

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	106.8750	106.280	1.846	1.86
ZF	113.1625	113.052	2.624	4.00
ZN	117.6875	117.220	3.314	6.59
2y	99.709	99.2270	1.900	1.93
5y	99.053	99.0170	2.705	4.56
10y	99.734	99.2350	3.530	8.23

Eurodollars (ED)					
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month
EDAM08	97.610	2.390	69	0.188	JUN
EDAU08	97.710	2.290	160	0.438	SEP White
EDAZ08	97.605	2.395	251	0.687	DEC Pack
EDAH09	97.540	2.460	342	0.936	MAR
EDAM09	97.350	2.650	433	1.186	JUN
EDAU09	97.130	2.870	524	1.435	SEP Red Pack
EDAZ09	96.880	3.120	615	1.684	DEC
EDAH10	96.700	3.300	706	1.934	MAR
EDAM10	96.505	3.495	797	2.183	JUN
EDAU10	96.320	3.680	888	2.432	SEP Green
EDAZ10	96.165	3.835	979	2.682	DEC Pack
EDAH11	96.060	3.940	1070	2.931	MAR
EDAM11	95.945	4.055	1161	3.180	JUN
EDAU11	95.850	4.150	1259	3.449	SEP Blue Pack
EDAZ11	95.720	4.280	1350	3.698	DEC
EDAH12	95.635	4.365	1441	3.947	MAR
EDAM12	95.510	4.490	1532	4.197	JUN
EDAU12	95.470	4.530	1623	4.446	SEP Gold Pack
EDAZ12	95.330	4.670	1714	4.695	DEC
EDAH13	95.270	4.730	1805	4.945	MAR

	Last Yield	Net Yield	Last Price	
White Pack	2.431	2.875	9761.625	Pack Prices
Red Pack	3.049	4.625	9701.500	
Green Pack	3.825	5.375	9626.250	
Blue Pack	4.316	4.625	9578.750	
Gold Pack		0.000	9540.375	

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.

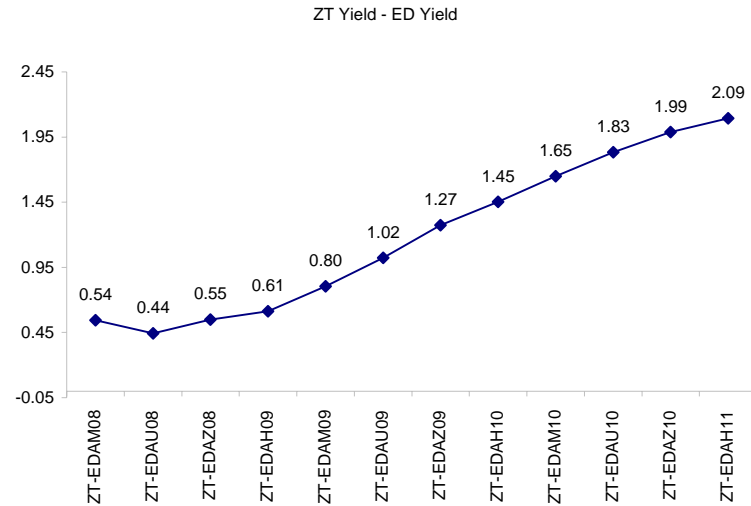
jgoulding@ghco.com

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.

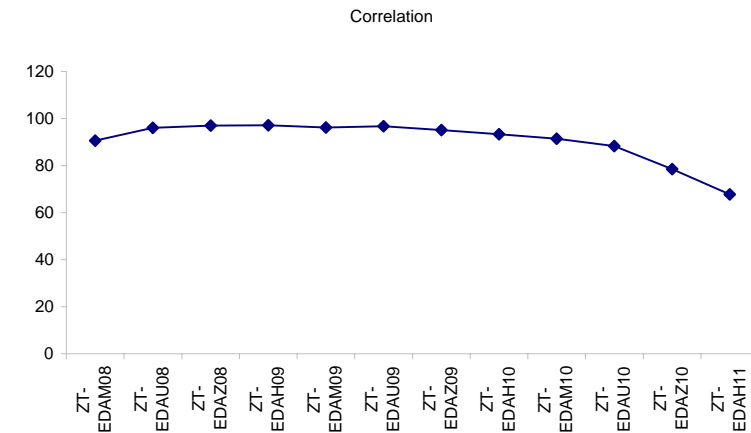
ZT				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	9.265	0.54	ZT-EDAM08	90.671
EDAU08	9.165	0.44	ZT-EDAU08	96.121
EDAZ08	9.270	0.55	ZT-EDAZ08	96.966
EDAH09	9.335	0.61	ZT-EDAH09	97.176
EDAM09	9.525	0.80	ZT-EDAM09	96.246
EDAU09	9.745	1.02	ZT-EDAU09	96.702
EDAZ09	9.995	1.27	ZT-EDAZ09	95.043
EDAH10	10.175	1.45	ZT-EDAH10	93.395
EDAM10	10.370	1.65	ZT-EDAM10	91.381
EDAU10	10.555	1.83	ZT-EDAU10	88.337
EDAZ10	10.710	1.99	ZT-EDAZ10	78.478
EDAH11	10.815	2.09	ZT-EDAH11	67.732

