

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	106.5156	106.165	2.063	1.82
ZF	112.4219	112.135	2.821	3.96
ZN	116.2500	116.080	3.537	5.92
2y	99.288	99.0920	2.122	1.89
5y	98.109	98.0350	2.914	4.60
10y	98.109	98.0350	3.731	8.17

Eurodollars (ED)					
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month
EDAM08	97.130	2.870	56	0.153	JUN
EDAU08	97.210	2.790	147	0.402	SEP White
EDAZ08	97.140	2.860	238	0.651	DEC Pack
EDAH09	97.135	2.865	329	0.901	MAR
EDAM09	96.995	3.005	420	1.150	JUN
EDAU09	96.825	3.175	511	1.399	SEP Red Pack
EDAZ09	96.615	3.385	602	1.649	DEC
EDAH10	96.475	3.525	693	1.898	MAR
EDAM10	96.295	3.705	784	2.147	JUN
EDAU10	96.120	3.880	875	2.397	SEP Green
EDAZ10	95.950	4.050	966	2.646	DEC Pack
EDAH11	95.835	4.165	1057	2.895	MAR
EDAM11	95.705	4.295	1148	3.145	JUN
EDAU11	95.610	4.390	1246	3.413	SEP Blue Pack
EDAZ11	95.490	4.510	1337	3.662	DEC
EDAH12	95.420	4.580	1428	3.912	MAR
EDAM12	95.335	4.665	1519	4.161	JUN
EDAU12	95.265	4.735	1610	4.410	SEP Gold Pack
EDAZ12	95.125	4.875	1701	4.660	DEC
EDAH13	95.075	4.925	1792	4.909	MAR

	Last Yield	Net Yield	Last Price	
White Pack	2.906	5.000	9715.375	
Red Pack	3.345	7.125	9672.750	Pack
Green Pack	4.045	5.625	9605.000	Prices
Blue Pack	4.556	4.500	9555.625	
Gold Pack	4.926	2.375	9520.000	

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.

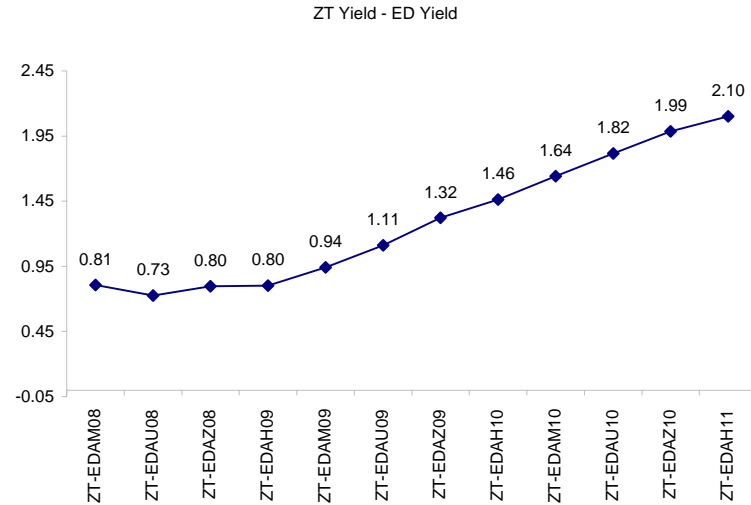
jgoulding@ghco.com

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.

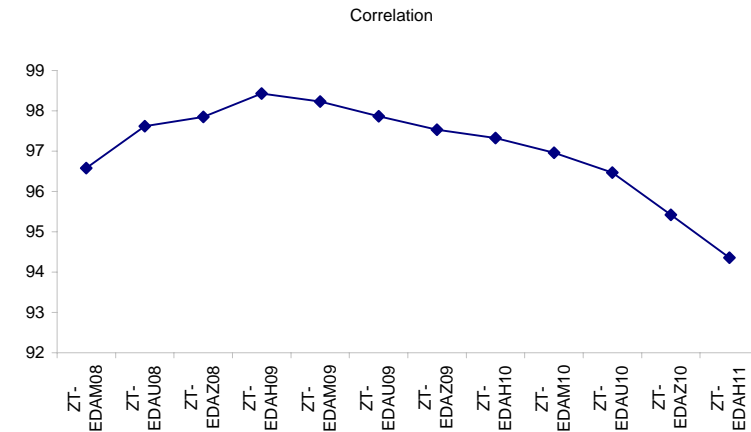
ZT				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	9.386	0.81	ZT-EDAM08	96.578
EDAU08	9.306	0.73	ZT-EDAU08	97.615
EDAZ08	9.376	0.80	ZT-EDAZ08	97.846
EDAH09	9.381	0.80	ZT-EDAH09	98.427
EDAM09	9.521	0.94	ZT-EDAM09	98.229
EDAU09	9.691	1.11	ZT-EDAU09	97.868
EDAZ09	9.901	1.32	ZT-EDAZ09	97.532
EDAH10	10.041	1.46	ZT-EDAH10	97.327
EDAM10	10.221	1.64	ZT-EDAM10	96.959
EDAU10	10.396	1.82	ZT-EDAU10	96.467
EDAZ10	10.566	1.99	ZT-EDAZ10	95.421
EDAH11	10.681	2.10	ZT-EDAH11	94.358

