

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	108.8125	108.2600	0.899	1.97
ZF	119.5156	119.1650	1.184	1.18
ZN	127.0156	127.0050	2.040	6.83
2y	99.9531	99.3050	0.899	1.97
5y	99.9688	99.3100	1.442	4.67
10y	113.8125	113.2600	2.174	8.34

Eurodollars (ED)						
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month	
EDAU08	98.830	1.170	80	0.218	MAR	
EDAZ08	98.755	1.245	171	0.468	JUN	White Pack
EDAH09	98.645	1.355	262	0.717	SEP	
EDAM09	98.500	1.500	353	0.966	DEC	
EDAU09	98.430	1.570	444	1.216	MAR	
EDAZ09	98.255	1.745	535	1.465	JUN	Red Pack
EDAH10	98.090	1.910	626	1.714	SEP	
EDAM10	97.800	2.200	717	1.964	DEC	
EDAU10	97.700	2.300	808	2.213	MAR	
EDAZ10	97.580	2.420	899	2.462	JUN	Green Pack
EDAH11	97.475	2.525	997	2.731	SEP	
EDAM11	97.400	2.600	1088	2.980	DEC	
EDAU11	97.385	2.615	1179	3.229	MAR	
EDAZ11	97.400	2.600	1270	3.479	JUN	Blue Pack
EDAH12	97.320	2.680	1361	3.728	SEP	
EDAM12	97.245	2.755	1452	3.977	DEC	
EDAU12	97.315	2.685	1543	4.227	MAR	
EDAZ12	97.265	2.735	1634	4.476	JUN	Gold Pack
EDAM13	97.205	2.795	1725	4.725	SEP	
EDZU13	97.005	2.995	1816	4.975	DEC	

	Last Yield	Net Yield	Last Price	
White Pack	1.340	2.375	9868.250	
Red Pack		9.000	9814.250	Pack Prices
Green Pack		0.000	9753.875	
Blue Pack		0.000	9733.250	
Gold Pack		0.000	9715.000	

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.

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.

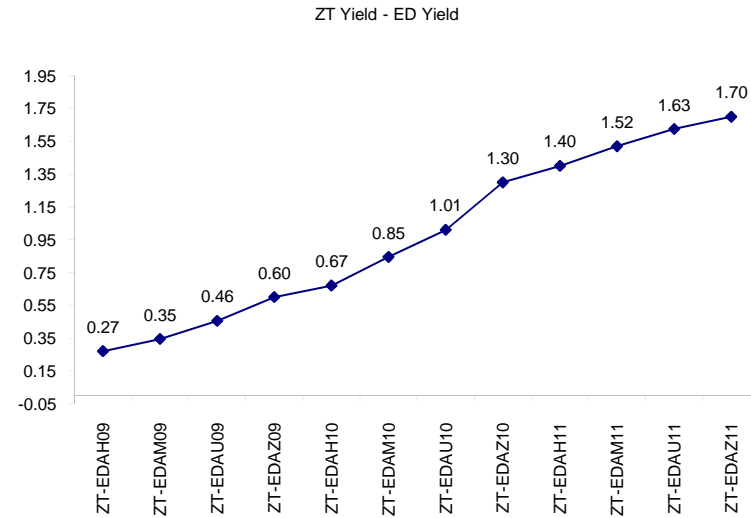
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Correlations (Important)

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. So, it's much easier to formulate the correlations based on yield than price.

