

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	106.3500	106.112	2.160	1.82
ZF	112.0844	112.027	2.883	3.96
ZN	116.0469	116.015	3.548	5.91
2y	99.131	99.0420	2.210	1.89
5y	97.834	97.2670	2.973	4.60
10y	97.969	97.3100	3.745	8.16

Eurodollars (ED)						
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month	
EDAM08	97.105	2.895	55	0.150	JUN	
EDAU08	97.120	2.880	146	0.399	SEP	White
EDAZ08	97.040	2.960	237	0.649	DEC	Pack
EDAH09	97.035	2.965	328	0.898	MAR	
EDAM09	96.895	3.105	419	1.147	JUN	
EDAU09	96.735	3.265	510	1.397	SEP	Red Pack
EDAZ09	96.525	3.475	601	1.646	DEC	
EDAH10	96.395	3.605	692	1.895	MAR	
EDAM10	96.220	3.780	783	2.145	JUN	
EDAU10	96.050	3.950	874	2.394	SEP	Green
EDAZ10	95.905	4.095	965	2.643	DEC	Pack
EDAH11	95.800	4.200	1056	2.893	MAR	
EDAM11	95.690	4.310	1147	3.142	JUN	
EDAU11	95.550	4.450	1245	3.410	SEP	Blue Pack
EDAZ11	95.480	4.520	1336	3.660	DEC	
EDAH12	95.455	4.545	1427	3.909	MAR	
EDAM12	95.365	4.635	1518	4.158	JUN	
EDAU12	95.290	4.710	1609	4.408	SEP	Gold Pack
EDAZ12	95.230	4.770	1700	4.657	DEC	
EDAH13	95.150	4.850	1791	4.906	MAR	

	Last Yield	Net Yield	Last Price	
White Pack	2.987	-3.750	9707.500	
Red Pack	3.438	-5.500	9663.750	Pack
Green Pack	4.103	-5.500	9599.375	Prices
Blue Pack		-4.000	9554.375	
Gold Pack		0.000	9526.250	

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.

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)

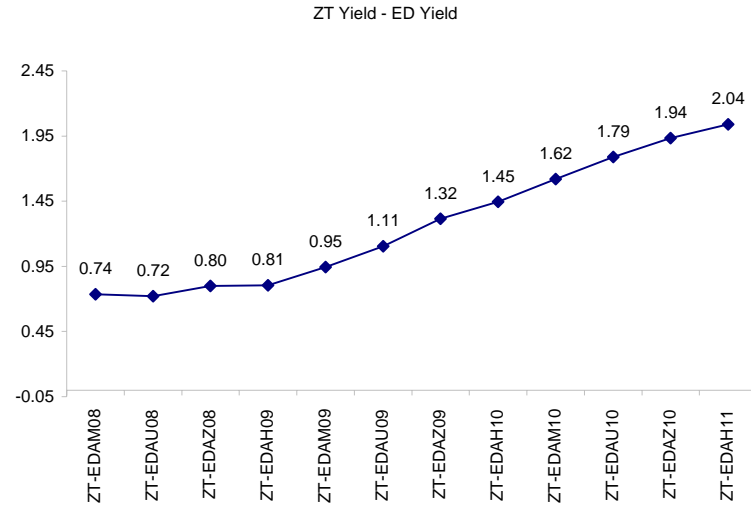
Correlations for the US Cash Treasuries are done on a YIELD basis. Therefore, you'll see negative values. The reason for this is due to the new issues. Every new issue takes too long to 'catch up' because the correlation formula looks back 10days.

ZT				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	9.245	0.74	ZT-EDAM08	99.064
EDAU08	9.230	0.72	ZT-EDAU08	99.330
EDAZ08	9.310	0.80	ZT-EDAZ08	99.241
EDAH09	9.315	0.81	ZT-EDAH09	99.240
EDAM09	9.455	0.95	ZT-EDAM09	98.778
EDAU09	9.615	1.11	ZT-EDAU09	98.203
EDAZ09	9.825	1.32	ZT-EDAZ09	97.787
EDAH10	9.955	1.45	ZT-EDAH10	97.278
EDAM10	10.130	1.62	ZT-EDAM10	96.605
EDAU10	10.300	1.79	ZT-EDAU10	95.748
EDAZ10	10.445	1.94	ZT-EDAZ10	94.248
EDAH11	10.550	2.04	ZT-EDAH11	93.127

Price = Outright Decimal Price - Euro Contract Price

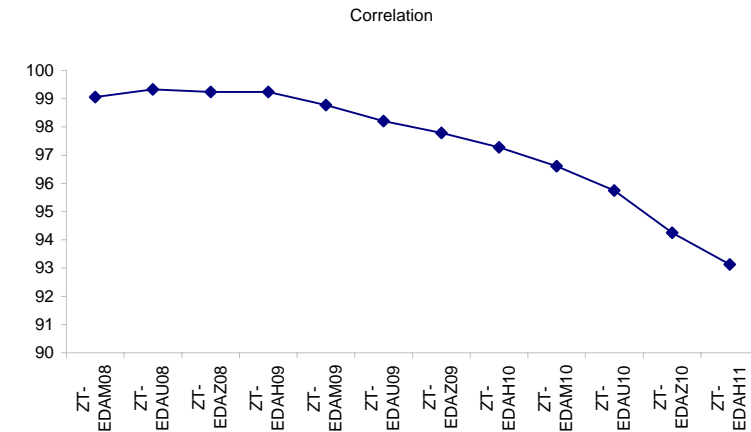
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