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	
EDAM08	0.153	1.82	1.67	ZT-EDAM08		
EDAU08	0.402	1.82	1.42	ZT-EDAU08		
EDAZ08	0.651	1.82	1.17	ZT-EDAZ08		
EDAH09	0.901	1.82	0.92	ZT-EDAH09		
EDAM09	1.150	1.82	0.67	ZT-EDAM09		
EDAU09	1.399	1.82	0.42	ZT-EDAU09		
EDAZ09	1.649	1.82	0.17	ZT-EDAZ09		
EDAH10	1.898	1.82	(0.08)	ZT-EDAH10		
EDAM10	2.147	1.82	(0.33)	ZT-EDAM10		
EDAU10	2.397	1.82	(0.58)	ZT-EDAU10		
EDAZ10	2.646	1.82	(0.82)	ZT-EDAZ10		
EDAH11	2.895	1.82	(1.07)	ZT-EDAH11		

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

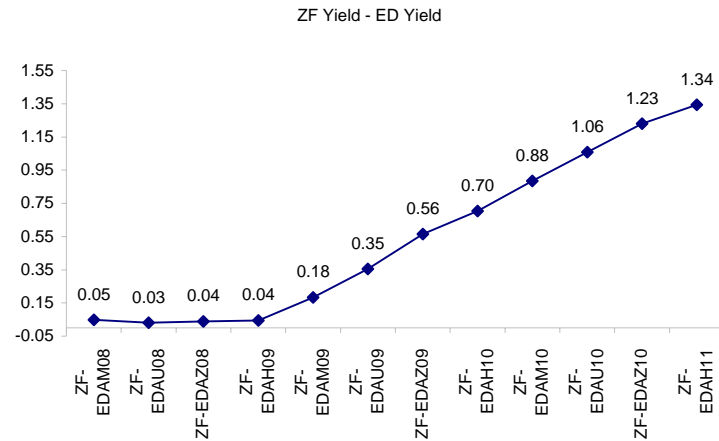


	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	15.292	0.05	ZF-EDAM08	93.050
EDAU08	15.212	0.03	ZF-EDAU08	94.843
EDAZ08	15.282	0.04	ZF-EDAZ08	95.601
EDAH09	15.287	0.04	ZF-EDAH09	96.889
EDAM09	15.427	0.18	ZF-EDAM09	97.114
EDAU09	15.597	0.35	ZF-EDAU09	97.037
EDAZ09	15.807	0.56	ZF-EDAZ09	96.774
EDAH10	15.947	0.70	ZF-EDAH10	97.043
EDAM10	16.127	0.88	ZF-EDAM10	97.111
EDAU10	16.302	1.06	ZF-EDAU10	96.715
EDAZ10	16.472	1.23	ZF-EDAZ10	95.604
EDAH11	16.587	1.34	ZF-EDAH11	94.706

Price = Outright Decimal Price - Euro Contract Price

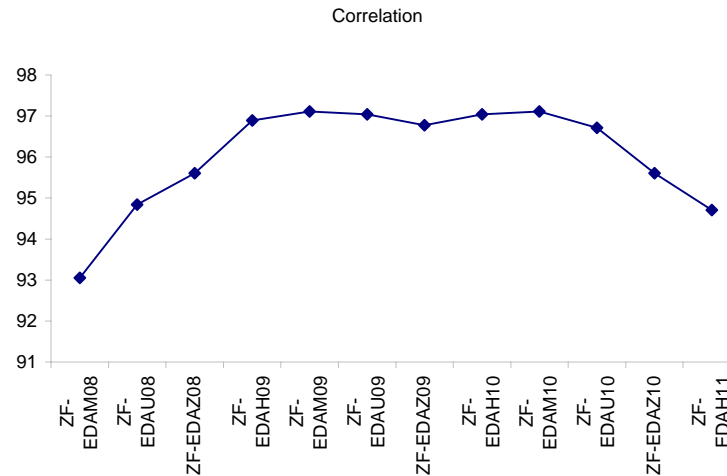
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year		ZF Duration	Spread Duration	
EDAM08	0.153	3.96	3.81	ZF-EDAM08	
EDAU08	0.402	3.96	3.56	ZF-EDAU08	
EDAZ08	0.651	3.96	3.31	ZF-EDAZ08	
EDAH09	0.901	3.96	3.06	ZF-EDAH09	
EDAM09	1.150	3.96	2.81	ZF-EDAM09	
EDAU09	1.399	3.96	2.56	ZF-EDAU09	
EDAZ09	1.649	3.96	2.32	ZF-EDAZ09	
EDAH10	1.898	3.96	2.07	ZF-EDAH10	
EDAM10	2.147	3.96	1.82	ZF-EDAM10	
EDAU10	2.397	3.96	1.57	ZF-EDAU10	
EDAZ10	2.646	3.96	1.32	ZF-EDAZ10	
EDAH11	2.895	3.96	1.07	ZF-EDAH11	

