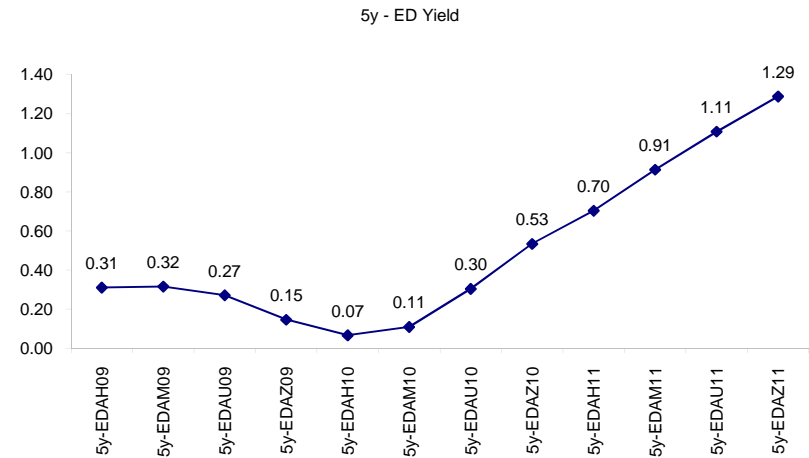


	5y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	1.793	0.31	5y-EDAH09	72.180
EDAM09	1.788	0.32	5y-EDAM09	65.468
EDAU09	1.833	0.27	5y-EDAU09	36.454
EDAZ09	1.958	0.15	5y-EDAZ09	-25.336
EDAH10	2.038	0.07	5y-EDAH10	-68.175
EDAM10	2.213	0.11	5y-EDAM10	-80.081
EDAU10	2.408	0.30	5y-EDAU10	-84.567
EDAZ10	2.638	0.53	5y-EDAZ10	-87.687
EDAH11	2.808	0.70	5y-EDAH11	-89.586
EDAM11	3.018	0.91	5y-EDAM11	-90.963
EDAU11	3.213	1.11	5y-EDAU11	-91.486
EDAZ11	3.393	1.29	5y-EDAZ11	-90.681

Price = Outright Decimal Price - Euro Contract Price

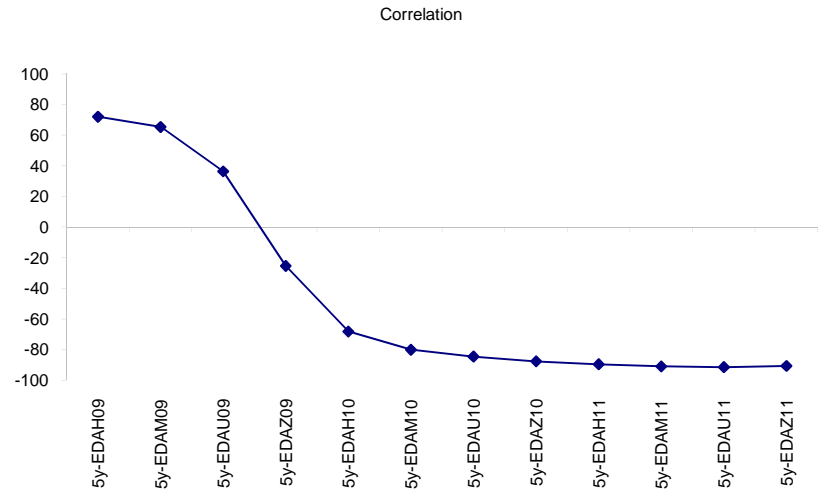
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year		5Y Duration	Spread Duration	
EDAH09	0.071	4.72	4.65	5y-EDAH09	
EDAM09	0.320	4.72	4.40	5y-EDAM09	
EDAU09	0.569	4.72	4.15	5y-EDAU09	
EDAZ09	0.819	4.72	3.90	5y-EDAZ09	
EDAH10	1.068	4.72	3.65	5y-EDAH10	
EDAM10	1.317	4.72	3.40	5y-EDAM10	
EDAU10	1.566	4.72	3.15	5y-EDAU10	
EDAZ10	1.816	4.72	2.90	5y-EDAZ10	
EDAH11	2.065	4.72	2.65	5y-EDAH11	
EDAM11	2.314	4.72	2.40	5y-EDAM11	
EDAU11	2.583	4.72	2.14	5y-EDAU11	
EDAZ11	2.832	4.72	1.89	5y-EDAZ11	

