

The Morning Email: TERM TEDS & Dirty TEDS

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New

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	107.3500	107.112	1.618	1.84
ZF	114.1563	114.050	2.427	3.99
ZN	118.4531	118.145	3.185	5.95
2y	100.109	100.0350	1.694	1.92
5y	99.859	99.2750	2.527	4.63
10y	100.469	100.1500	3.443	8.22

Eurodollars (ED)						
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month	
EDAM08	97.525	2.475	63	0.172	JUN	
EDAU08	97.760	2.240	154	0.421	SEP	White
EDAZ08	97.705	2.295	245	0.671	DEC	Pack
EDAH09	97.715	2.285	336	0.920	MAR	
EDAM09	97.585	2.415	427	1.169	JUN	
EDAU09	97.400	2.600	518	1.418	SEP	Red Pack
EDAZ09	97.155	2.845	609	1.668	DEC	
EDAH10	96.970	3.030	700	1.917	MAR	
EDAM10	96.755	3.245	791	2.166	JUN	
EDAU10	96.550	3.450	882	2.416	SEP	Green
EDAZ10	96.360	3.640	973	2.665	DEC	Pack
EDAH11	96.215	3.785	1064	2.914	MAR	
EDAM11	96.015	3.985	1155	3.164	JUN	
EDAU11	95.940	4.060	1253	3.432	SEP	Blue Pack
EDAZ11	95.810	4.190	1344	3.682	DEC	
EDAH12	95.725	4.275	1435	3.931	MAR	
EDAM12	#VALUE!	#VALUE!	1526	4.180	JUN	
EDAU12	95.540	4.460	1617	4.429	SEP	Gold Pack
EDAZ12	#VALUE!	#VALUE!	1708	4.679	DEC	
EDAH13	#VALUE!	#VALUE!	1799	4.928	MAR	

	Last Yield	Net Yield	Last Price	
White Pack	2.370	2.000	9767.625	
Red Pack	2.779	6.750	9727.750	Pack
Green Pack	3.611	6.125	9647.000	Prices
Blue Pack	4.228	3.500	9587.250	
Gold Pack		1.000	9546.375	

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

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

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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Correlations (Important)

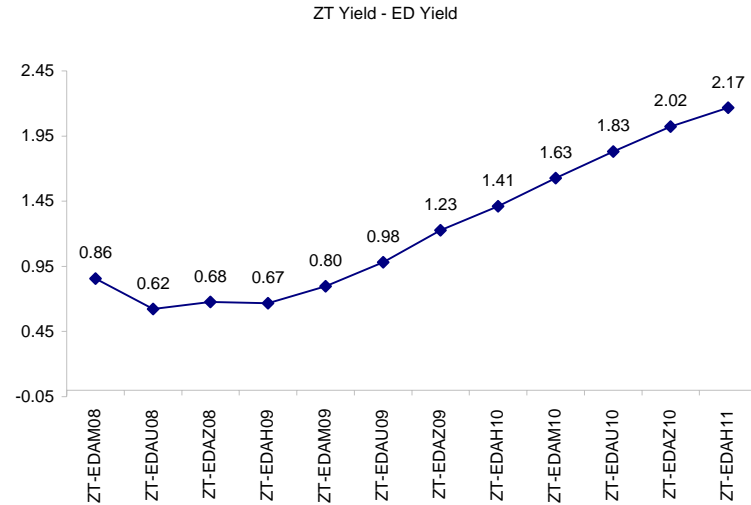
Correlations for the US Cash Treasuries are done on a YIELD basis. Therefore, you'll see negative values. The reason for this is due to the new issues. Every new issue takes too long to 'catch up' because the correlation formula looks back 10days.

ZT				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	9.825	0.86	ZT-EDAM08	-17.886
EDAU08	9.590	0.62	ZT-EDAU08	71.829
EDAZ08	9.645	0.68	ZT-EDAZ08	80.921
EDAH09	9.635	0.67	ZT-EDAH09	95.234
EDAM09	9.765	0.80	ZT-EDAM09	98.042
EDAU09	9.950	0.98	ZT-EDAU09	97.918
EDAZ09	10.195	1.23	ZT-EDAZ09	96.854
EDAH10	10.380	1.41	ZT-EDAH10	96.698
EDAM10	10.595	1.63	ZT-EDAM10	96.454
EDAU10	10.800	1.83	ZT-EDAU10	95.841
EDAZ10	10.990	2.02	ZT-EDAZ10	93.380
EDAH11	11.135	2.17	ZT-EDAH11	91.649

Price = Outright Decimal Price - Euro Contract Price

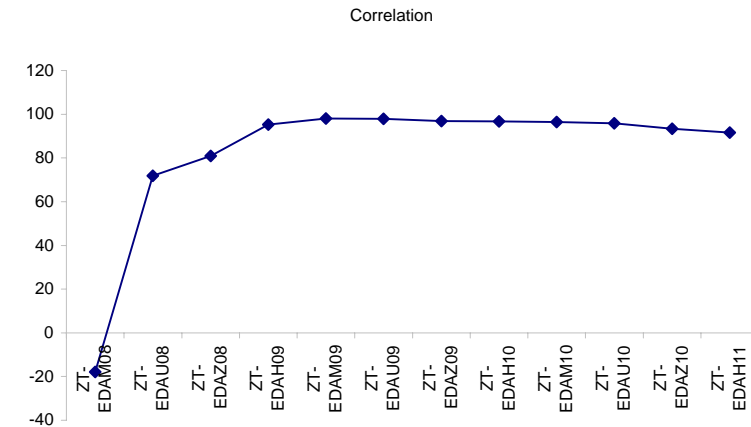
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