ED Duration as Fraction of year				ZT Duration	Spread Duration	
EDAM08	0.150	1.82	1.67	ZT-EDAM08		
EDAU08	0.399	1.82	1.42	ZT-EDAU08		
EDAZ08	0.649	1.82	1.17	ZT-EDAZ08		
EDAH09	0.898	1.82	0.92	ZT-EDAH09		
EDAM09	1.147	1.82	0.67	ZT-EDAM09		
EDAU09	1.397	1.82	0.42	ZT-EDAU09		
EDAZ09	1.646	1.82	0.17	ZT-EDAZ09		
EDAH10	1.895	1.82	(0.08)	ZT-EDAH10		
EDAM10	2.145	1.82	(0.33)	ZT-EDAM10		
EDAU10	2.394	1.82	(0.58)	ZT-EDAU10		
EDAZ10	2.643	1.82	(0.83)	ZT-EDAZ10		
EDAH11	2.893	1.82	(1.08)	ZT-EDAH11		

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

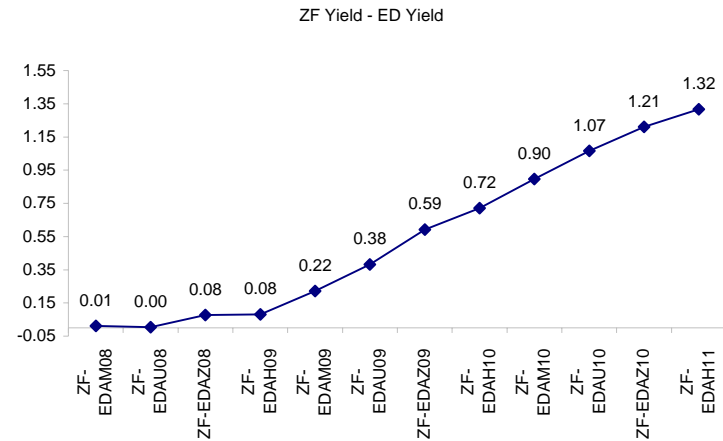


	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	14.979	0.01	ZF-EDAM08	98.500
EDAU08	14.964	0.00	ZF-EDAU08	98.889
EDAZ08	15.044	0.08	ZF-EDAZ08	99.120
EDAH09	15.049	0.08	ZF-EDAH09	99.337
EDAM09	15.189	0.22	ZF-EDAM09	99.064
EDAU09	15.349	0.38	ZF-EDAU09	98.595
EDAZ09	15.559	0.59	ZF-EDAZ09	98.203
EDAH10	15.689	0.72	ZF-EDAH10	97.856
EDAM10	15.864	0.90	ZF-EDAM10	97.390
EDAU10	16.034	1.07	ZF-EDAU10	96.717
EDAZ10	16.179	1.21	ZF-EDAZ10	95.404
EDAH11	16.284	1.32	ZF-EDAH11	94.561

Price = Outright Decimal Price - Euro Contract Price

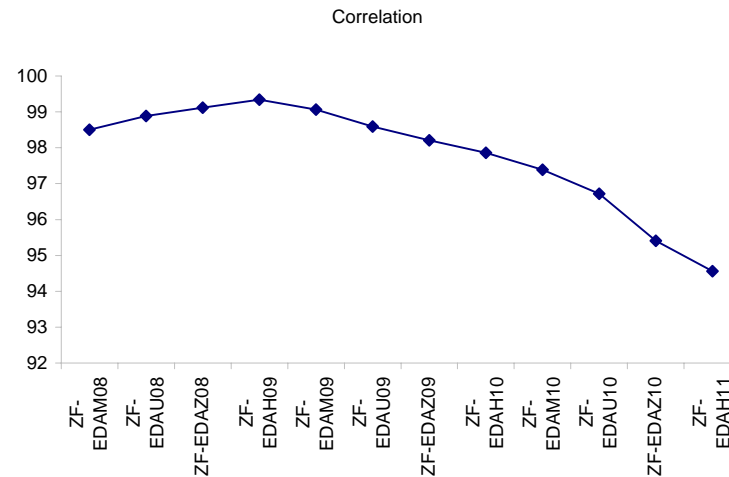
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year		ZF Duration	Spread Duration	
EDAM08	0.150	3.96	3.81	ZF-EDAM08	
EDAU08	0.399	3.96	3.56	ZF-EDAU08	
EDAZ08	0.649	3.96	3.31	ZF-EDAZ08	
EDAH09	0.898	3.96	3.06	ZF-EDAH09	
EDAM09	1.147	3.96	2.81	ZF-EDAM09	
EDAU09	1.397	3.96	2.56	ZF-EDAU09	
EDAZ09	1.646	3.96	2.31	ZF-EDAZ09	
EDAH10	1.895	3.96	2.06	ZF-EDAH10	
EDAM10	2.145	3.96	1.82	ZF-EDAM10	
EDAU10	2.394	3.96	1.57	ZF-EDAU10	
EDAZ10	2.643	3.96	1.32	ZF-EDAZ10	
EDAH11	2.893	3.96	1.07	ZF-EDAH11	