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

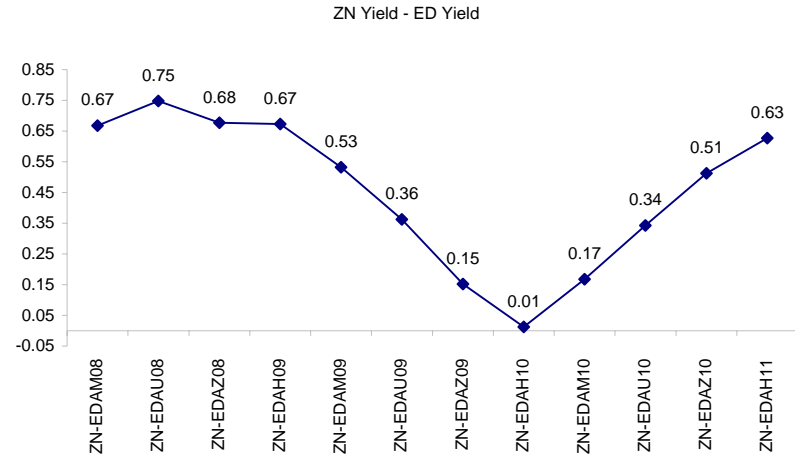


ZN				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	19.120	0.67	ZN-EDAM08	95.460
EDAU08	19.040	0.75	ZN-EDAU08	97.115
EDAZ08	19.110	0.68	ZN-EDAZ08	98.236
EDAH09	19.115	0.67	ZN-EDAH09	98.971
EDAM09	19.255	0.53	ZN-EDAM09	99.138
EDAU09	19.425	0.36	ZN-EDAU09	99.045
EDAZ09	19.635	0.15	ZN-EDAZ09	98.765
EDAH10	19.775	0.01	ZN-EDAH10	97.043
EDAM10	19.955	0.17	ZN-EDAM10	97.111
EDAU10	20.130	0.34	ZN-EDAU10	96.715
EDAZ10	20.300	0.51	ZN-EDAZ10	95.604
EDAH11	20.415	0.63	ZN-EDAH11	94.706

Price = Outright Decimal Price - Euro Contract Price

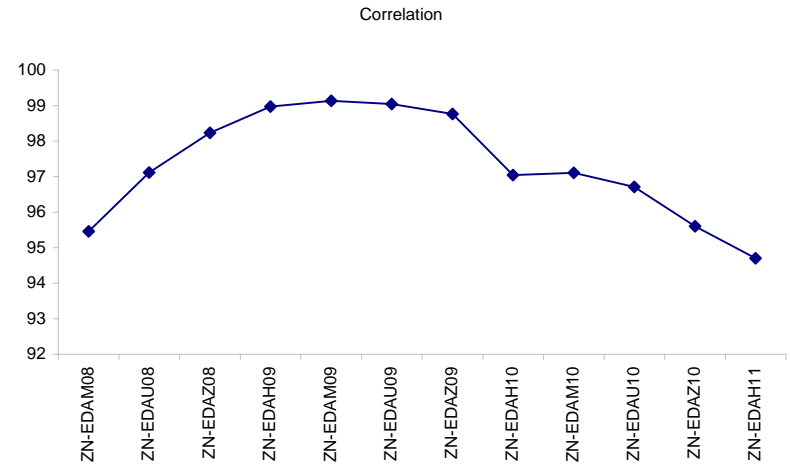
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year	ZN Duration	Spread Duration	
EDAM08	0.153	5.92	5.76	ZN-EDAM08
EDAU08	0.402	5.92	5.51	ZN-EDAU08
EDAZ08	0.651	5.92	5.27	ZN-EDAZ08
EDAH09	0.901	5.92	5.02	ZN-EDAH09
EDAM09	1.150	5.92	4.77	ZN-EDAM09
EDAU09	1.399	5.92	4.52	ZN-EDAU09
EDAZ09	1.649	5.92	4.27	ZN-EDAZ09
EDAH10	1.898	5.92	4.02	ZN-EDAH10
EDAM10	2.147	5.92	3.77	ZN-EDAM10
EDAU10	2.397	5.92	3.52	ZN-EDAU10
EDAZ10	2.646	5.92	3.27	ZN-EDAZ10
EDAH11	2.895	5.92	3.02	ZN-EDAH11

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

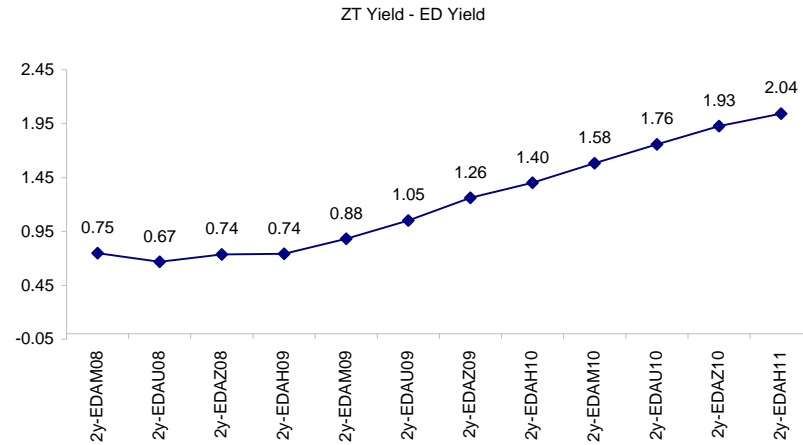


	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	2.158	0.75	2y-EDAM08	-96.609
EDAU08	2.077	0.67	2y-EDAU08	-97.838
EDAZ08	2.147	0.74	2y-EDAZ08	-98.159
EDAH09	2.152	0.74	2y-EDAH09	-98.801
EDAM09	2.292	0.88	2y-EDAM09	-98.611
EDAU09	2.462	1.05	2y-EDAU09	-98.258
EDAZ09	2.672	1.26	2y-EDAZ09	-97.845
EDAH10	2.812	1.40	2y-EDAH10	-97.578
EDAM10	2.992	1.58	2y-EDAM10	-97.258
EDAU10	3.167	1.76	2y-EDAU10	-96.858
EDAZ10	3.337	1.93	2y-EDAZ10	-96.055
EDAH11	3.452	2.04	2y-EDAH11	-95.076