ED Duration as Fraction of year				ZT Duration	Spread Duration	
EDAM08	0.172	1.84	1.67	ZT-EDAM08		
EDAU08	0.421	1.84	1.42	ZT-EDAU08		
EDAZ08	0.671	1.84	1.17	ZT-EDAZ08		
EDAH09	0.920	1.84	0.92	ZT-EDAH09		
EDAM09	1.169	1.84	0.68	ZT-EDAM09		
EDAU09	1.418	1.84	0.43	ZT-EDAU09		
EDAZ09	1.668	1.84	0.18	ZT-EDAZ09		
EDAH10	1.917	1.84	(0.07)	ZT-EDAH10		
EDAM10	2.166	1.84	(0.32)	ZT-EDAM10		
EDAU10	2.416	1.84	(0.57)	ZT-EDAU10		
EDAZ10	2.665	1.84	(0.82)	ZT-EDAZ10		
EDAH11	2.914	1.84	(1.07)	ZT-EDAH11		

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

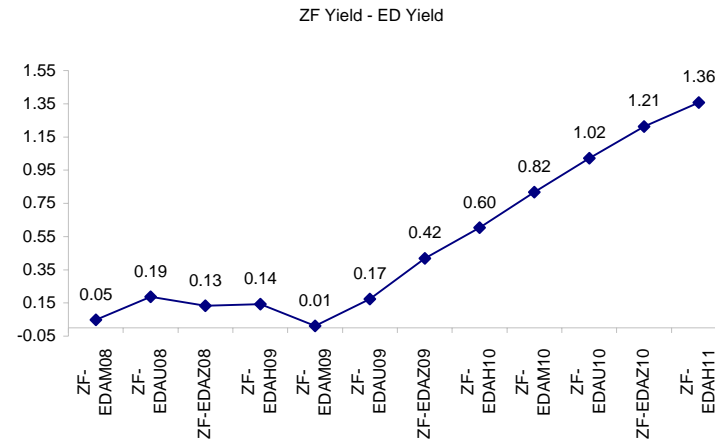


	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	16.631	0.05	ZF-EDAM08	-7.428
EDAU08	16.396	0.19	ZF-EDAU08	77.465
EDAZ08	16.451	0.13	ZF-EDAZ08	86.122
EDAH09	16.441	0.14	ZF-EDAH09	96.257
EDAM09	16.571	0.01	ZF-EDAM09	96.127
EDAU09	16.756	0.17	ZF-EDAU09	94.210
EDAZ09	17.001	0.42	ZF-EDAZ09	92.946
EDAH10	17.186	0.60	ZF-EDAH10	93.344
EDAM10	17.401	0.82	ZF-EDAM10	93.912
EDAU10	17.606	1.02	ZF-EDAU10	93.975
EDAZ10	17.796	1.21	ZF-EDAZ10	92.478
EDAH11	17.941	1.36	ZF-EDAH11	92.293

Price = Outright Decimal Price - Euro Contract Price

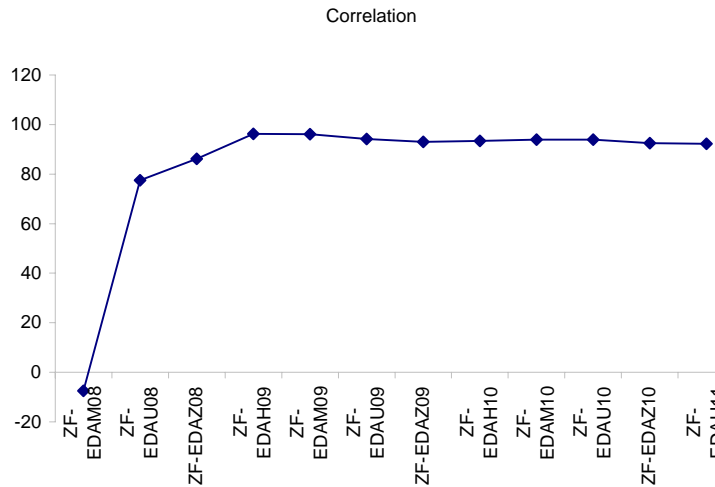
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

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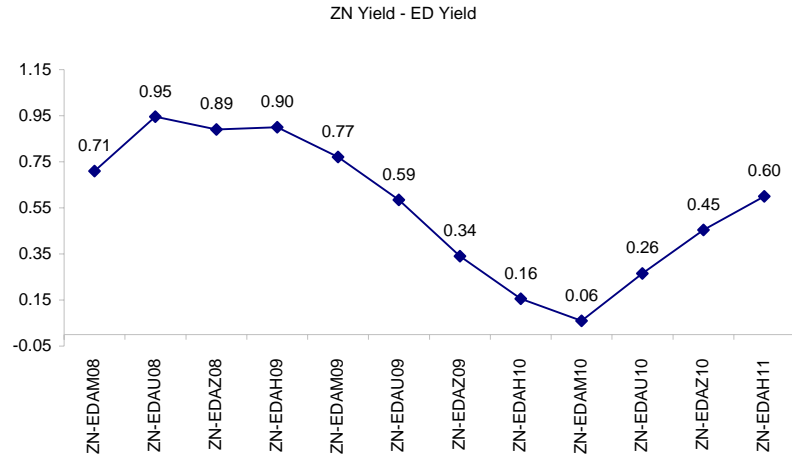
	ED Duration as Fraction of year		ZF Duration	Spread Duration	
EDAM08	0.172	3.99	3.82	ZF-EDAM08	
EDAU08	0.421	3.99	3.57	ZF-EDAU08	
EDAZ08	0.671	3.99	3.32	ZF-EDAZ08	
EDAH09	0.920	3.99	3.07	ZF-EDAH09	
EDAM09	1.169	3.99	2.82	ZF-EDAM09	
EDAU09	1.418	3.99	2.58	ZF-EDAU09	
EDAZ09	1.668	3.99	2.33	ZF-EDAZ09	
EDAH10	1.917	3.99	2.08	ZF-EDAH10	
EDAM10	2.166	3.99	1.83	ZF-EDAM10	
EDAU10	2.416	3.99	1.58	ZF-EDAU10	
EDAZ10	2.665	3.99	1.33	ZF-EDAZ10	
EDAH11	2.914	3.99	1.08	ZF-EDAH11	