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



	10y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	1.793	1.28	10y-EDAH09	77.571
EDAM09	1.788	1.29	10y-EDAM09	70.553
EDAU09	1.833	1.24	10y-EDAU09	40.966
EDAZ09	1.958	1.12	10y-EDAZ09	-22.530
EDAH10	2.038	1.04	10y-EDAH10	-67.686
EDAM10	2.213	0.86	10y-EDAM10	-80.611
EDAU10	2.408	0.67	10y-EDAU10	-85.100
EDAZ10	2.638	0.44	10y-EDAZ10	-87.950
EDAH11	2.808	0.27	10y-EDAH11	-89.822
EDAM11	3.018	0.06	10y-EDAM11	-91.255
EDAU11	3.213	0.14	10y-EDAU11	-91.719
EDAZ11	3.393	0.32	10y-EDAZ11	-91.087

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	0.071	8.69	8.62	10y-EDAH09
EDAM09	0.320	8.69	8.37	10y-EDAM09
EDAU09	0.569	8.69	8.12	10y-EDAU09
EDAZ09	0.819	8.69	7.88	10y-EDAZ09
EDAH10	1.068	8.69	7.63	10y-EDAH10
EDAM10	1.317	8.69	7.38	10y-EDAM10
EDAU10	1.566	8.69	7.13	10y-EDAU10
EDAZ10	1.816	8.69	6.88	10y-EDAZ10
EDAH11	2.065	8.69	6.63	10y-EDAH11
EDAM11	2.314	8.69	6.38	10y-EDAM11
EDAU11	2.583	8.69	6.11	10y-EDAU11
EDAZ11	2.832	8.69	5.86	10y-EDAZ11

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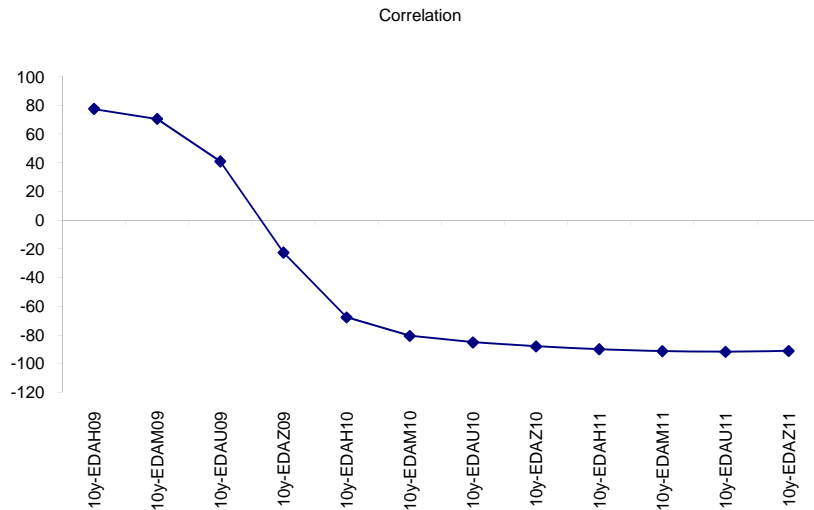
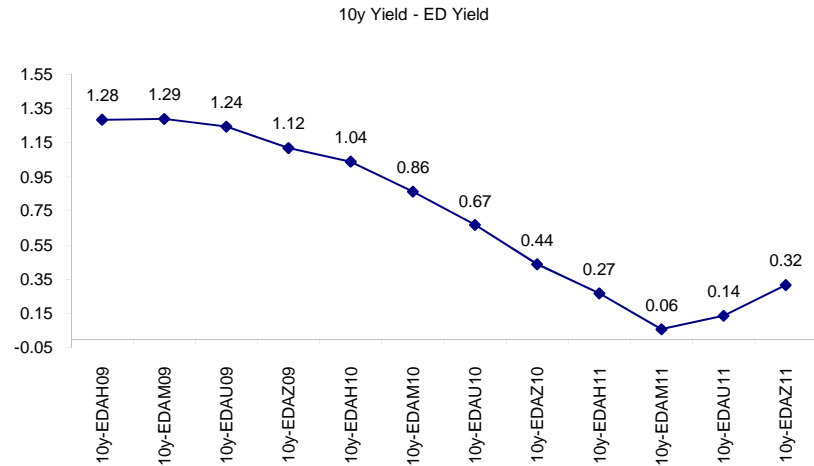