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

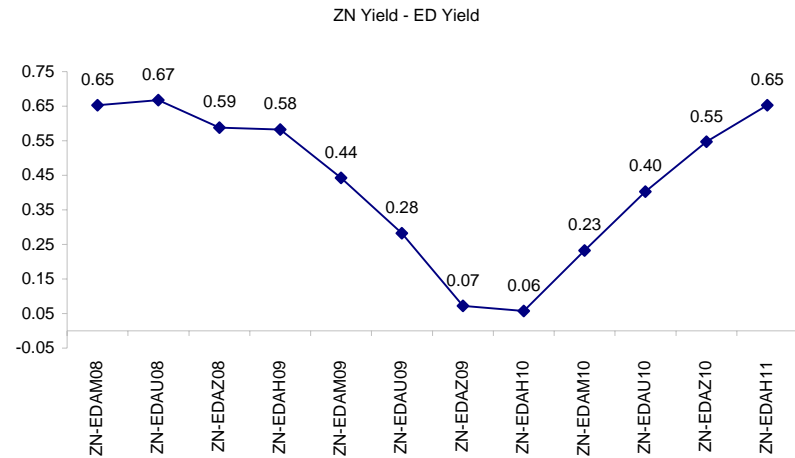


ZN				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	18.942	0.65	ZN-EDAM08	97.229
EDAU08	18.927	0.67	ZN-EDAU08	97.508
EDAZ08	19.007	0.59	ZN-EDAZ08	98.507
EDAH09	19.012	0.58	ZN-EDAH09	98.878
EDAM09	19.152	0.44	ZN-EDAM09	99.178
EDAU09	19.312	0.28	ZN-EDAU09	99.191
EDAZ09	19.522	0.07	ZN-EDAZ09	99.070
EDAH10	19.652	0.06	ZN-EDAH10	97.856
EDAM10	19.827	0.23	ZN-EDAM10	97.390
EDAU10	19.997	0.40	ZN-EDAU10	96.717
EDAZ10	20.142	0.55	ZN-EDAZ10	95.404
EDAH11	20.247	0.65	ZN-EDAH11	94.561

Price = Outright Decimal Price - Euro Contract Price

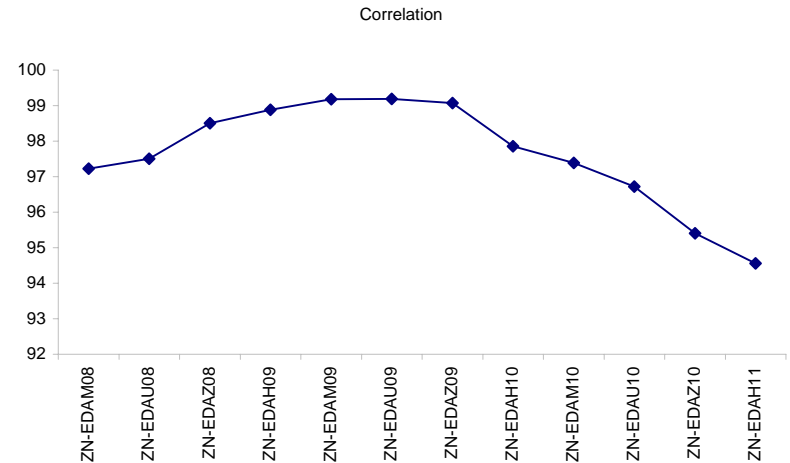
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year	ZN Duration	Spread Duration	
EDAM08	0.150	5.91	5.76	ZN-EDAM08
EDAU08	0.399	5.91	5.51	ZN-EDAU08
EDAZ08	0.649	5.91	5.27	ZN-EDAZ08
EDAH09	0.898	5.91	5.02	ZN-EDAH09
EDAM09	1.147	5.91	4.77	ZN-EDAM09
EDAU09	1.397	5.91	4.52	ZN-EDAU09
EDAZ09	1.646	5.91	4.27	ZN-EDAZ09
EDAH10	1.895	5.91	4.02	ZN-EDAH10
EDAM10	2.145	5.91	3.77	ZN-EDAM10
EDAU10	2.394	5.91	3.52	ZN-EDAU10
EDAZ10	2.643	5.91	3.27	ZN-EDAZ10
EDAH11	2.893	5.91	3.02	ZN-EDAH11

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

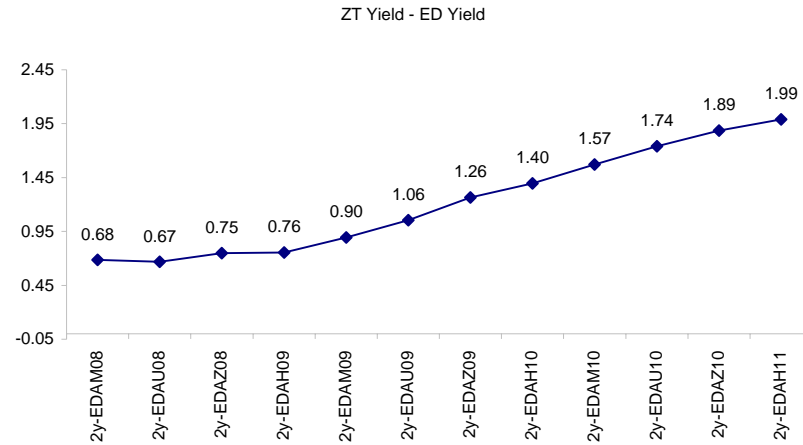


	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	2.026	0.68	2y-EDAM08	-97.960
EDAU08	2.011	0.67	2y-EDAU08	-99.068
EDAZ08	2.091	0.75	2y-EDAZ08	-99.008
EDAH09	2.096	0.76	2y-EDAH09	-99.064
EDAM09	2.236	0.90	2y-EDAM09	-98.529
EDAU09	2.396	1.06	2y-EDAU09	-97.848
EDAZ09	2.606	1.26	2y-EDAZ09	-97.278
EDAH10	2.736	1.40	2y-EDAH10	-96.699
EDAM10	2.911	1.57	2y-EDAM10	-95.875
EDAU10	3.081	1.74	2y-EDAU10	-94.994
EDAZ10	3.226	1.89	2y-EDAZ10	-93.377
EDAH11	3.331	1.99	2y-EDAH11	-92.302