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	0.188	1.86	1.67	ZT-EDAM08
EDAU08	0.438	1.86	1.42	ZT-EDAU08
EDAZ08	0.687	1.86	1.17	ZT-EDAZ08
EDAH09	0.936	1.86	0.92	ZT-EDAH09
EDAM09	1.186	1.86	0.67	ZT-EDAM09
EDAU09	1.435	1.86	0.42	ZT-EDAU09
EDAZ09	1.684	1.86	0.17	ZT-EDAZ09
EDAH10	1.934	1.86	(0.08)	ZT-EDAH10
EDAM10	2.183	1.86	(0.32)	ZT-EDAM10
EDAU10	2.432	1.86	(0.57)	ZT-EDAU10
EDAZ10	2.682	1.86	(0.82)	ZT-EDAZ10
EDAH11	2.931	1.86	(1.07)	ZT-EDAH11

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

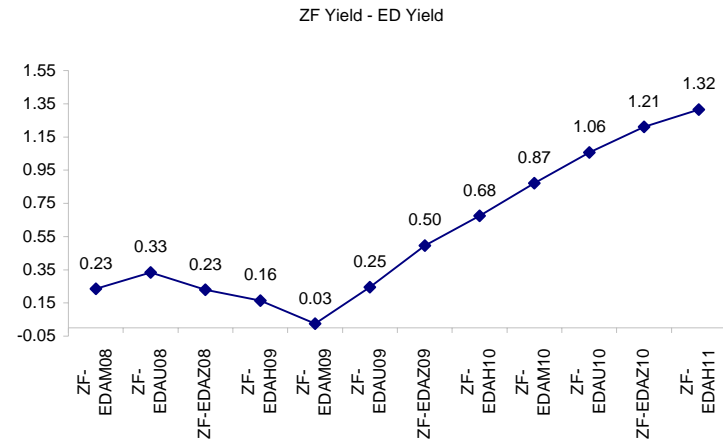


	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	15.553	0.23	ZF-EDAM08	92.036
EDAU08	15.453	0.33	ZF-EDAU08	96.642
EDAZ08	15.558	0.23	ZF-EDAZ08	98.079
EDAH09	15.623	0.16	ZF-EDAH09	98.263
EDAM09	15.813	0.03	ZF-EDAM09	97.506
EDAU09	16.033	0.25	ZF-EDAU09	96.639
EDAZ09	16.283	0.50	ZF-EDAZ09	96.033
EDAH10	16.463	0.68	ZF-EDAH10	94.905
EDAM10	16.658	0.87	ZF-EDAM10	93.899
EDAU10	16.843	1.06	ZF-EDAU10	92.129
EDAZ10	16.998	1.21	ZF-EDAZ10	84.669
EDAH11	17.103	1.32	ZF-EDAH11	75.723

Price = Outright Decimal Price - Euro Contract Price

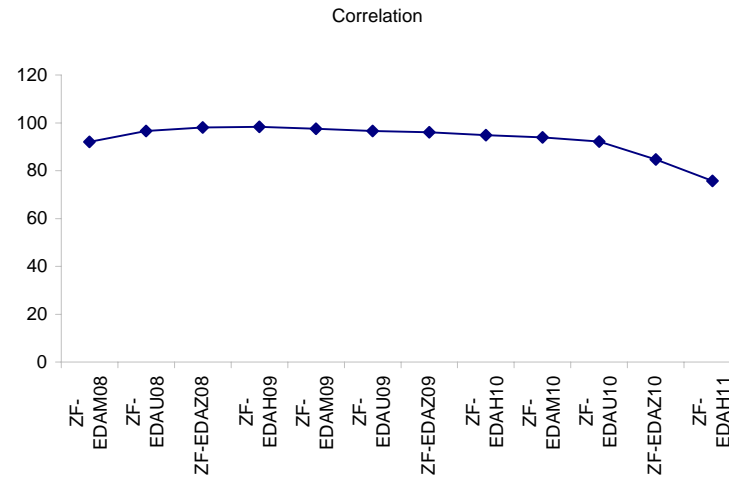
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year		ZF Duration	Spread Duration	
EDAM08	0.188	4.00	3.82	ZF-EDAM08	
EDAU08	0.438	4.00	3.57	ZF-EDAU08	
EDAZ08	0.687	4.00	3.32	ZF-EDAZ08	
EDAH09	0.936	4.00	3.07	ZF-EDAH09	
EDAM09	1.186	4.00	2.82	ZF-EDAM09	
EDAU09	1.435	4.00	2.57	ZF-EDAU09	
EDAZ09	1.684	4.00	2.32	ZF-EDAZ09	
EDAH10	1.934	4.00	2.07	ZF-EDAH10	
EDAM10	2.183	4.00	1.82	ZF-EDAM10	
EDAU10	2.432	4.00	1.57	ZF-EDAU10	
EDAZ10	2.682	4.00	1.32	ZF-EDAZ10	
EDAH11	2.931	4.00	1.07	ZF-EDAH11	