Chart values show the differences between ED contract and Treasury Futures contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.

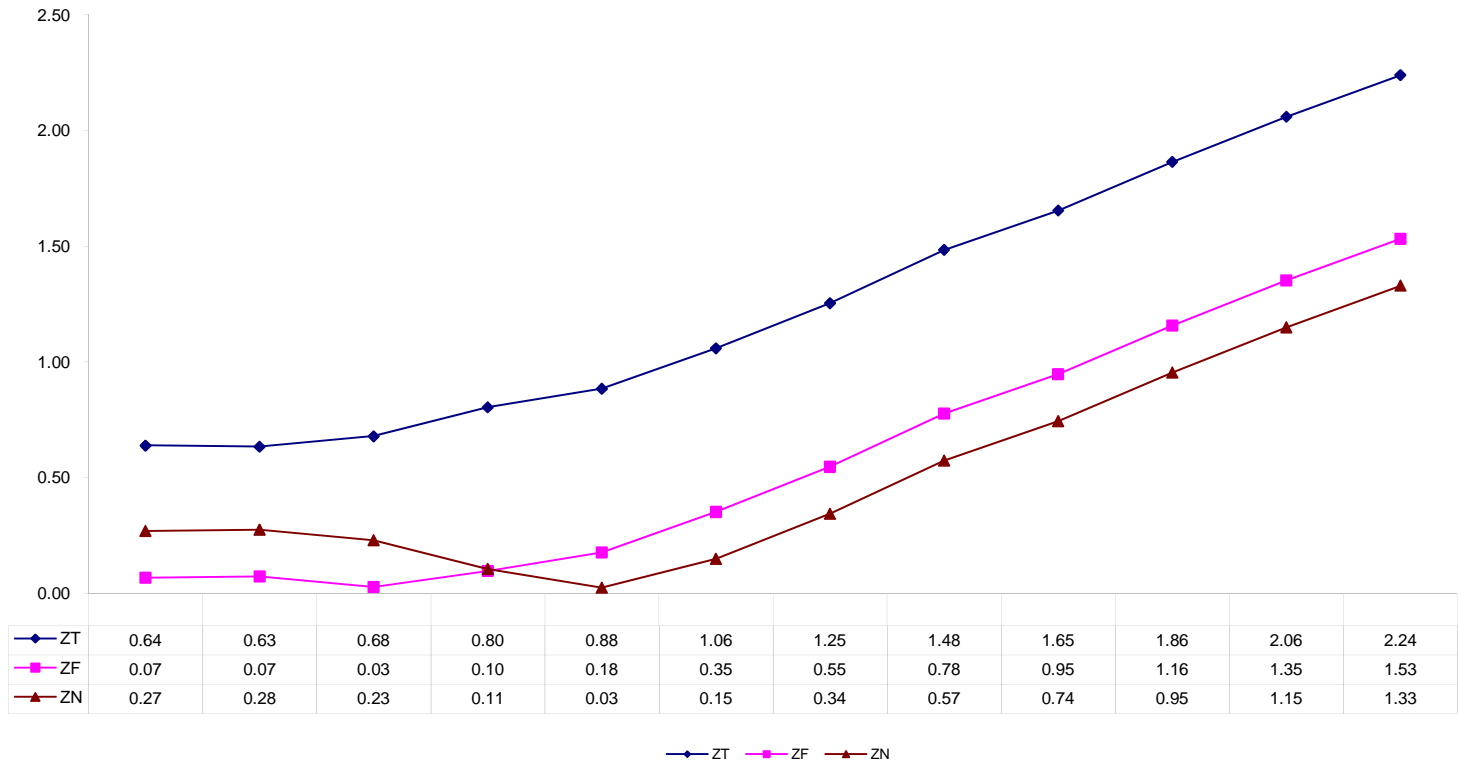
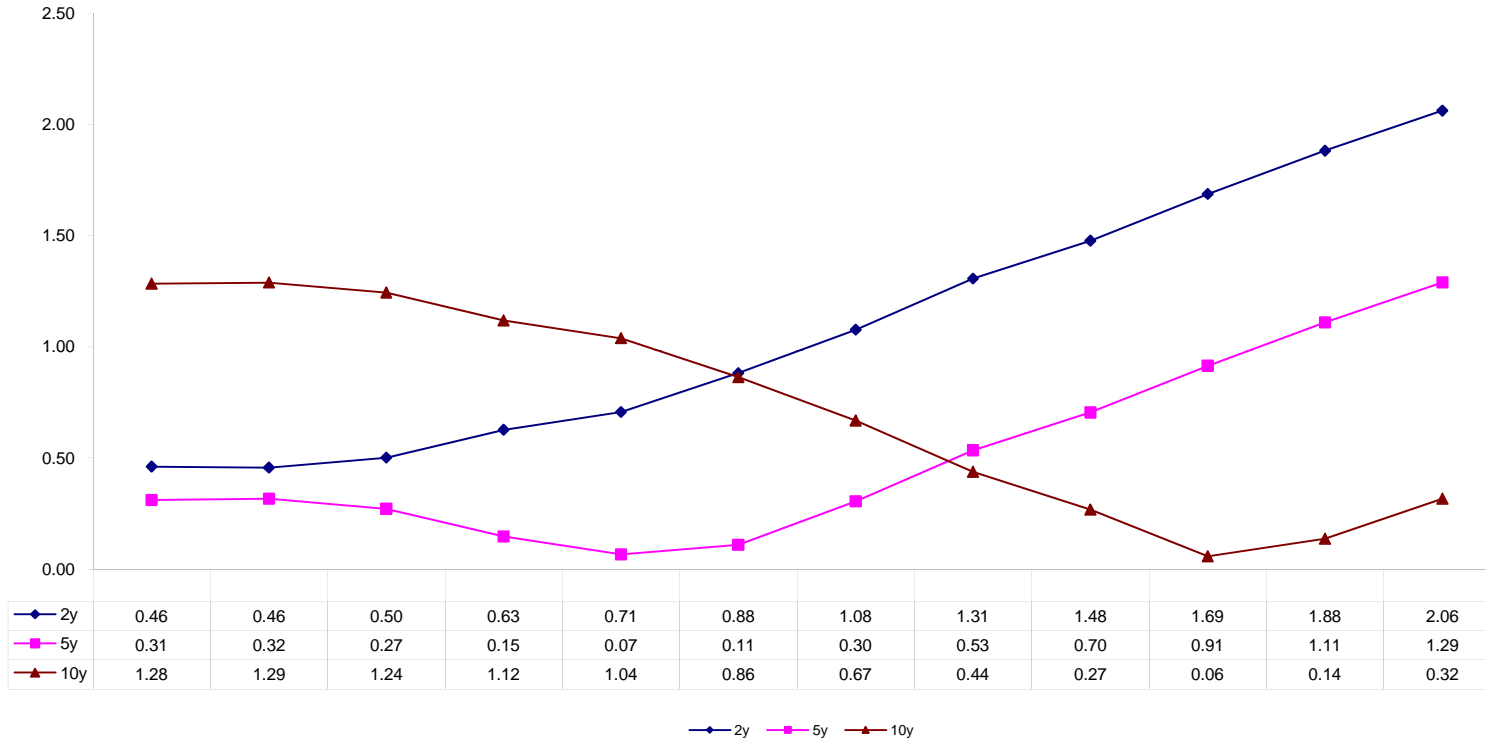