Price = Outright Decimal Price - Euro Contract Price

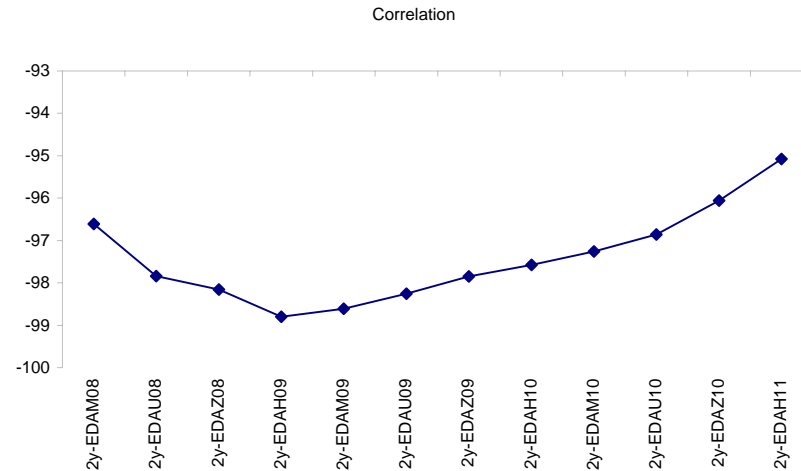
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

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	ED Duration as Fraction of year		2Y Duration	Spread Duration	
EDAM08	0.153	1.89	1.74	2y-EDAM08	
EDAU08	0.402	1.89	1.49	2y-EDAU08	
EDAZ08	0.651	1.89	1.24	2y-EDAZ08	
EDAH09	0.901	1.89	0.99	2y-EDAH09	
EDAM09	1.150	1.89	0.74	2y-EDAM09	
EDAU09	1.399	1.89	0.49	2y-EDAU09	
EDAZ09	1.649	1.89	0.25	2y-EDAZ09	
EDAH10	1.898	1.89	(0.00)	2y-EDAH10	
EDAM10	2.147	1.89	(0.25)	2y-EDAM10	
EDAU10	2.397	1.89	(0.50)	2y-EDAU10	
EDAZ10	2.646	1.89	(0.75)	2y-EDAZ10	
EDAH11	2.895	1.89	(1.00)	2y-EDAH11	

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

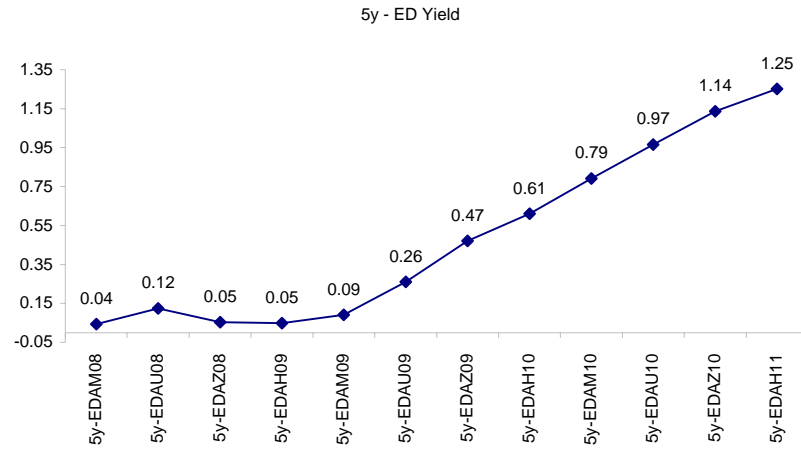


	5y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	0.979	0.04	5y-EDAM08	-93.294
EDAU08	0.899	0.12	5y-EDAU08	-95.045
EDAZ08	0.969	0.05	5y-EDAZ08	-93.294
EDAH09	0.974	0.05	5y-EDAH09	-97.377
EDAM09	1.114	0.09	5y-EDAM09	-97.642
EDAU09	1.284	0.26	5y-EDAU09	-97.618
EDAZ09	1.494	0.47	5y-EDAZ09	-97.298
EDAH10	1.634	0.61	5y-EDAH10	-97.532
EDAM10	1.814	0.79	5y-EDAM10	-97.714
EDAU10	1.989	0.97	5y-EDAU10	-97.608
EDAZ10	2.159	1.14	5y-EDAZ10	-97.069
EDAH11	2.274	1.25	5y-EDAH11	-96.468

Price = Outright Decimal Price - Euro Contract Price

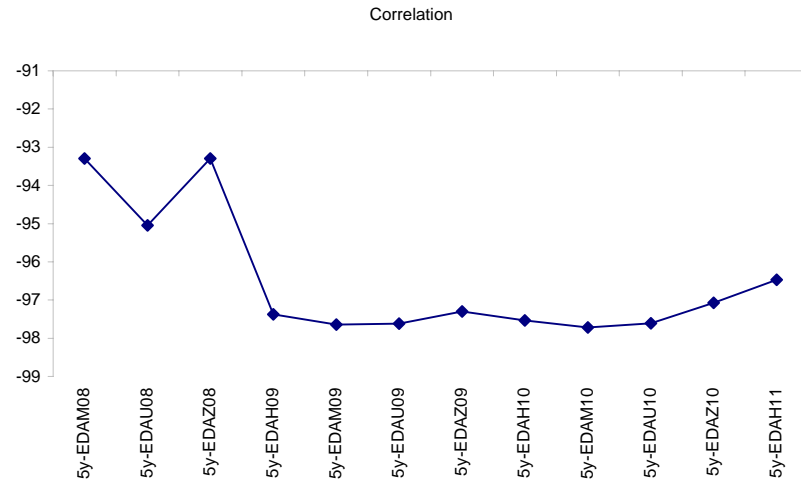
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year			
	Fraction of year	5Y Duration	Spread Duration	
EDAM08	0.153	4.60	4.45	5y-EDAM08
EDAU08	0.402	4.60	4.20	5y-EDAU08
EDAZ08	0.651	4.60	3.95	5y-EDAZ08
EDAH09	0.901	4.60	3.70	5y-EDAH09
EDAM09	1.150	4.60	3.45	5y-EDAM09
EDAU09	1.399	4.60	3.20	5y-EDAU09
EDAZ09	1.649	4.60	2.95	5y-EDAZ09
EDAH10	1.898	4.60	2.70	5y-EDAH10
EDAM10	2.147	4.60	2.45	5y-EDAM10
EDAU10	2.397	4.60	2.20	5y-EDAU10
EDAZ10	2.646	4.60	1.95	5y-EDAZ10
EDAH11	2.895	4.60	1.71	5y-EDAH11