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



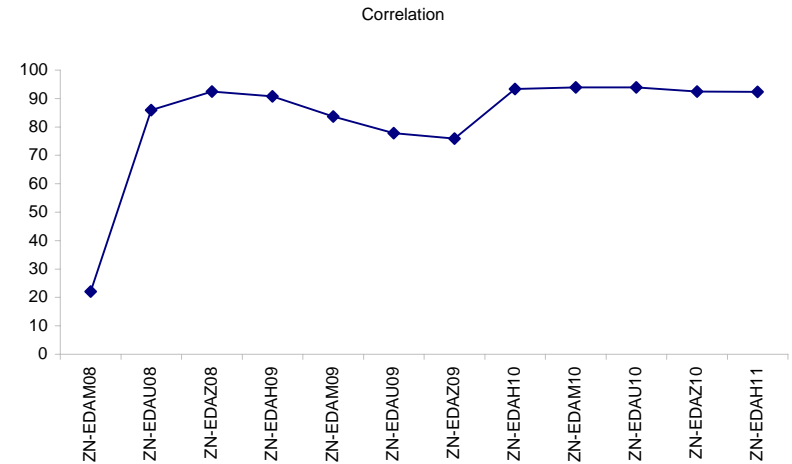
ZN				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	20.928	0.71	ZN-EDAM08	22.055
EDAU08	20.693	0.95	ZN-EDAU08	85.967
EDAZ08	20.748	0.89	ZN-EDAZ08	92.460
EDAH09	20.738	0.90	ZN-EDAH09	90.760
EDAM09	20.868	0.77	ZN-EDAM09	83.651
EDAU09	21.053	0.59	ZN-EDAU09	77.801
EDAZ09	21.298	0.34	ZN-EDAZ09	75.857
EDAH10	21.483	0.16	ZN-EDAH10	93.344
EDAM10	21.698	0.06	ZN-EDAM10	93.912
EDAU10	21.903	0.26	ZN-EDAU10	93.975
EDAZ10	22.093	0.45	ZN-EDAZ10	92.478
EDAH11	22.238	0.60	ZN-EDAH11	92.293

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



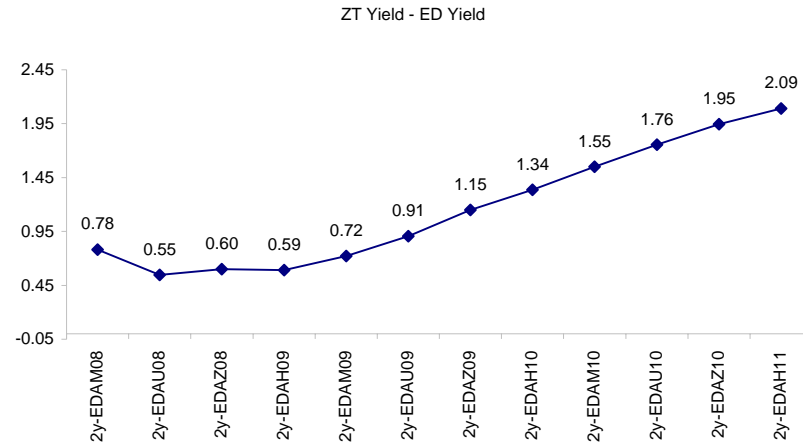
ED Duration as Fraction of year				ZN Duration	Spread Duration	
EDAM08	0.172	5.95	5.78	ZN-EDAM08		
EDAU08	0.421	5.95	5.53	ZN-EDAU08		
EDAZ08	0.671	5.95	5.28	ZN-EDAZ08		
EDAH09	0.920	5.95	5.03	ZN-EDAH09		
EDAM09	1.169	5.95	4.78	ZN-EDAM09		
EDAU09	1.418	5.95	4.53	ZN-EDAU09		
EDAZ09	1.668	5.95	4.29	ZN-EDAZ09		
EDAH10	1.917	5.95	4.04	ZN-EDAH10		
EDAM10	2.166	5.95	3.79	ZN-EDAM10		
EDAU10	2.416	5.95	3.54	ZN-EDAU10		
EDAZ10	2.665	5.95	3.29	ZN-EDAZ10		
EDAH11	2.914	5.95	3.04	ZN-EDAH11		