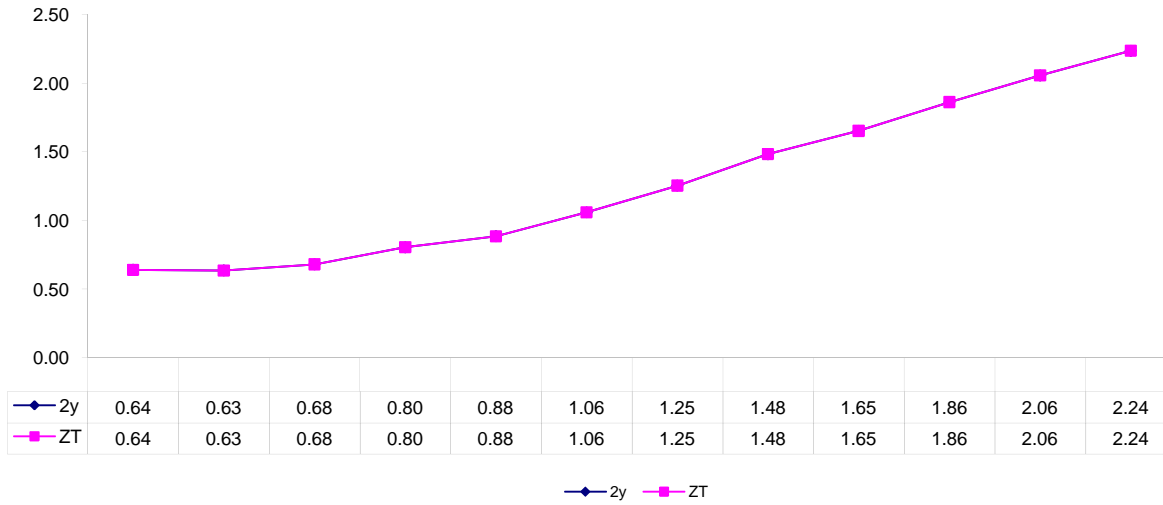
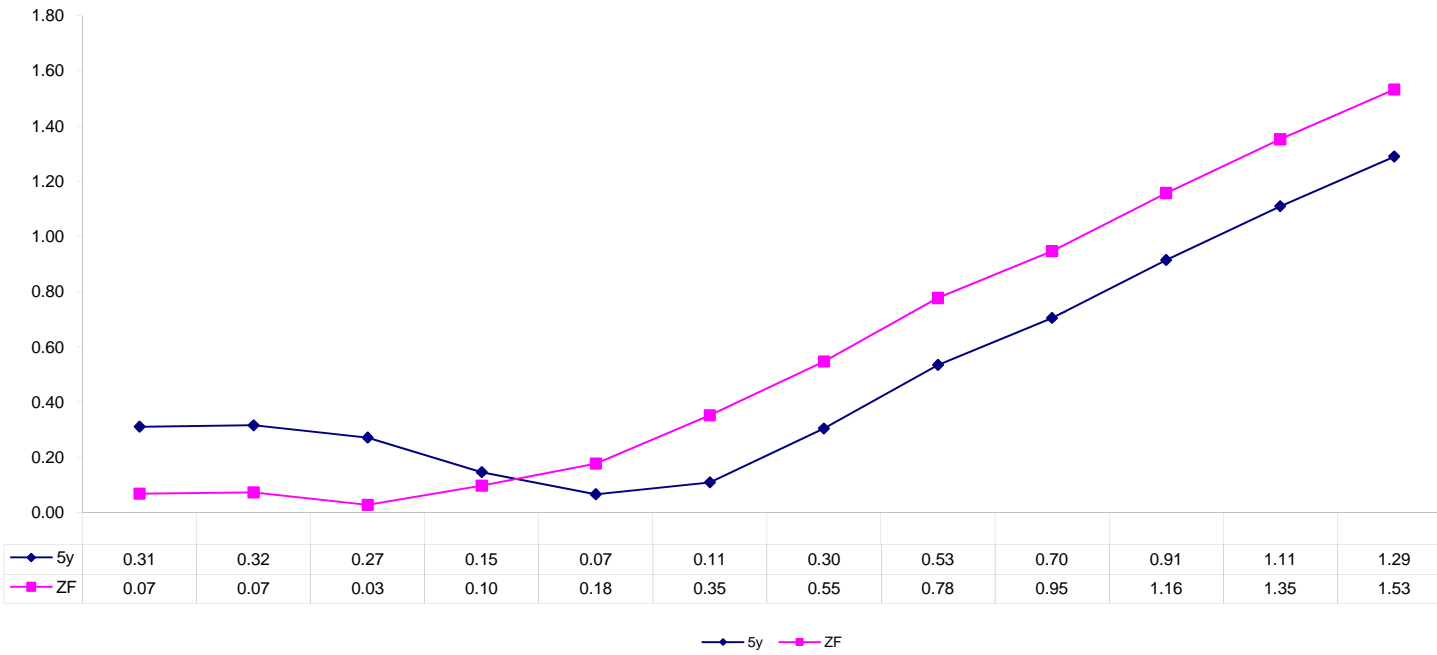