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

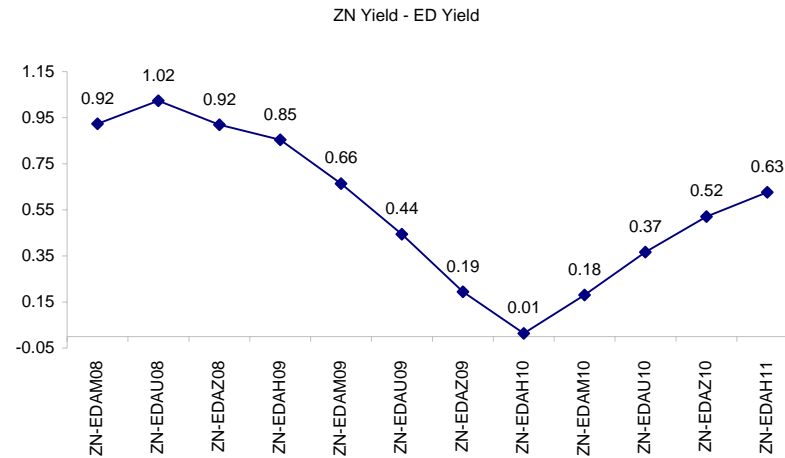


ZN				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	20.078	0.92	ZN-EDAM08	92.806
EDAU08	19.978	1.02	ZN-EDAU08	94.678
EDAZ08	20.083	0.92	ZN-EDAZ08	95.599
EDAH09	20.148	0.85	ZN-EDAH09	95.629
EDAM09	20.338	0.66	ZN-EDAM09	94.465
EDAU09	20.558	0.44	ZN-EDAU09	92.042
EDAZ09	20.808	0.19	ZN-EDAZ09	92.457
EDAH10	20.988	0.01	ZN-EDAH10	94.905
EDAM10	21.183	0.18	ZN-EDAM10	93.899
EDAU10	21.368	0.37	ZN-EDAU10	92.129
EDAZ10	21.523	0.52	ZN-EDAZ10	84.669
EDAH11	21.628	0.63	ZN-EDAH11	75.723

Price = Outright Decimal Price - Euro Contract Price

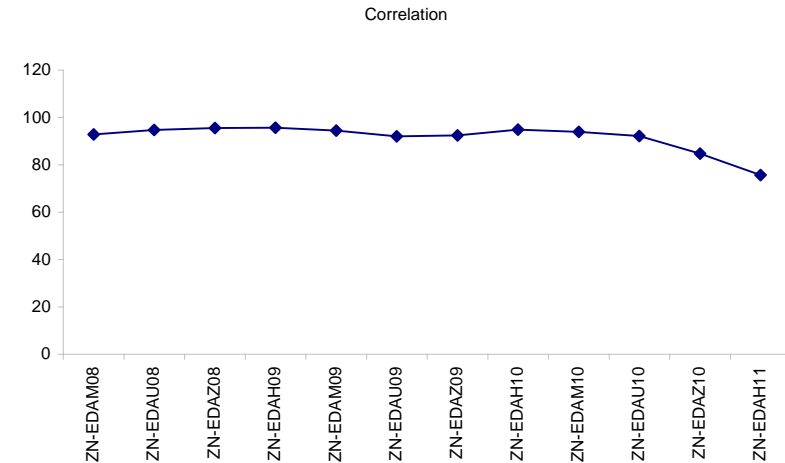
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year	ZN Duration	Spread Duration	
EDAM08	0.188	6.59	6.41	ZN-EDAM08
EDAU08	0.438	6.59	6.16	ZN-EDAU08
EDAZ08	0.687	6.59	5.91	ZN-EDAZ08
EDAH09	0.936	6.59	5.66	ZN-EDAH09
EDAM09	1.186	6.59	5.41	ZN-EDAM09
EDAU09	1.435	6.59	5.16	ZN-EDAU09
EDAZ09	1.684	6.59	4.91	ZN-EDAZ09
EDAH10	1.934	6.59	4.66	ZN-EDAH10
EDAM10	2.183	6.59	4.41	ZN-EDAM10
EDAU10	2.432	6.59	4.16	ZN-EDAU10
EDAZ10	2.682	6.59	3.91	ZN-EDAZ10
EDAH11	2.931	6.59	3.66	ZN-EDAH11

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

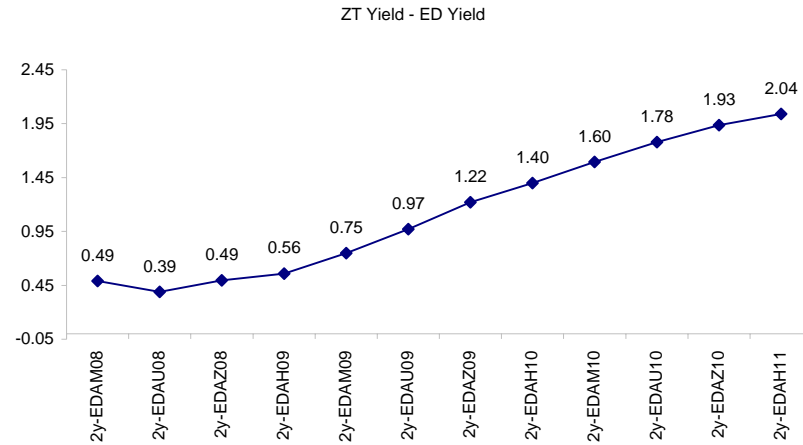


	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	2.099	0.49	2y-EDAM08	-91.424
EDAU08	1.999	0.39	2y-EDAU08	-93.512
EDAZ08	2.104	0.49	2y-EDAZ08	-91.424
EDAH09	2.169	0.56	2y-EDAH09	-95.150
EDAM09	2.359	0.75	2y-EDAM09	-94.000
EDAU09	2.579	0.97	2y-EDAU09	-93.168
EDAZ09	2.829	1.22	2y-EDAZ09	-91.999
EDAH10	3.009	1.40	2y-EDAH10	-90.355
EDAM10	3.204	1.60	2y-EDAM10	-89.107
EDAU10	3.389	1.78	2y-EDAU10	-85.702
EDAZ10	3.544	1.93	2y-EDAZ10	-75.096
EDAH11	3.649	2.04	2y-EDAH11	-63.027