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

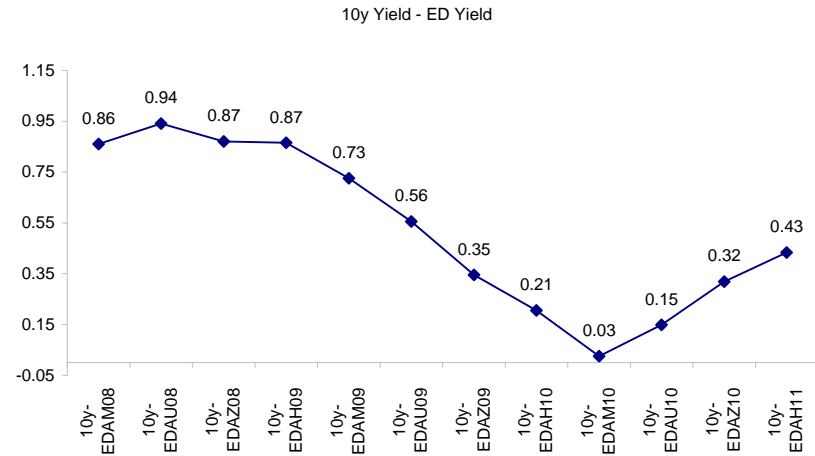


	10y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	0.979	0.86	10y-EDAM08	-92.375
EDAU08	0.899	0.94	10y-EDAU08	-93.917
EDAZ08	0.969	0.87	10y-EDAZ08	-92.375
EDAH09	0.974	0.87	10y-EDAH09	-96.389
EDAM09	1.114	0.73	10y-EDAM09	-96.907
EDAU09	1.284	0.56	10y-EDAU09	-97.210
EDAZ09	1.494	0.35	10y-EDAZ09	-97.165
EDAH10	1.634	0.21	10y-EDAH10	-97.231
EDAM10	1.814	0.03	10y-EDAM10	-97.307
EDAU10	1.989	0.15	10y-EDAU10	-97.533
EDAZ10	2.159	0.32	10y-EDAZ10	-98.003
EDAH11	2.274	0.43	10y-EDAH11	-97.940

Price = Outright Decimal Price - Euro Contract Price

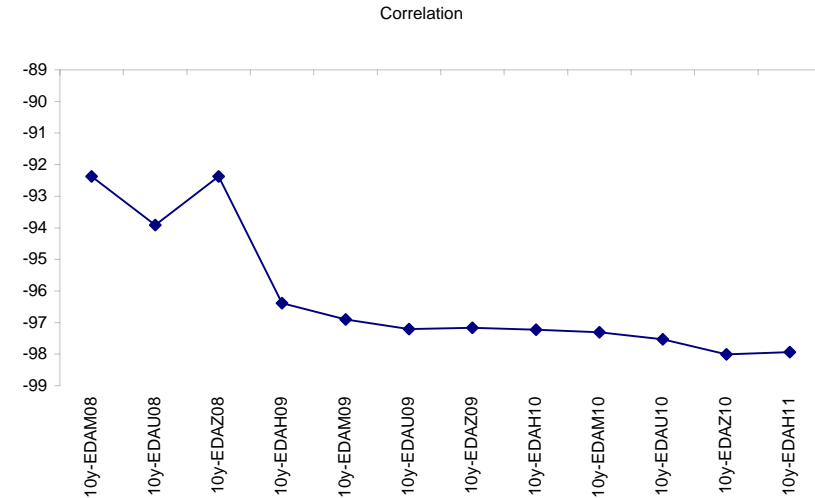
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year			
	10Y Duration	Spread Duration		
EDAM08	0.153	8.17	8.02	10y-EDAM08
EDAU08	0.402	8.17	7.77	10y-EDAU08
EDAZ08	0.651	8.17	7.52	10y-EDAZ08
EDAH09	0.901	8.17	7.27	10y-EDAH09
EDAM09	1.150	8.17	7.02	10y-EDAM09
EDAU09	1.399	8.17	6.77	10y-EDAU09
EDAZ09	1.649	8.17	6.52	10y-EDAZ09
EDAH10	1.898	8.17	6.27	10y-EDAH10
EDAM10	2.147	8.17	6.02	10y-EDAM10
EDAU10	2.397	8.17	5.77	10y-EDAU10
EDAZ10	2.646	8.17	5.52	10y-EDAZ10
EDAH11	2.895	8.17	5.27	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.