Price = Outright Decimal Price - Euro Contract Price

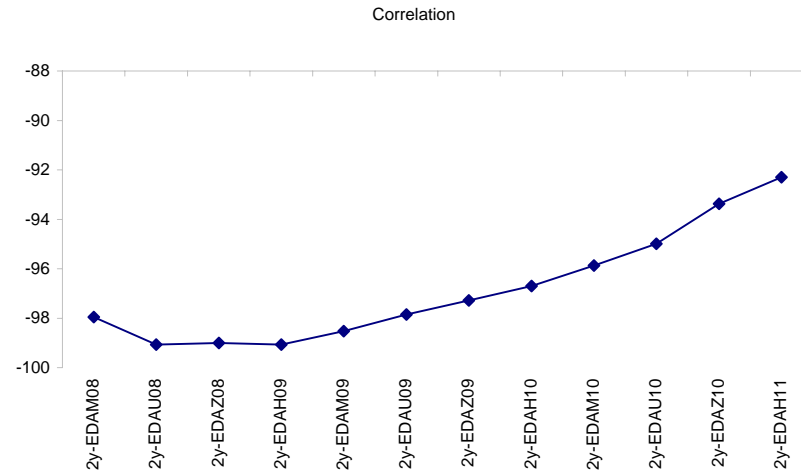
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

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



	ED Duration as Fraction of year			2Y Duration	Spread Duration	
EDAM08	0.150	1.89	1.74	2y-EDAM08		
EDAU08	0.399	1.89	1.49	2y-EDAU08		
EDAZ08	0.649	1.89	1.24	2y-EDAZ08		
EDAH09	0.898	1.89	0.99	2y-EDAH09		
EDAM09	1.147	1.89	0.74	2y-EDAM09		
EDAU09	1.397	1.89	0.49	2y-EDAU09		
EDAZ09	1.646	1.89	0.24	2y-EDAZ09		
EDAH10	1.895	1.89	(0.00)	2y-EDAH10		
EDAM10	2.145	1.89	(0.25)	2y-EDAM10		
EDAU10	2.394	1.89	(0.50)	2y-EDAU10		
EDAZ10	2.643	1.89	(0.75)	2y-EDAZ10		
EDAH11	2.893	1.89	(1.00)	2y-EDAH11		

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

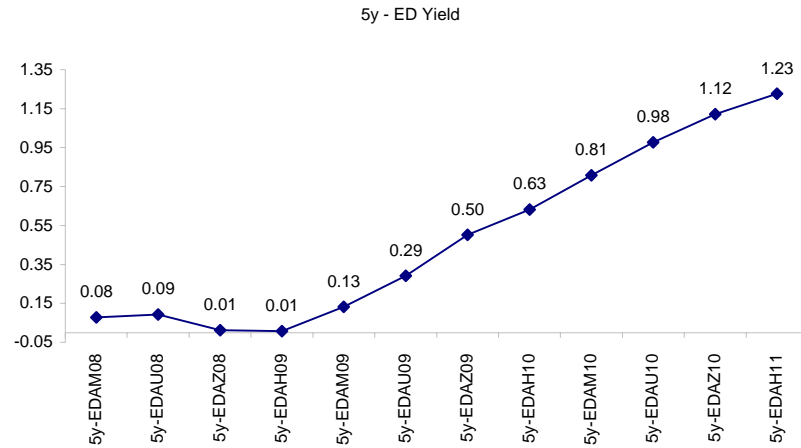


	5y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	0.729	0.08	5y-EDAM08	-96.837
EDAU08	0.714	0.09	5y-EDAU08	-97.933
EDAZ08	0.794	0.01	5y-EDAZ08	-96.837
EDAH09	0.799	0.01	5y-EDAH09	-98.856
EDAM09	0.939	0.13	5y-EDAM09	-98.630
EDAU09	1.099	0.29	5y-EDAU09	-98.203
EDAZ09	1.309	0.50	5y-EDAZ09	-97.793
EDAH10	1.439	0.63	5y-EDAH10	-97.499
EDAM10	1.614	0.81	5y-EDAM10	-97.132
EDAU10	1.784	0.98	5y-EDAU10	-96.543
EDAZ10	1.929	1.12	5y-EDAZ10	-95.443
EDAH11	2.034	1.23	5y-EDAH11	-94.781

Price = Outright Decimal Price - Euro Contract Price

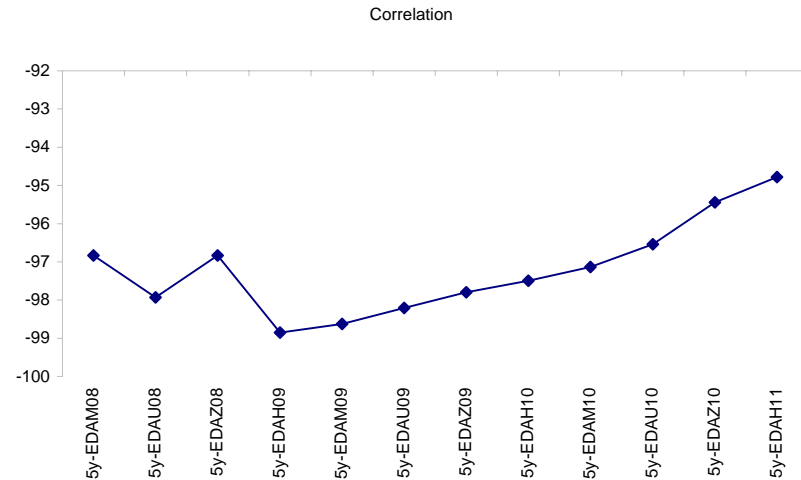
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year			
	Fraction of year	5Y Duration	Spread Duration	
EDAM08	0.150	4.60	4.45	5y-EDAM08
EDAU08	0.399	4.60	4.20	5y-EDAU08
EDAZ08	0.649	4.60	3.95	5y-EDAZ08
EDAH09	0.898	4.60	3.70	5y-EDAH09
EDAM09	1.147	4.60	3.45	5y-EDAM09
EDAU09	1.397	4.60	3.20	5y-EDAU09
EDAZ09	1.646	4.60	2.95	5y-EDAZ09
EDAH10	1.895	4.60	2.70	5y-EDAH10
EDAM10	2.145	4.60	2.45	5y-EDAM10
EDAU10	2.394	4.60	2.20	5y-EDAU10
EDAZ10	2.643	4.60	1.95	5y-EDAZ10
EDAH11	2.893	4.60	1.70	5y-EDAH11