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



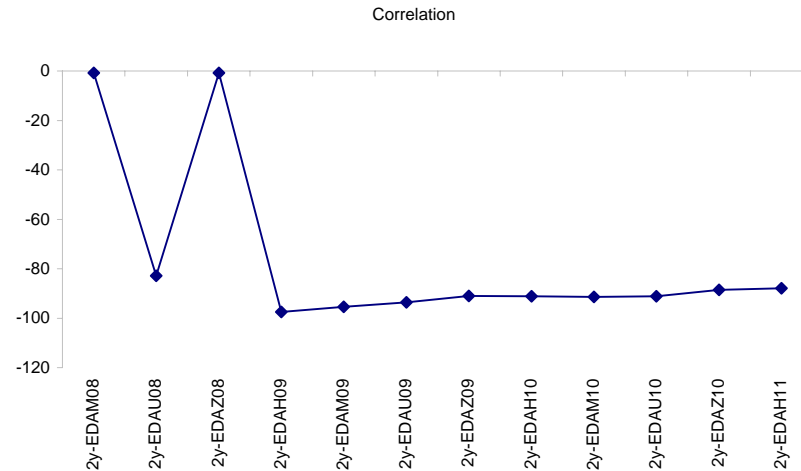
	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	2.584	0.78	2y-EDAM08	-0.741
EDAU08	2.349	0.55	2y-EDAU08	-82.884
EDAZ08	2.404	0.60	2y-EDAZ08	-0.741
EDAH09	2.394	0.59	2y-EDAH09	-97.503
EDAM09	2.524	0.72	2y-EDAM09	-95.356
EDAU09	2.709	0.91	2y-EDAU09	-93.542
EDAZ09	2.954	1.15	2y-EDAZ09	-91.025
EDAH10	3.139	1.34	2y-EDAH10	-91.140
EDAM10	3.354	1.55	2y-EDAM10	-91.381
EDAU10	3.559	1.76	2y-EDAU10	-91.152
EDAZ10	3.749	1.95	2y-EDAZ10	-88.567
EDAH11	3.894	2.09	2y-EDAH11	-87.873

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	
EDAM08	0.172	1.92	1.74	2y-EDAM08	
EDAU08	0.421	1.92	1.50	2y-EDAU08	
EDAZ08	0.671	1.92	1.25	2y-EDAZ08	
EDAH09	0.920	1.92	1.00	2y-EDAH09	
EDAM09	1.169	1.92	0.75	2y-EDAM09	
EDAU09	1.418	1.92	0.50	2y-EDAU09	
EDAZ09	1.668	1.92	0.25	2y-EDAZ09	
EDAH10	1.917	1.92	(0.00)	2y-EDAH10	
EDAM10	2.166	1.92	(0.25)	2y-EDAM10	
EDAU10	2.416	1.92	(0.50)	2y-EDAU10	
EDAZ10	2.665	1.92	(0.75)	2y-EDAZ10	
EDAH11	2.914	1.92	(1.00)	2y-EDAH11	

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

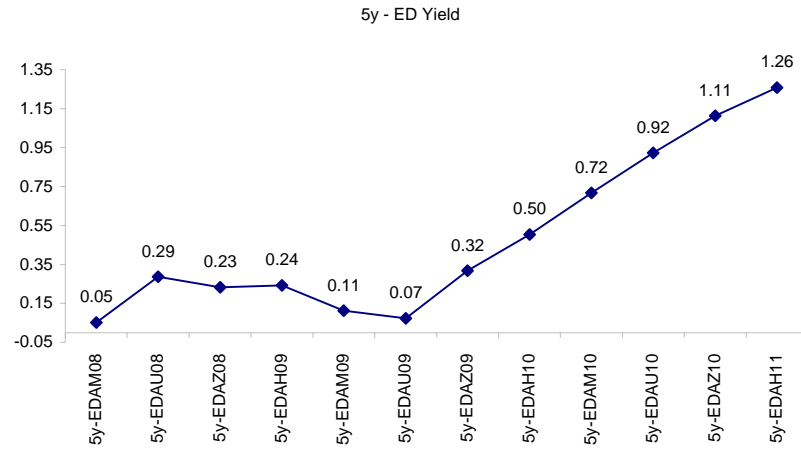


	5y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	2.334	0.05	5y-EDAM08	-11.192
EDAU08	2.099	0.29	5y-EDAU08	-87.341
EDAZ08	2.154	0.23	5y-EDAZ08	-11.192
EDAH09	2.144	0.24	5y-EDAH09	-97.769
EDAM09	2.274	0.11	5y-EDAM09	-93.585
EDAU09	2.459	0.07	5y-EDAU09	-89.962
EDAZ09	2.704	0.32	5y-EDAZ09	-87.835
EDAH10	2.889	0.50	5y-EDAH10	-88.571
EDAM10	3.104	0.72	5y-EDAM10	-89.731
EDAU10	3.309	0.92	5y-EDAU10	-90.442
EDAZ10	3.499	1.11	5y-EDAZ10	-89.503
EDAH11	3.644	1.26	5y-EDAH11	-90.446

Price = Outright Decimal Price - Euro Contract Price

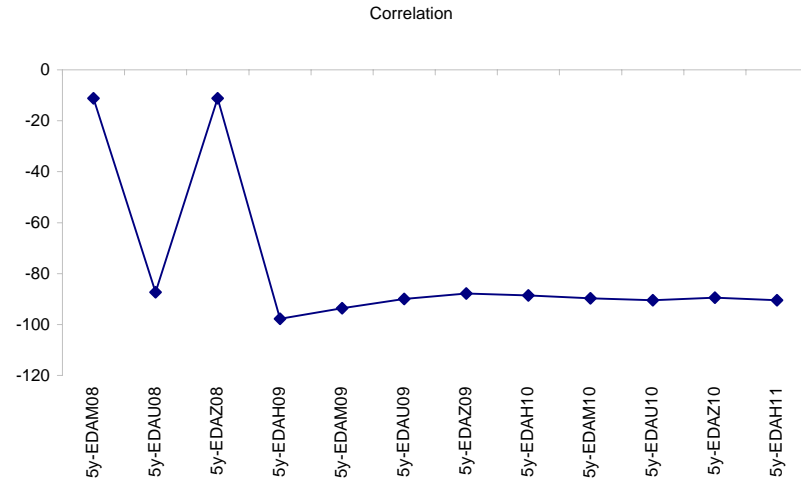
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year			
	5Y Duration	Spread Duration		
EDAM08	0.172	4.63	4.46	5y-EDAM08
EDAU08	0.421	4.63	4.21	5y-EDAU08
EDAZ08	0.671	4.63	3.96	5y-EDAZ08
EDAH09	0.920	4.63	3.71	5y-EDAH09
EDAM09	1.169	4.63	3.46	5y-EDAM09
EDAU09	1.418	4.63	3.21	5y-EDAU09
EDAZ09	1.668	4.63	2.96	5y-EDAZ09
EDAH10	1.917	4.63	2.71	5y-EDAH10
EDAM10	2.166	4.63	2.46	5y-EDAM10
EDAU10	2.416	4.63	2.22	5y-EDAU10
EDAZ10	2.665	4.63	1.97	5y-EDAZ10
EDAH11	2.914	4.63	1.72	5y-EDAH11