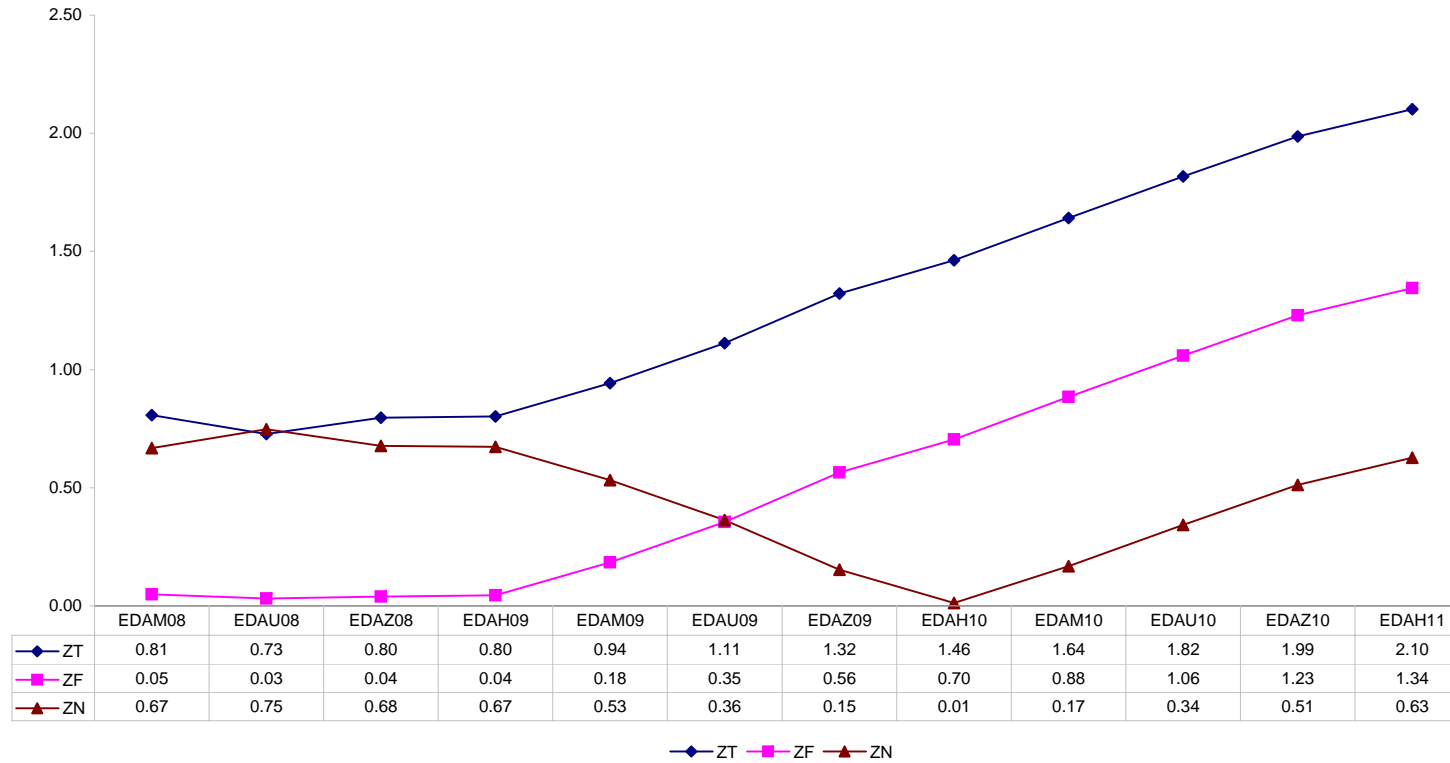
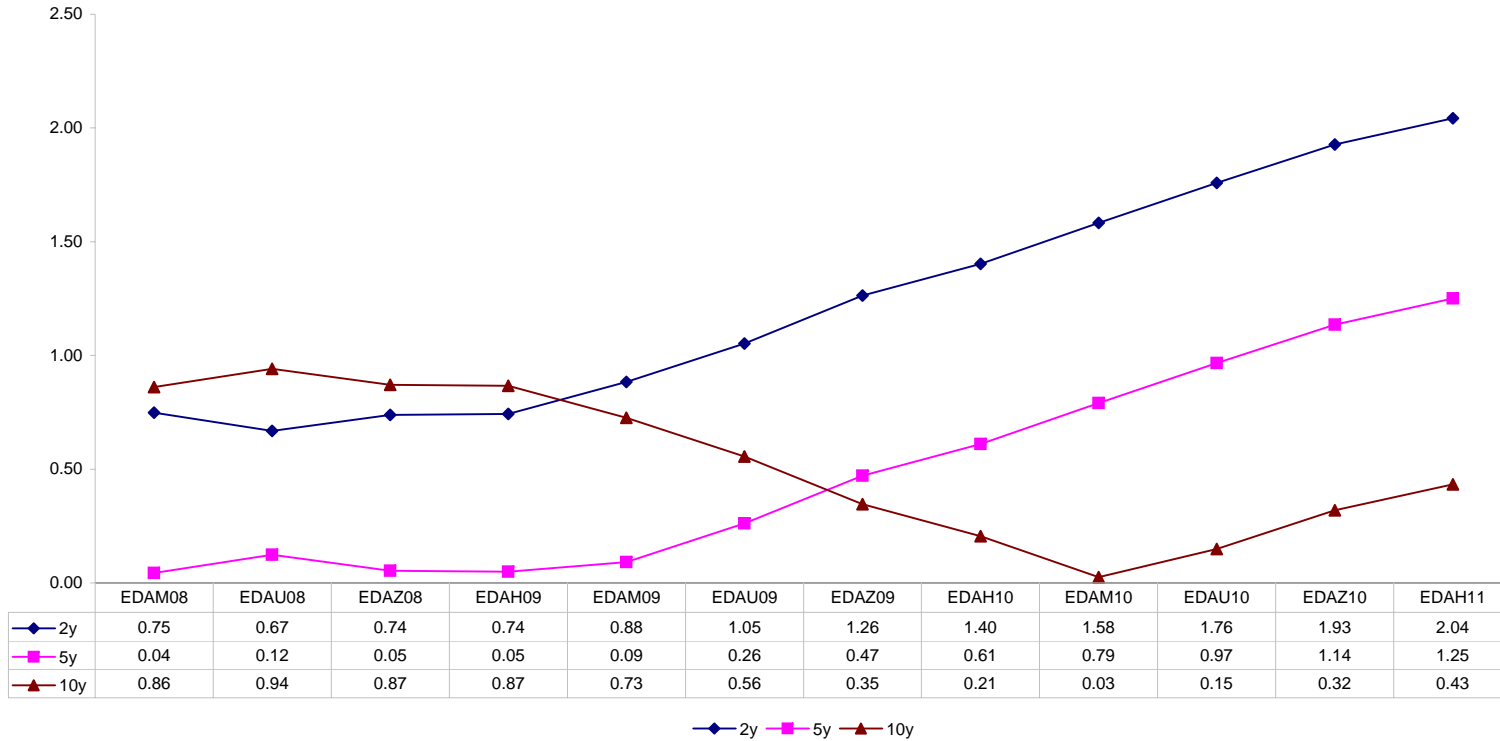
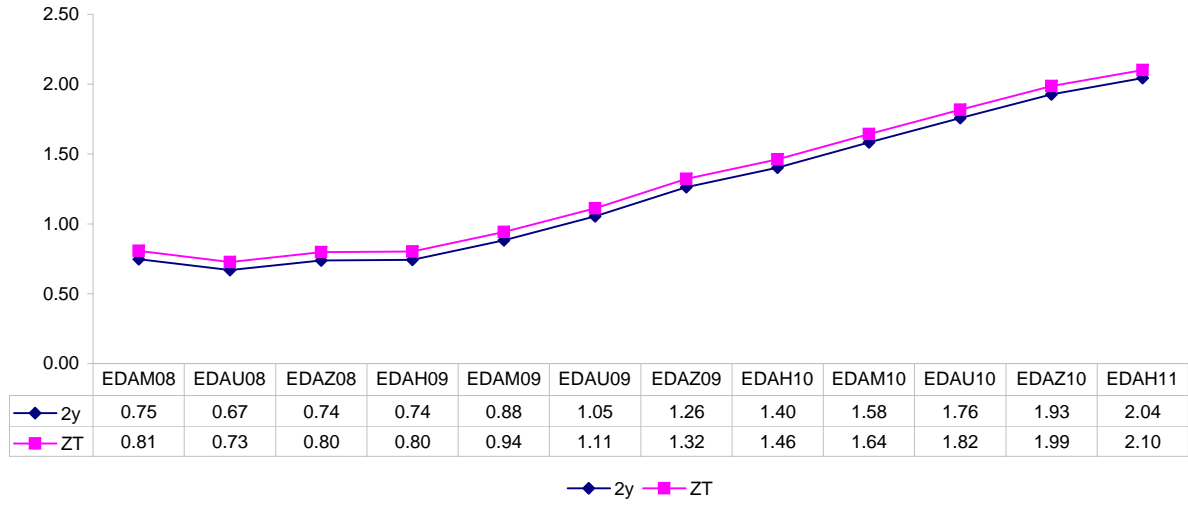