Price = Outright Decimal Price - Euro Contract Price

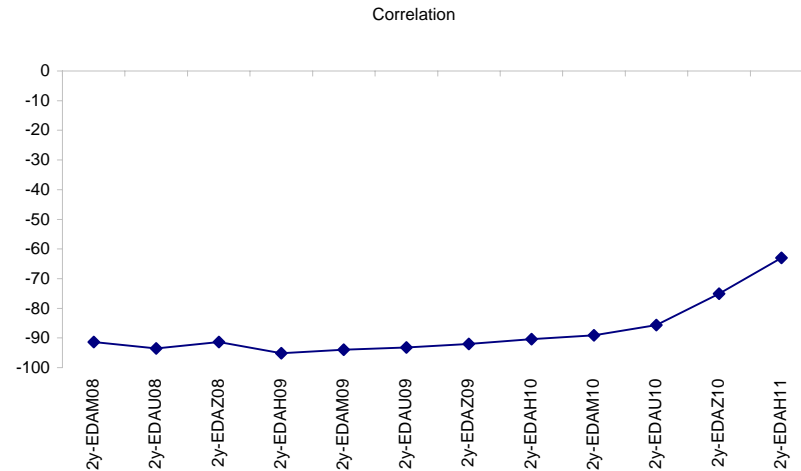
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

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



	ED Duration as Fraction of year		2Y Duration	Spread Duration	
EDAM08	0.188	1.93	1.74	2y-EDAM08	
EDAU08	0.438	1.93	1.49	2y-EDAU08	
EDAZ08	0.687	1.93	1.24	2y-EDAZ08	
EDAH09	0.936	1.93	0.99	2y-EDAH09	
EDAM09	1.186	1.93	0.75	2y-EDAM09	
EDAU09	1.435	1.93	0.50	2y-EDAU09	
EDAZ09	1.684	1.93	0.25	2y-EDAZ09	
EDAH10	1.934	1.93	(0.00)	2y-EDAH10	
EDAM10	2.183	1.93	(0.25)	2y-EDAM10	
EDAU10	2.432	1.93	(0.50)	2y-EDAU10	
EDAZ10	2.682	1.93	(0.75)	2y-EDAZ10	
EDAH11	2.931	1.93	(1.00)	2y-EDAH11	

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

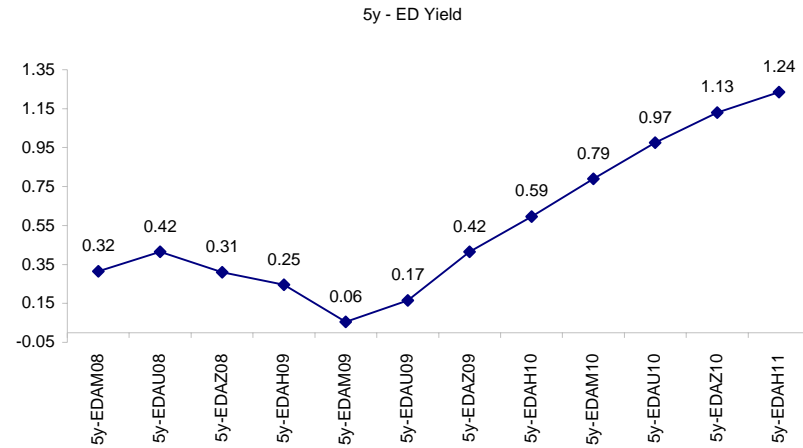


	5y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	1.443	0.32	5y-EDAM08	-94.568
EDAU08	1.343	0.42	5y-EDAU08	-96.523
EDAZ08	1.448	0.31	5y-EDAZ08	-94.568
EDAH09	1.513	0.25	5y-EDAH09	-97.682
EDAM09	1.703	0.06	5y-EDAM09	-96.793
EDAU09	1.923	0.17	5y-EDAU09	-95.367
EDAZ09	2.173	0.42	5y-EDAZ09	-95.083
EDAH10	2.353	0.59	5y-EDAH10	-94.022
EDAM10	2.548	0.79	5y-EDAM10	-93.387
EDAU10	2.733	0.97	5y-EDAU10	-91.104
EDAZ10	2.888	1.13	5y-EDAZ10	-82.914
EDAH11	2.993	1.24	5y-EDAH11	-72.750

Price = Outright Decimal Price - Euro Contract Price

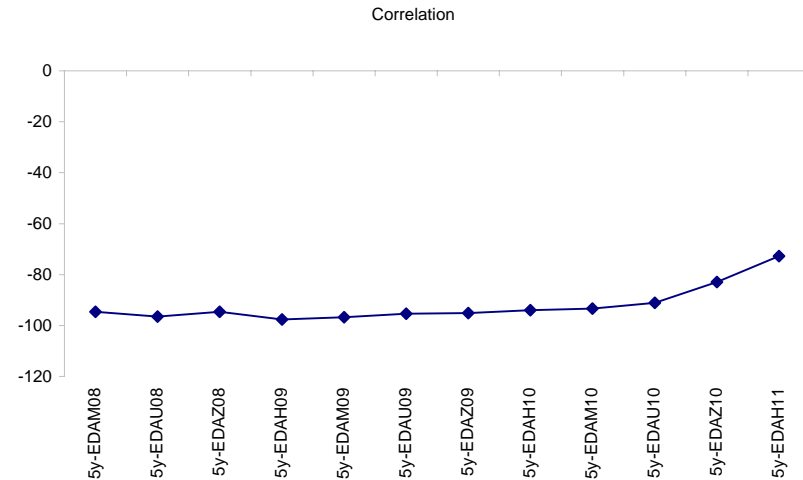
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year			
	Fraction of year	5Y Duration	Spread Duration	
EDAM08	0.188	4.56	4.37	5y-EDAM08
EDAU08	0.438	4.56	4.12	5y-EDAU08
EDAZ08	0.687	4.56	3.87	5y-EDAZ08
EDAH09	0.936	4.56	3.62	5y-EDAH09
EDAM09	1.186	4.56	3.37	5y-EDAM09
EDAU09	1.435	4.56	3.12	5y-EDAU09
EDAZ09	1.684	4.56	2.88	5y-EDAZ09
EDAH10	1.934	4.56	2.63	5y-EDAH10
EDAM10	2.183	4.56	2.38	5y-EDAM10
EDAU10	2.432	4.56	2.13	5y-EDAU10
EDAZ10	2.682	4.56	1.88	5y-EDAZ10
EDAH11	2.931	4.56	1.63	5y-EDAH11