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

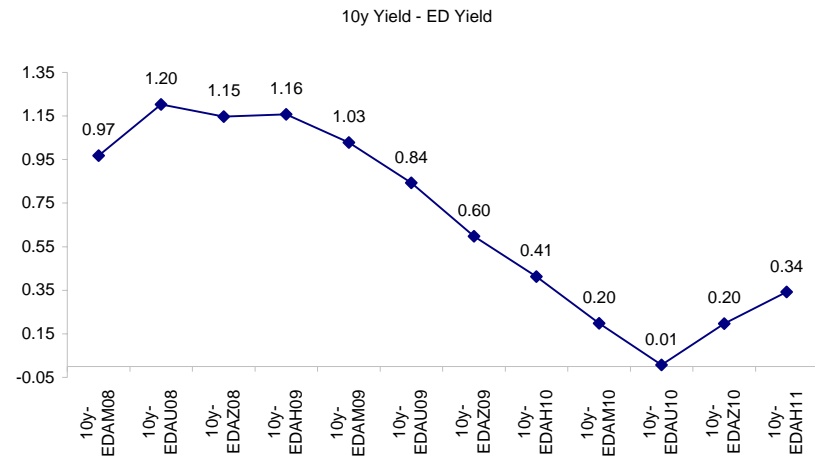


10y				Correlation* (percent)
Spread Price	Spread Yield	Spread Name		
EDAM08	2.334	0.97	10y-EDAM08	-17.310
EDAU08	2.099	1.20	10y-EDAU08	-82.042
EDAZ08	2.154	1.15	10y-EDAZ08	-17.310
EDAH09	2.144	1.16	10y-EDAH09	-90.155
EDAM09	2.274	1.03	10y-EDAM09	-86.917
EDAU09	2.459	0.84	10y-EDAU09	-81.562
EDAZ09	2.704	0.60	10y-EDAZ09	-81.899
EDAH10	2.889	0.41	10y-EDAH10	-83.047
EDAM10	3.104	0.20	10y-EDAM10	-85.060
EDAU10	3.309	0.01	10y-EDAU10	-87.220
EDAZ10	3.499	0.20	10y-EDAZ10	-89.868
EDAH11	3.644	0.34	10y-EDAH11	-92.881

Price = Outright Decimal Price - Euro Contract Price

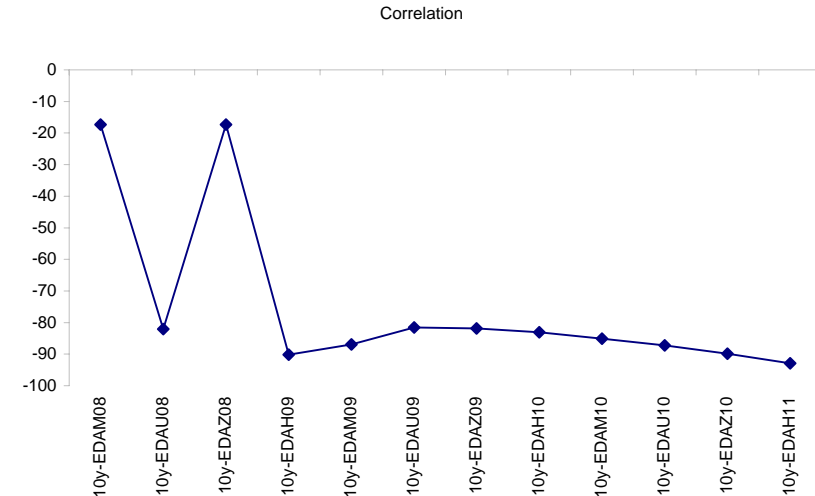
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



ED Duration as				Spread Duration	
Fraction of year	10Y Duration				
EDAM08	0.172	8.22	8.05	10y-EDAM08	
EDAU08	0.421	8.22	7.80	10y-EDAU08	
EDAZ08	0.671	8.22	7.55	10y-EDAZ08	
EDAH09	0.920	8.22	7.30	10y-EDAH09	
EDAM09	1.169	8.22	7.05	10y-EDAM09	
EDAU09	1.418	8.22	6.80	10y-EDAU09	
EDAZ09	1.668	8.22	6.55	10y-EDAZ09	
EDAH10	1.917	8.22	6.30	10y-EDAH10	
EDAM10	2.166	8.22	6.05	10y-EDAM10	
EDAU10	2.416	8.22	5.80	10y-EDAU10	
EDAZ10	2.665	8.22	5.56	10y-EDAZ10	
EDAH11	2.914	8.22	5.31	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.