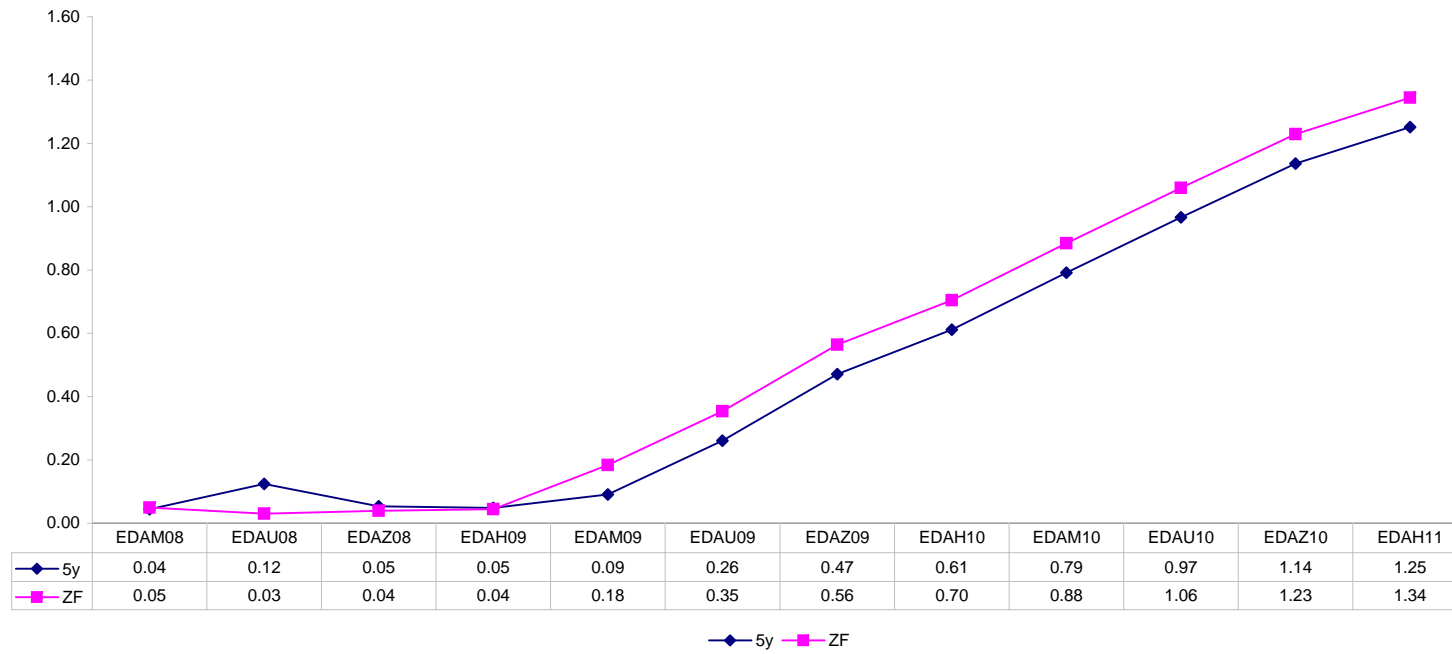
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