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

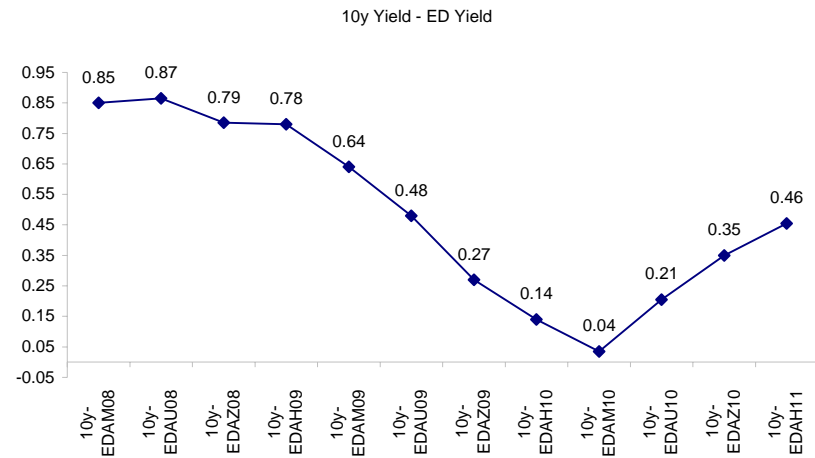


	10y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM08	0.729	0.85	10y-EDAM08	-94.291
EDAU08	0.714	0.87	10y-EDAU08	-95.107
EDAZ08	0.794	0.79	10y-EDAZ08	-94.291
EDAH09	0.799	0.78	10y-EDAH09	-97.095
EDAM09	0.939	0.64	10y-EDAM09	-97.606
EDAU09	1.099	0.48	10y-EDAU09	-97.894
EDAZ09	1.309	0.27	10y-EDAZ09	-97.951
EDAH10	1.439	0.14	10y-EDAH10	-98.082
EDAM10	1.614	0.04	10y-EDAM10	-98.122
EDAU10	1.784	0.21	10y-EDAU10	-98.021
EDAZ10	1.929	0.35	10y-EDAZ10	-97.879
EDAH11	2.034	0.46	10y-EDAH11	-97.727

Price = Outright Decimal Price - Euro Contract Price

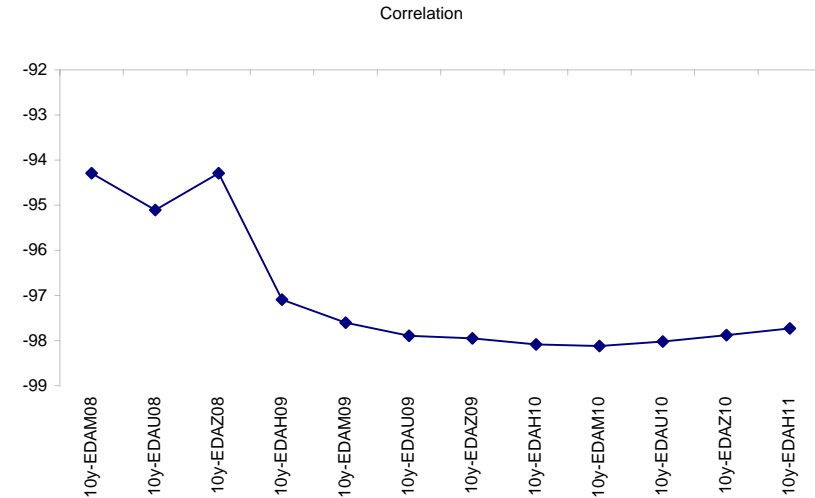
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year			
	10Y Duration	Spread Duration		
EDAM08	0.150	8.16	8.01	10y-EDAM08
EDAU08	0.399	8.16	7.77	10y-EDAU08
EDAZ08	0.649	8.16	7.52	10y-EDAZ08
EDAH09	0.898	8.16	7.27	10y-EDAH09
EDAM09	1.147	8.16	7.02	10y-EDAM09
EDAU09	1.397	8.16	6.77	10y-EDAU09
EDAZ09	1.646	8.16	6.52	10y-EDAZ09
EDAH10	1.895	8.16	6.27	10y-EDAH10
EDAM10	2.145	8.16	6.02	10y-EDAM10
EDAU10	2.394	8.16	5.77	10y-EDAU10
EDAZ10	2.643	8.16	5.52	10y-EDAZ10
EDAH11	2.893	8.16	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.