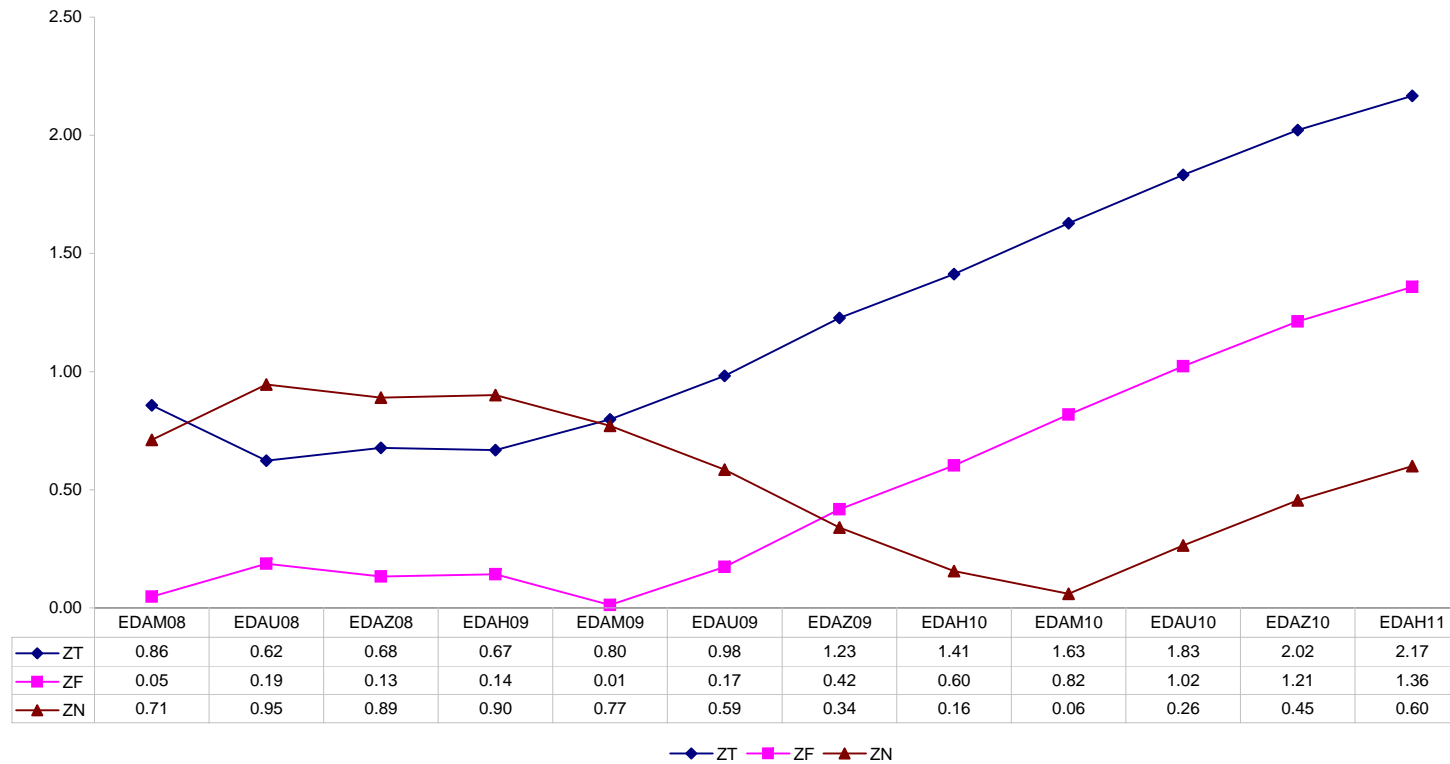
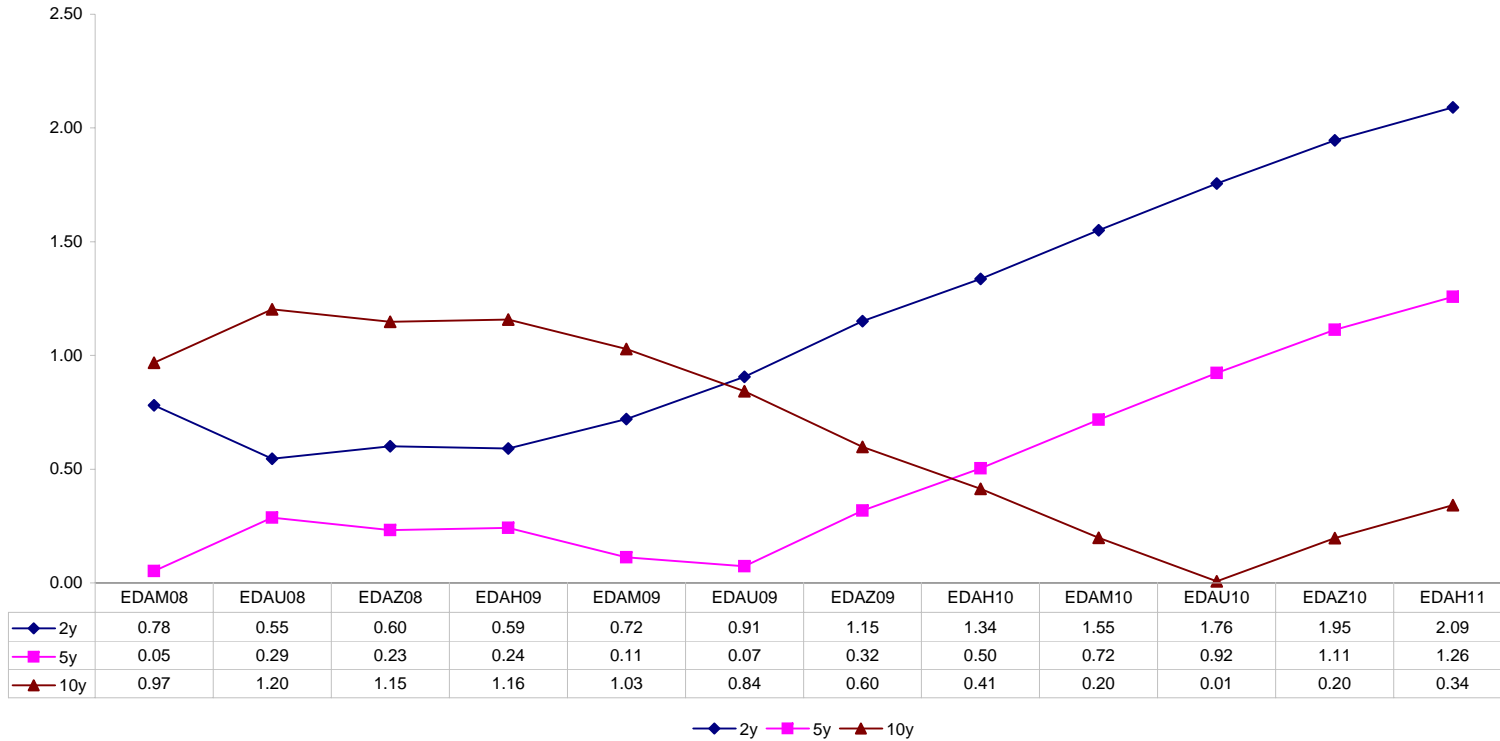
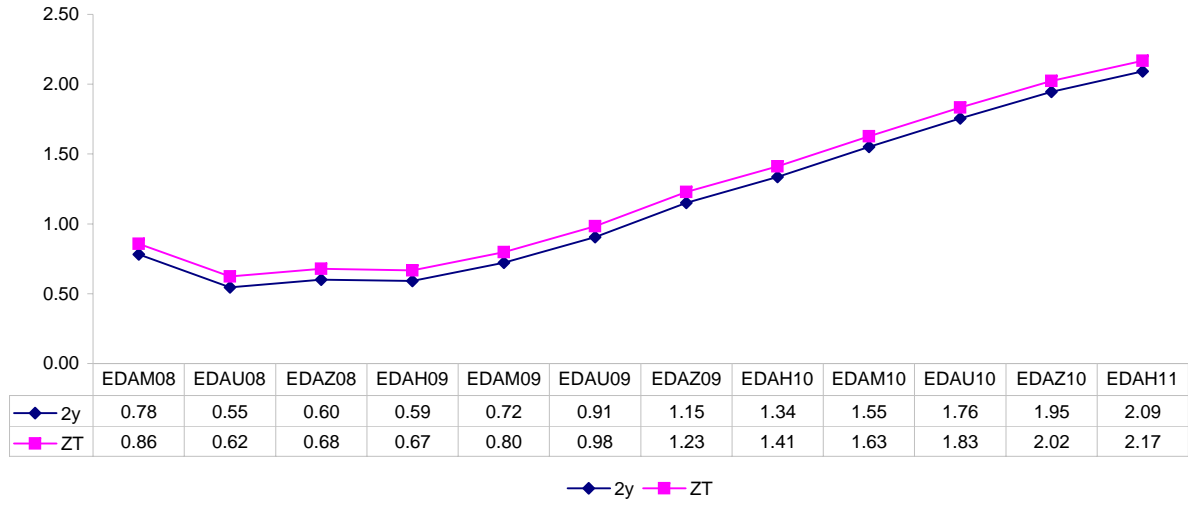