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

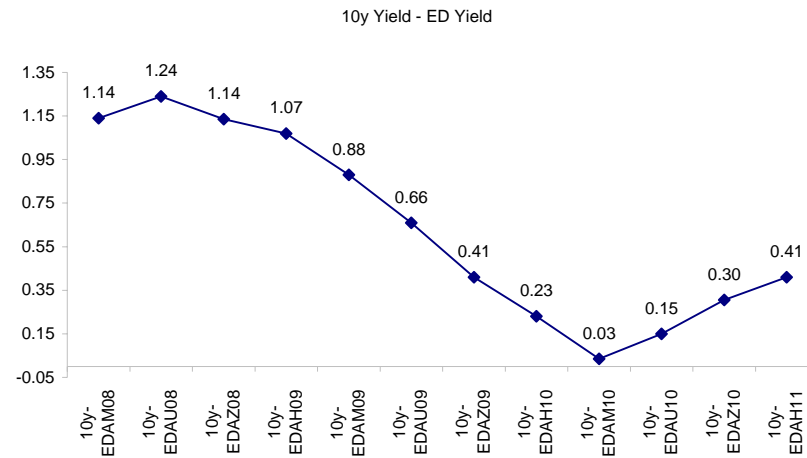


	10y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	1.443	1.14	10y-EDAM08	-87.501
EDAU08	1.343	1.24	10y-EDAU08	-87.847
EDAZ08	1.448	1.14	10y-EDAZ08	-87.501
EDAH09	1.513	1.07	10y-EDAH09	-88.328
EDAM09	1.703	0.88	10y-EDAM09	-88.557
EDAU09	1.923	0.66	10y-EDAU09	-85.794
EDAZ09	2.173	0.41	10y-EDAZ09	-88.293
EDAH10	2.353	0.23	10y-EDAH10	-89.121
EDAM10	2.548	0.03	10y-EDAM10	-90.695
EDAU10	2.733	0.15	10y-EDAU10	-92.211
EDAZ10	2.888	0.30	10y-EDAZ10	-92.442
EDAH11	2.993	0.41	10y-EDAH11	-89.293

Price = Outright Decimal Price - Euro Contract Price

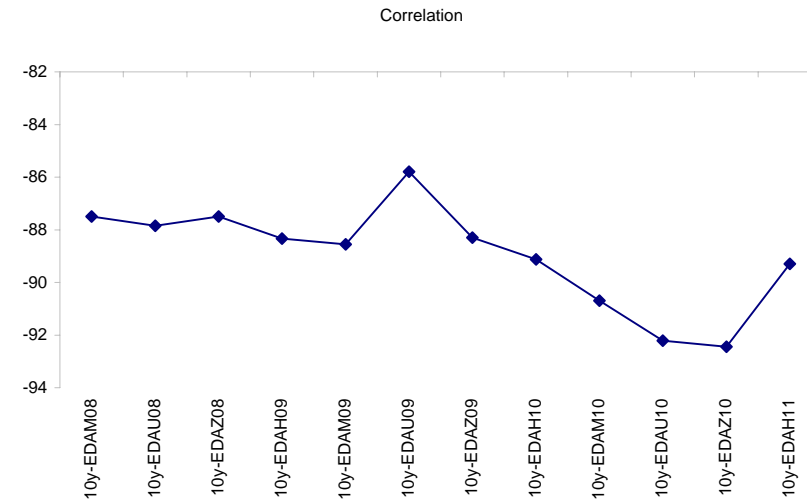
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year			
	Fraction of year	10Y Duration	Spread Duration	
EDAM08	0.188	8.23	8.04	10y-EDAM08
EDAU08	0.438	8.23	7.79	10y-EDAU08
EDAZ08	0.687	8.23	7.54	10y-EDAZ08
EDAH09	0.936	8.23	7.29	10y-EDAH09
EDAM09	1.186	8.23	7.04	10y-EDAM09
EDAU09	1.435	8.23	6.79	10y-EDAU09
EDAZ09	1.684	8.23	6.54	10y-EDAZ09
EDAH10	1.934	8.23	6.29	10y-EDAH10
EDAM10	2.183	8.23	6.04	10y-EDAM10
EDAU10	2.432	8.23	5.79	10y-EDAU10
EDAZ10	2.682	8.23	5.55	10y-EDAZ10
EDAH11	2.931	8.23	5.30	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.