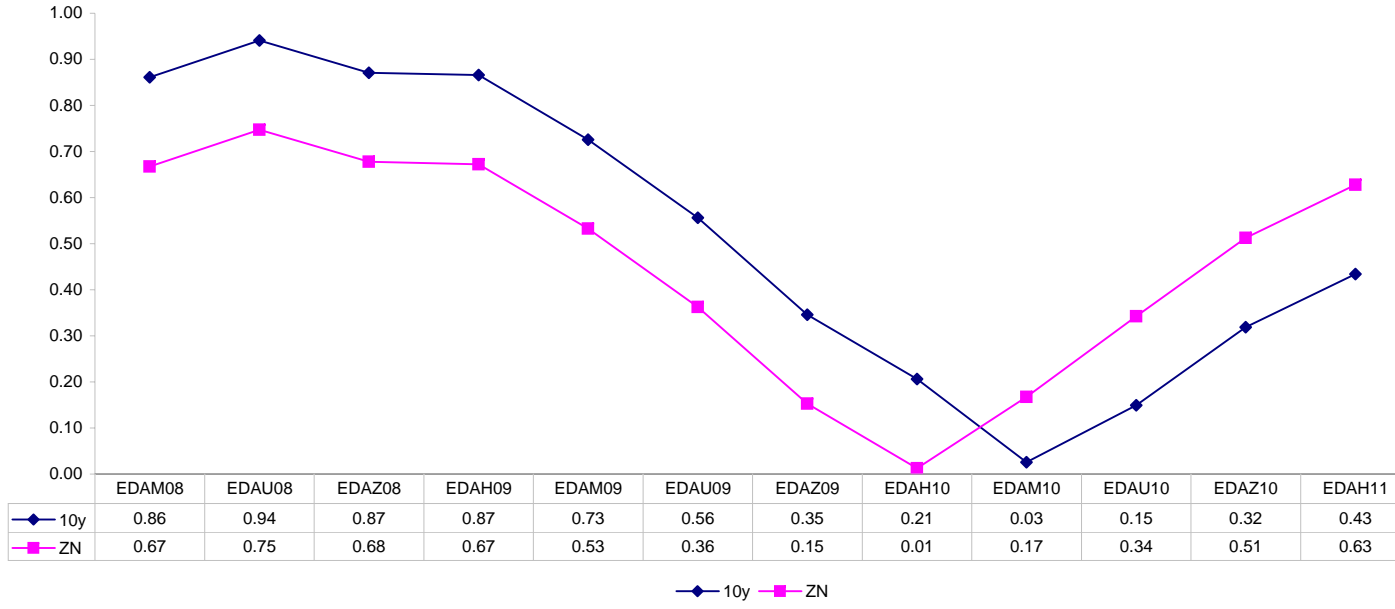
2y Basis TED Curve



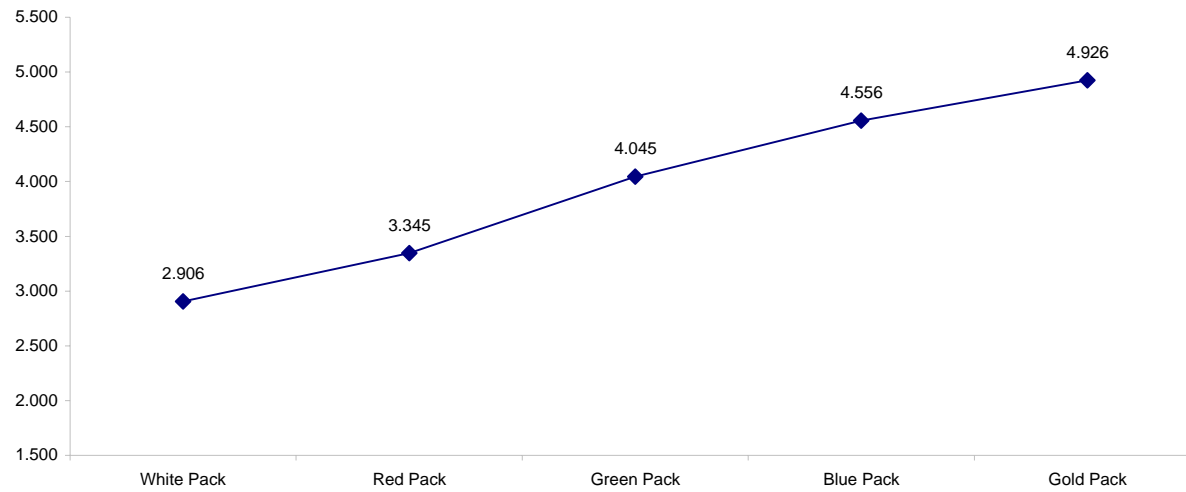
5y Basis TED Curve



10y Basis TED Curve



	Last Yield	Net Last Yield	Last Price
White Pack	2.906	5.000	9715.375
Red Pack	3.345	7.125	9672.750
Green Pack	4.045	5.625	9605.000
Blue Pack	4.556	4.500	9555.625
Gold Pack	4.926	2.375	9520.000



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