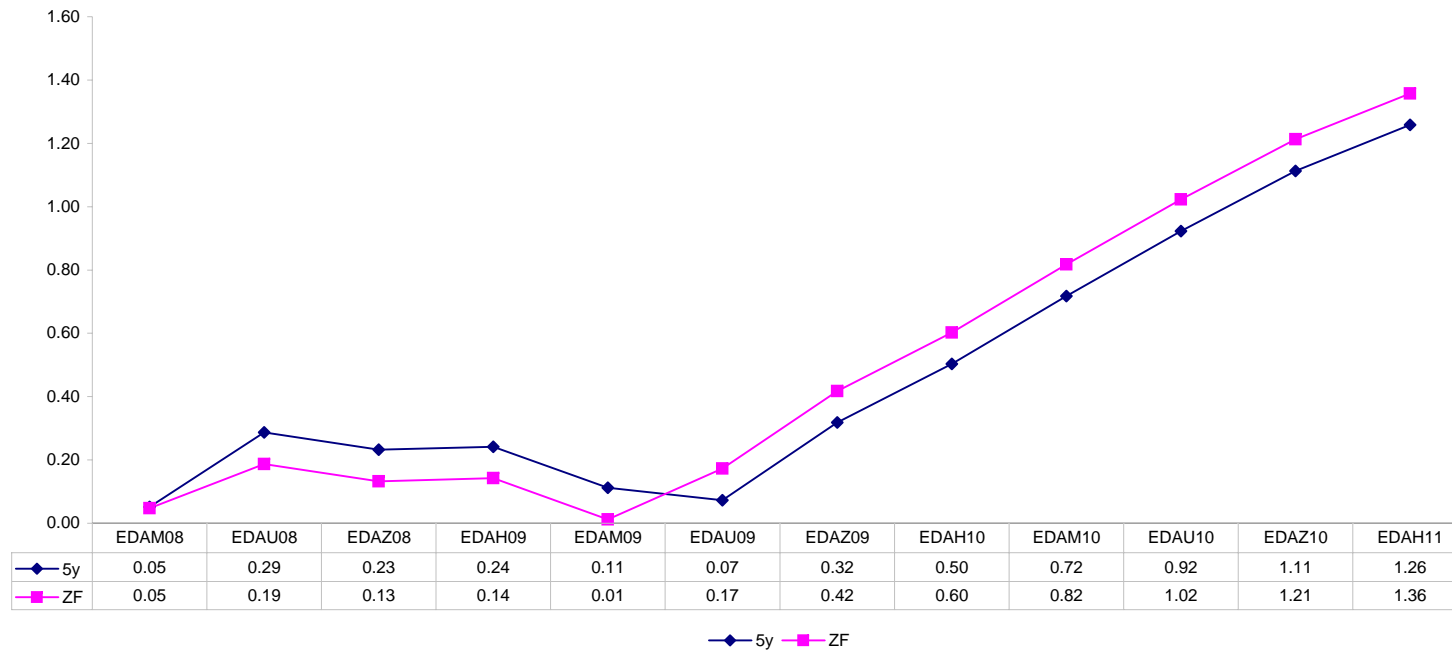
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