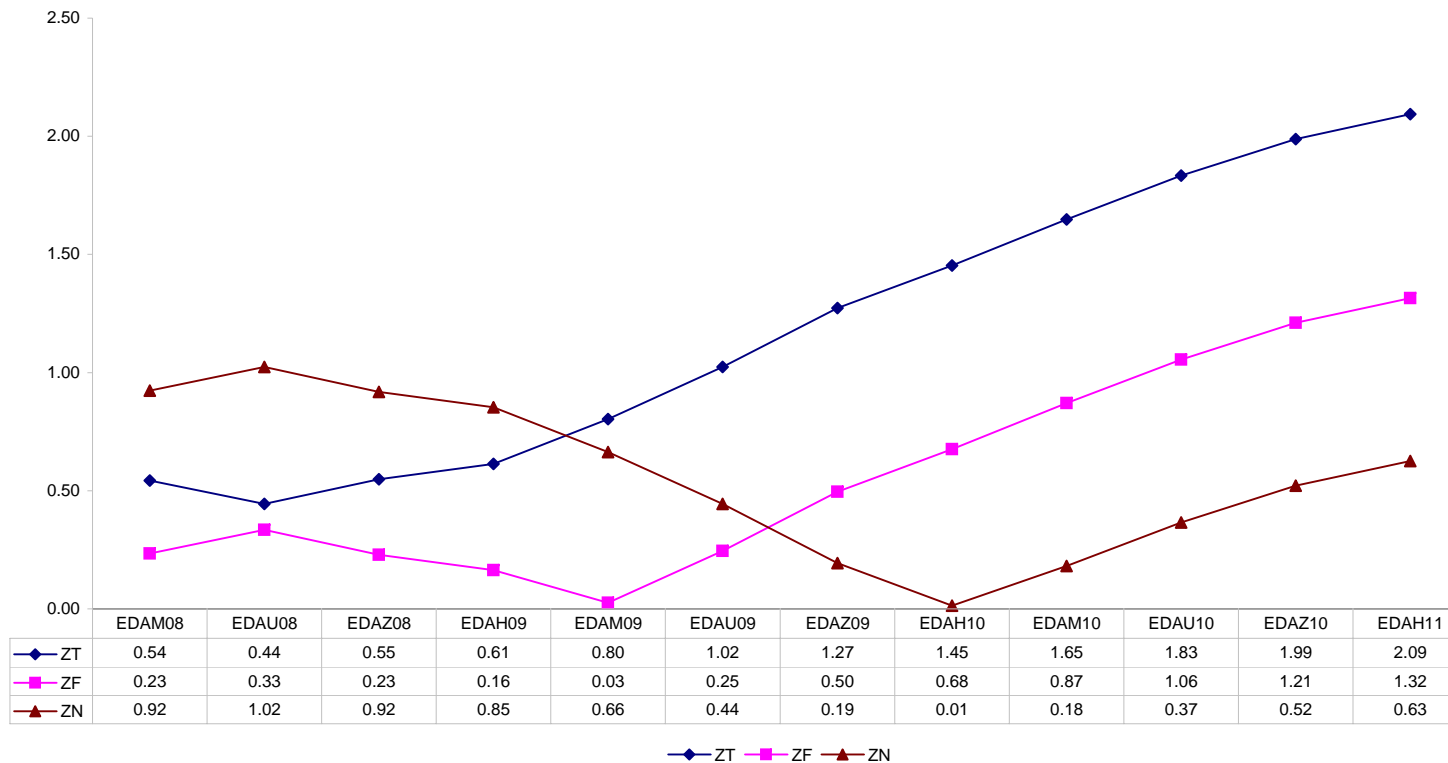
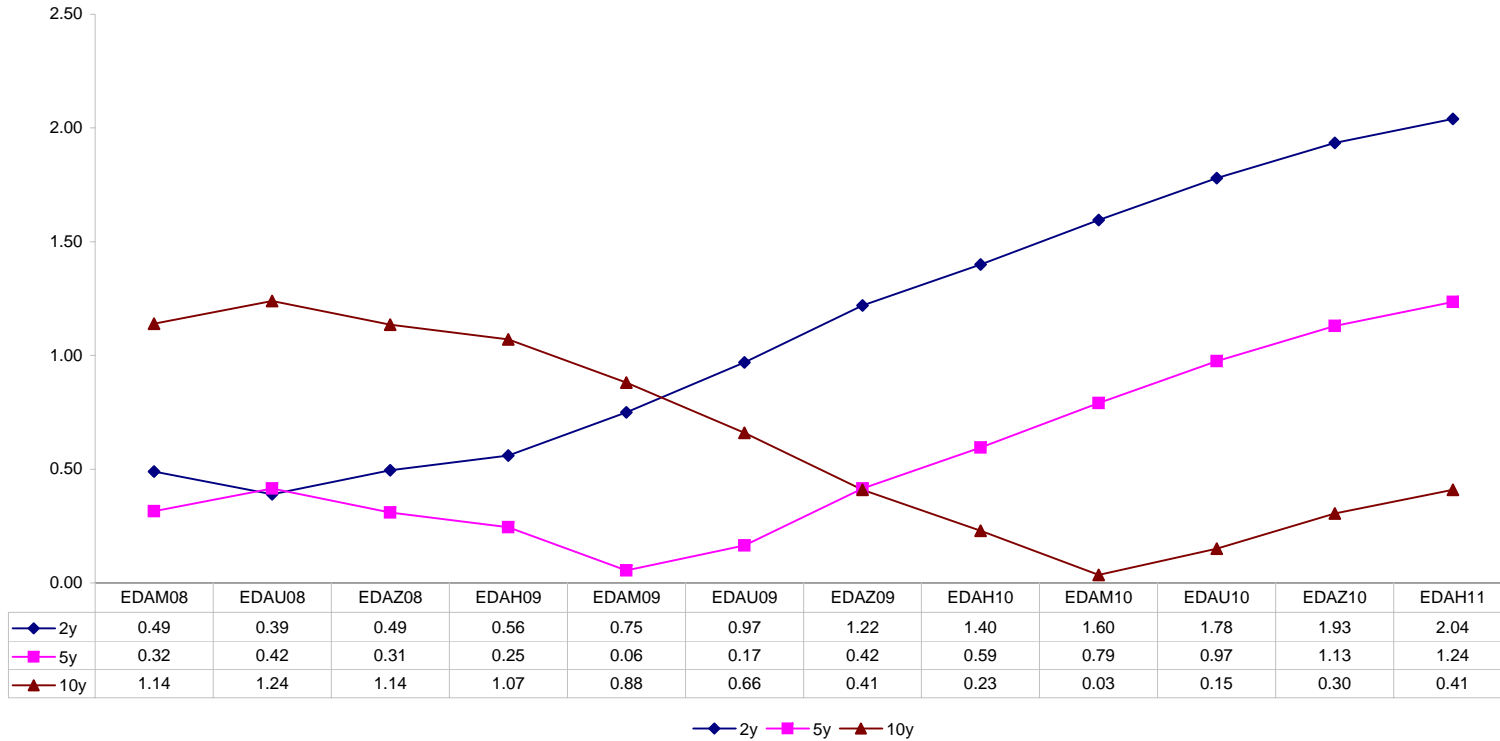
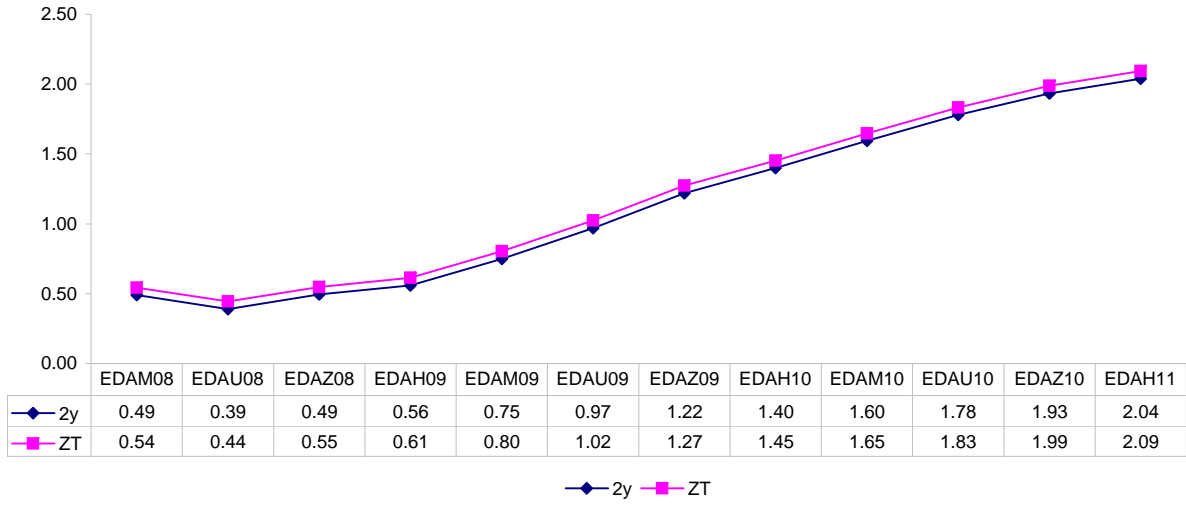