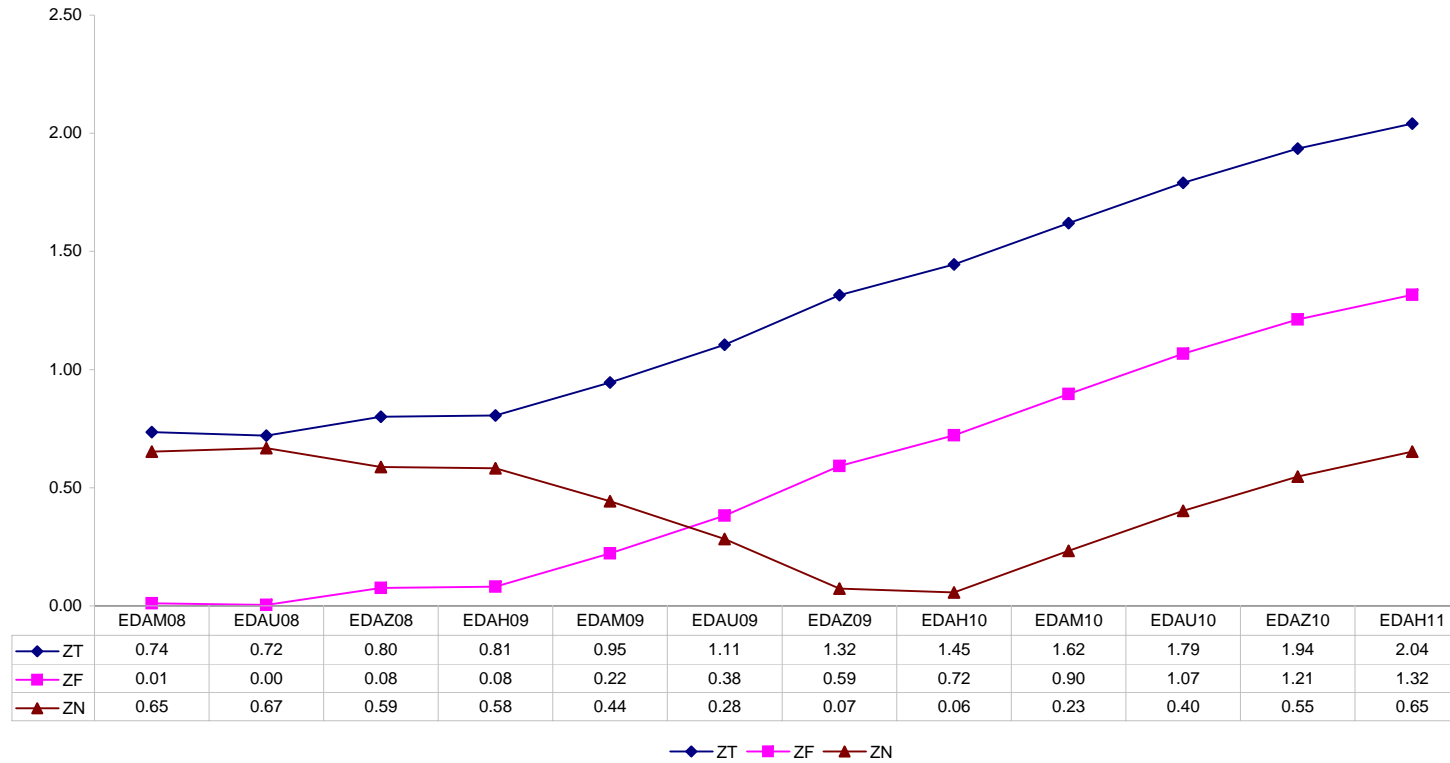
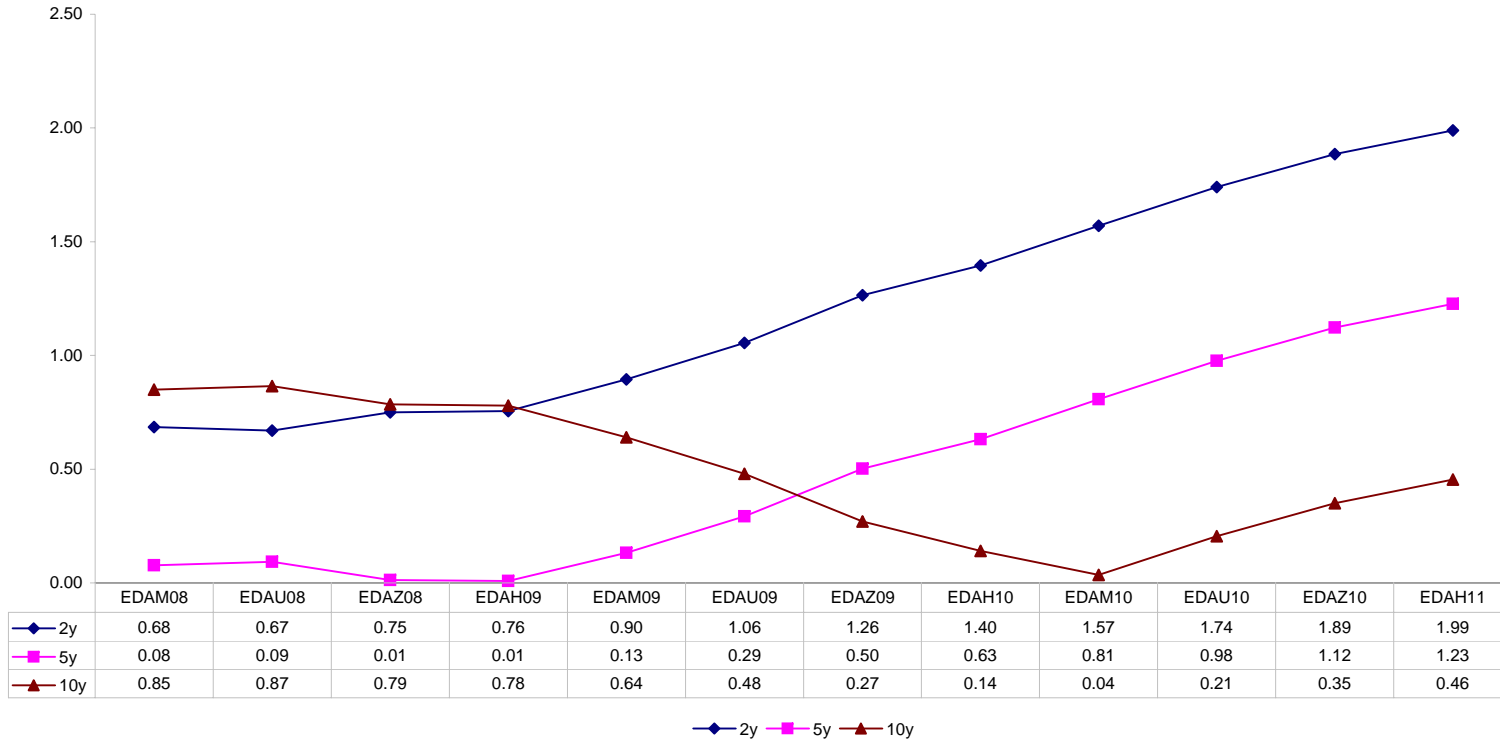
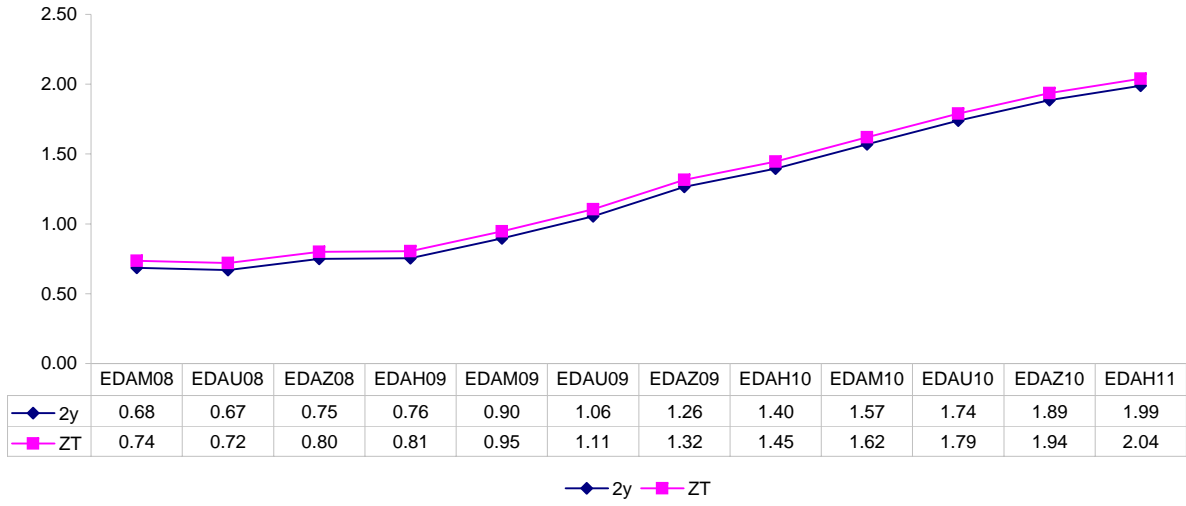