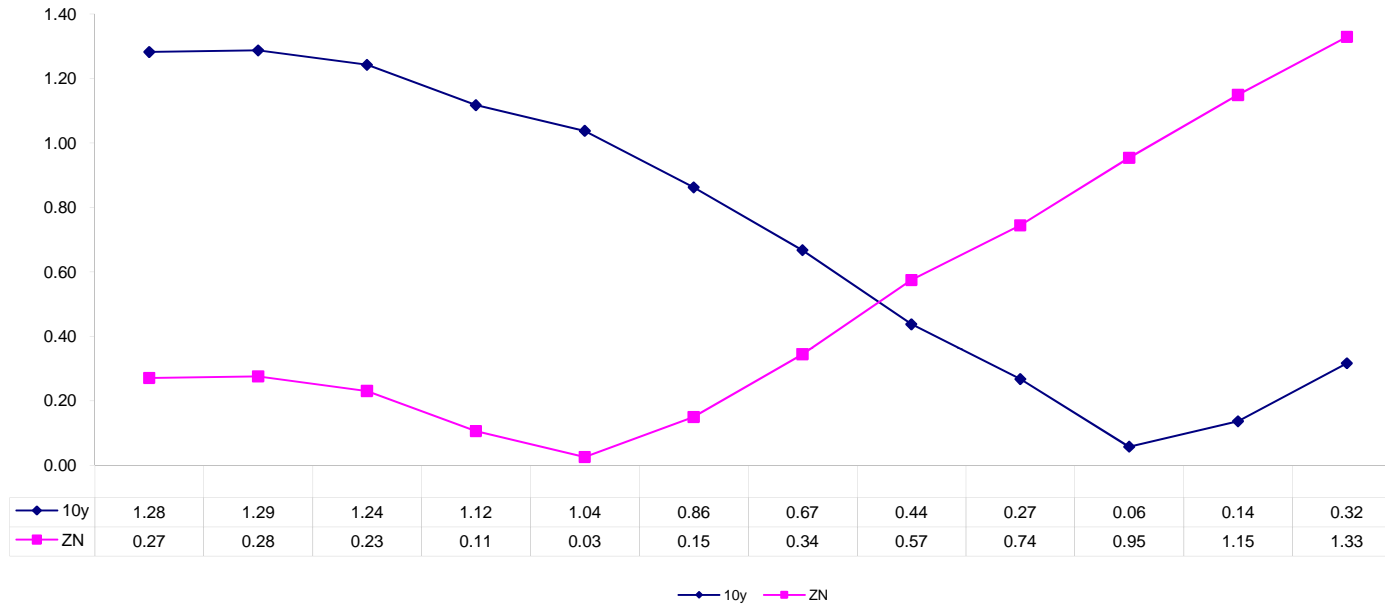
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



2y Basis TED Curve







	Last Yield	Net Last Yield	Last Price
White Pack	1.414	-4.500	9861.000
Red Pack	1.906	-3.875	9812.875
Green Pack	2.710	-2.250	9734.500
Blue Pack	3.250	-1.750	9682.000
Gold Pack		-0.625	9651.125