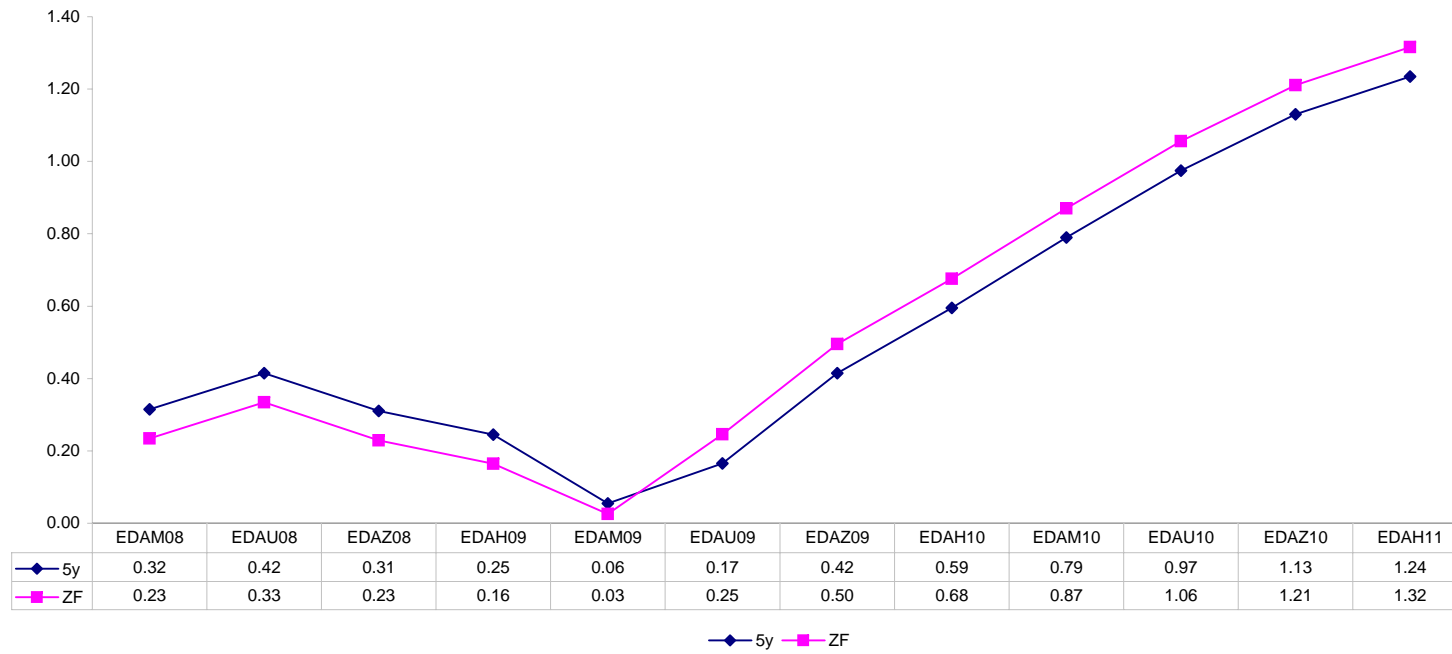
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