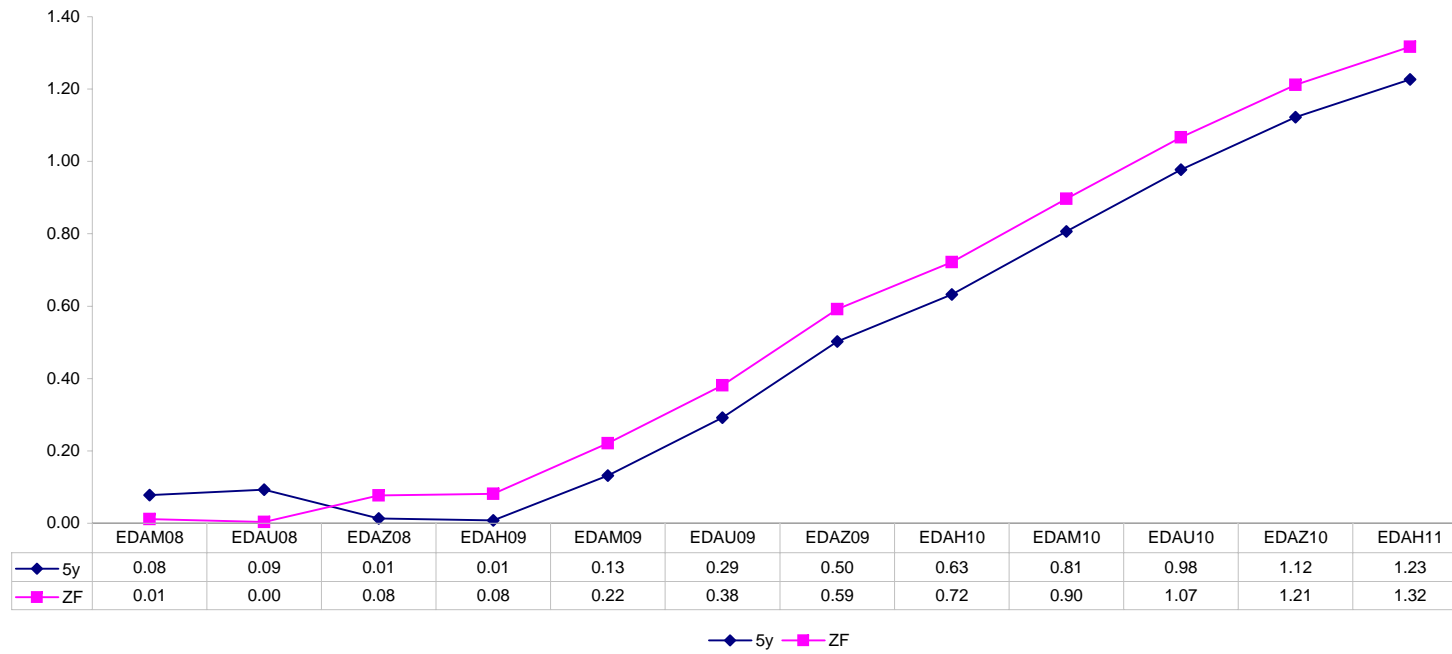
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