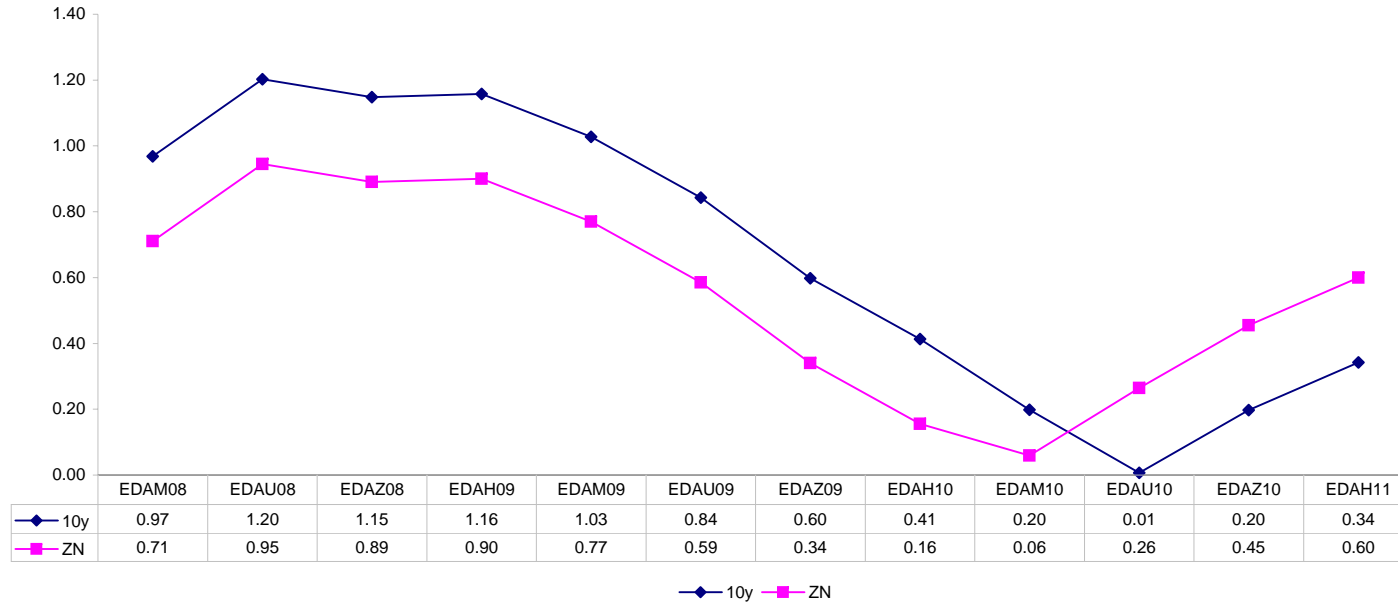
2y Basis TED Curve



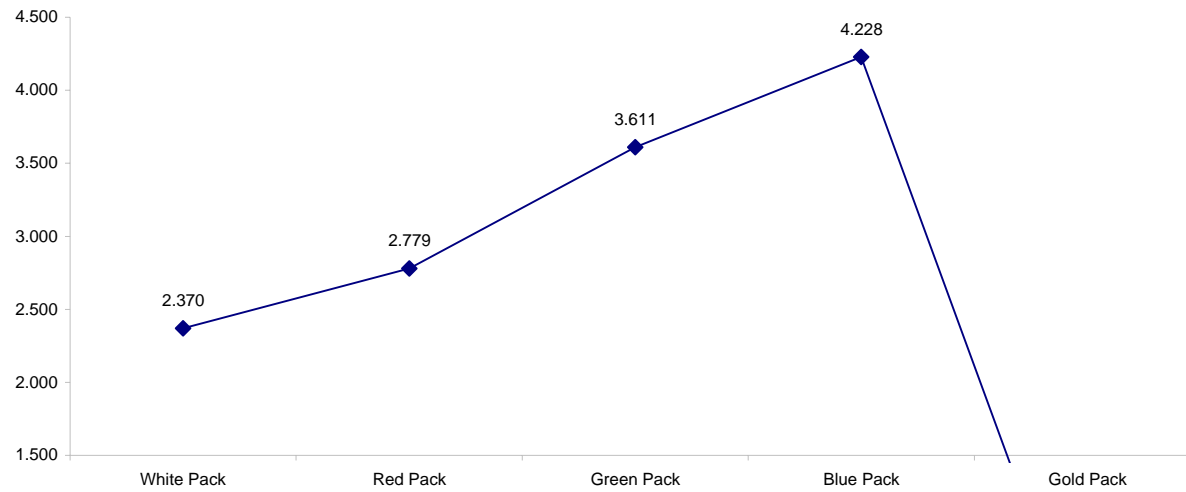
5y Basis TED Curve



10y Basis TED Curve



	Last Yield	Net Last Yield	Last Price
White Pack	2.370	2.000	9767.625
Red Pack	2.779	6.750	9727.750
Green Pack	3.611	6.125	9647.000
Blue Pack	4.228	3.500	9587.250
Gold Pack		1.000	9546.375



2y, 5y, 10y Basis Curves vs ED