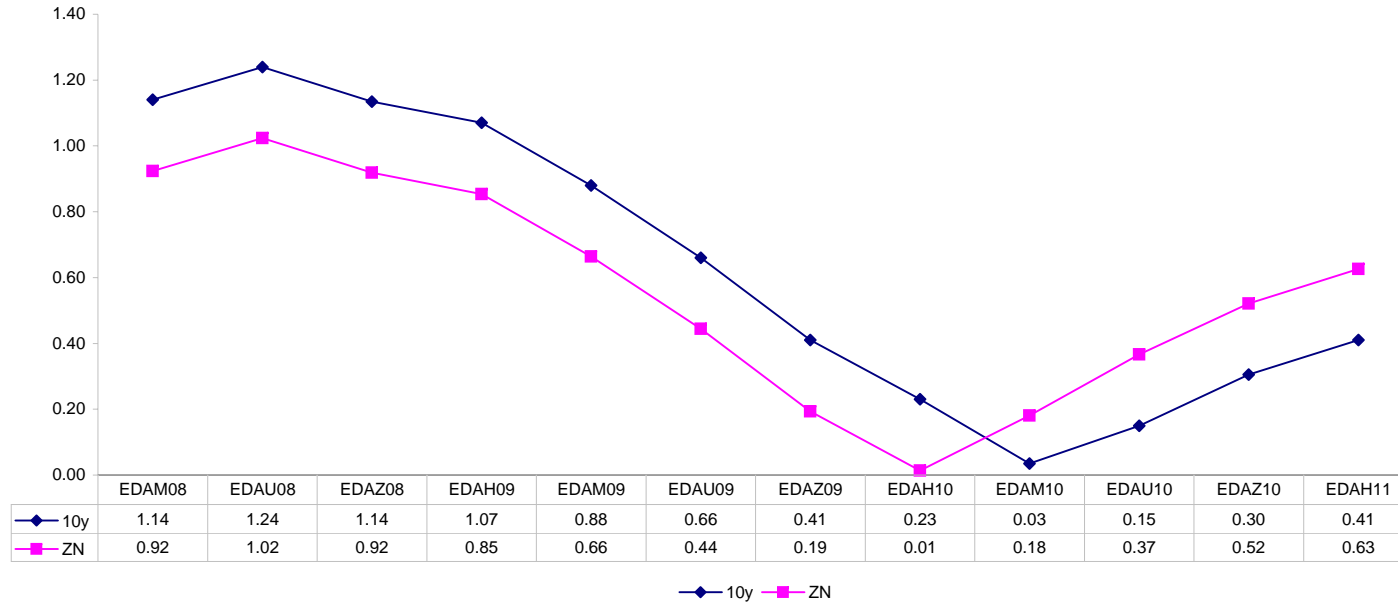
2y Basis TED Curve



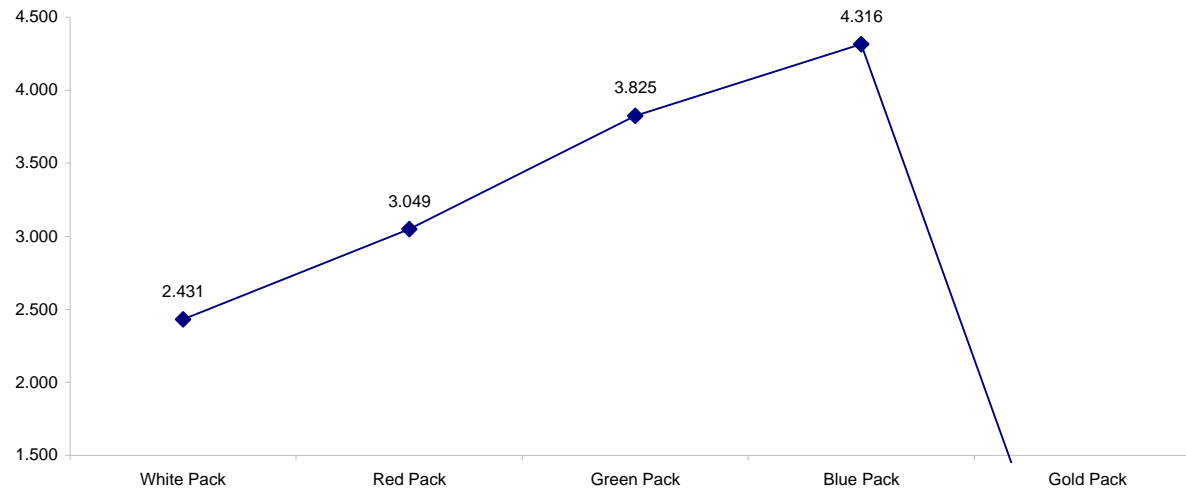
5y Basis TED Curve



10y Basis TED Curve



	Last Yield	Net Last Yield	Last Price
White Pack	2.431	2.875	9761.625
Red Pack	3.049	4.625	9701.500
Green Pack	3.825	5.375	9626.250
Blue Pack	4.316	4.625	9578.750
Gold Pack		0.000	9540.375



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