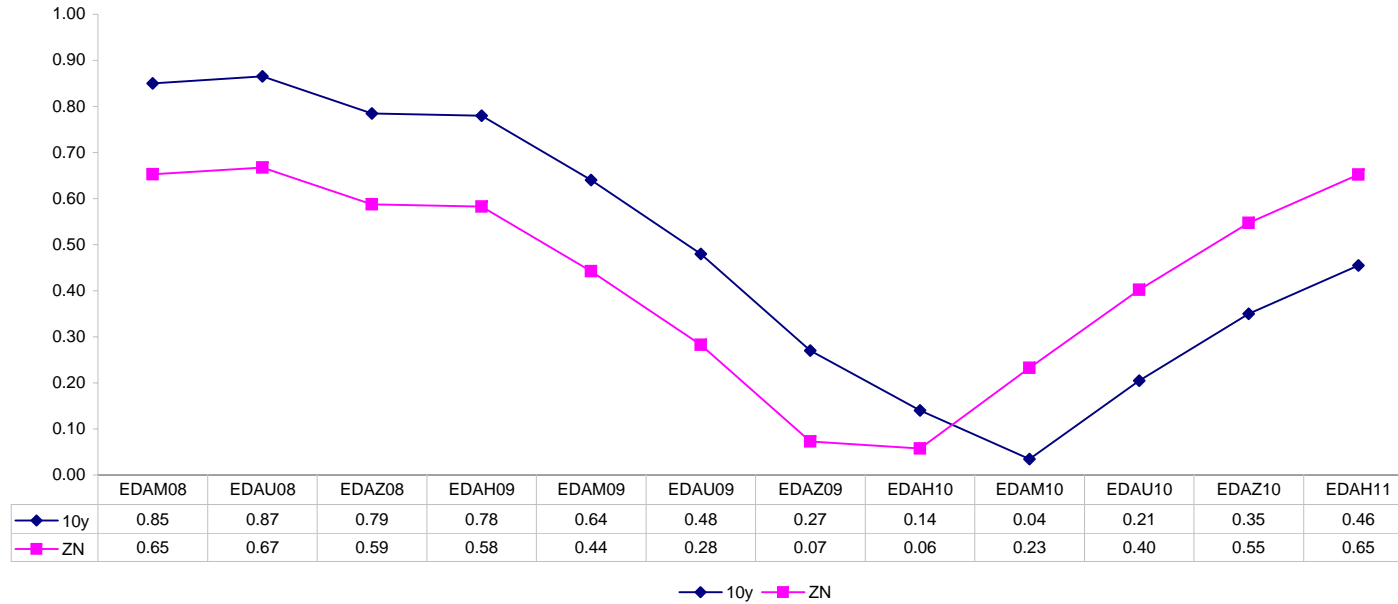
2y Basis TED Curve



5y Basis TED Curve

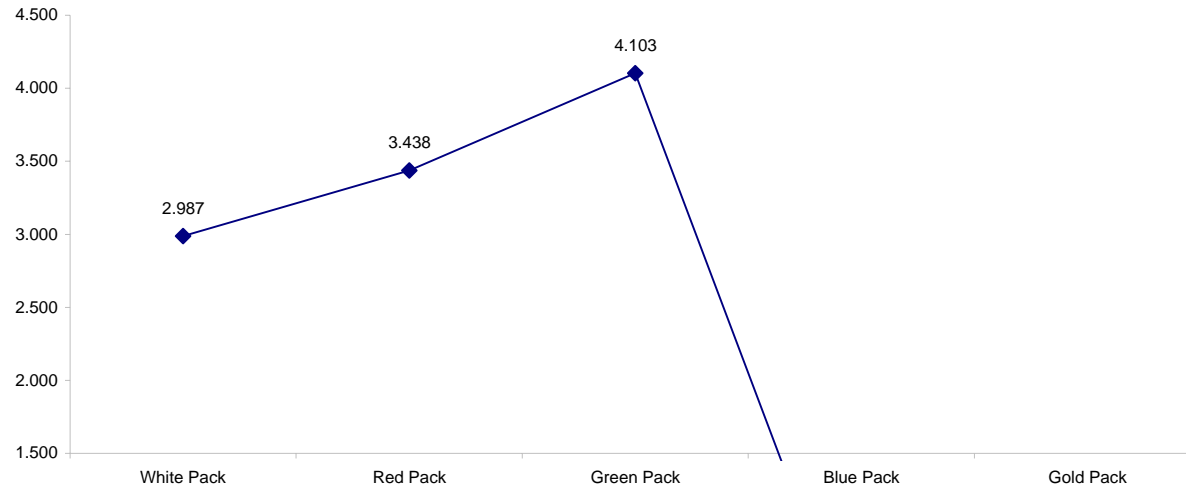


10y Basis TED Curve



Packs

	Last Yield	Net Last Yield	Last Price
White Pack	2.987	-3.750	9707.500
Red Pack	3.438	-5.500	9663.750
Green Pack	4.103	-5.500	9599.375
Blue Pack		-4.000	9554.375
Gold Pack		0.000	9526.250



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