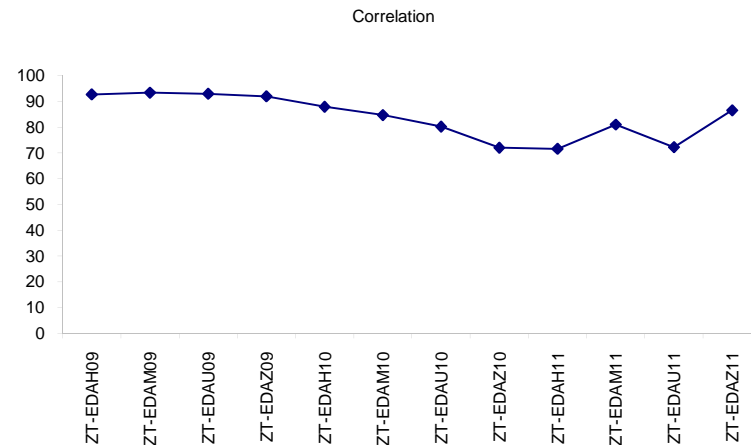
	ZT			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	9.983	0.27	ZT-EDAH09	92.727
EDAM09	10.058	0.35	ZT-EDAM09	93.436
EDAU09	10.168	0.46	ZT-EDAU09	92.970
EDAZ09	10.313	0.60	ZT-EDAZ09	91.989
EDAH10	10.383	0.67	ZT-EDAH10	87.924
EDAM10	10.558	0.85	ZT-EDAM10	84.736
EDAU10	10.723	1.01	ZT-EDAU10	80.230
EDAZ10	11.013	1.30	ZT-EDAZ10	72.036
EDAH11	11.113	1.40	ZT-EDAH11	71.594
EDAM11	11.233	1.52	ZT-EDAM11	81.014
EDAU11	11.338	1.63	ZT-EDAU11	72.235
EDAZ11	11.413	1.70	ZT-EDAZ11	86.555

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	0.218	1.97	1.76	ZT-EDAH09		
EDAM09	0.468	1.97	1.51	ZT-EDAM09		
EDAU09	0.717	1.97	1.26	ZT-EDAU09		
EDAZ09	0.966	1.97	1.01	ZT-EDAZ09		
EDAH10	1.216	1.97	0.76	ZT-EDAH10		
EDAM10	1.465	1.97	0.51	ZT-EDAM10		
EDAU10	1.714	1.97	0.26	ZT-EDAU10		
EDAZ10	1.964	1.97	0.01	ZT-EDAZ10		
EDAH11	2.213	1.97	(0.24)	ZT-EDAH11		
EDAM11	2.462	1.97	(0.49)	ZT-EDAM11		
EDAU11	2.731	1.97	(0.76)	ZT-EDAU11		
EDAZ11	2.980	1.97	(1.01)	ZT-EDAZ11		

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

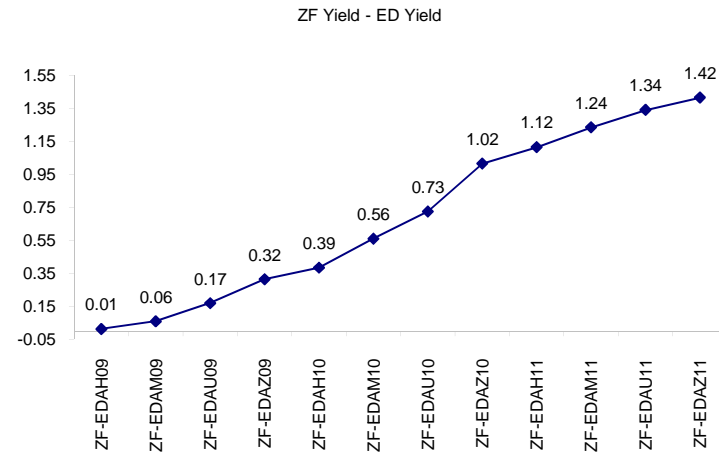


ZF				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	20.686	0.01	ZF-EDAH09	79.983
EDAM09	20.761	0.06	ZF-EDAM09	84.573
EDAU09	20.871	0.17	ZF-EDAU09	88.057
EDAZ09	21.016	0.32	ZF-EDAZ09	90.699
EDAH10	21.086	0.39	ZF-EDAH10	93.830
EDAM10	21.261	0.56	ZF-EDAM10	94.937
EDAU10	21.426	0.73	ZF-EDAU10	95.732
EDAZ10	21.716	1.02	ZF-EDAZ10	94.249
EDAH11	21.816	1.12	ZF-EDAH11	93.754
EDAM11	21.936	1.24	ZF-EDAM11	96.205
EDAU11	22.041	1.34	ZF-EDAU11	89.541
EDAZ11	22.116	1.42	ZF-EDAZ11	92.670

Price = Outright Decimal Price - Euro Contract Price

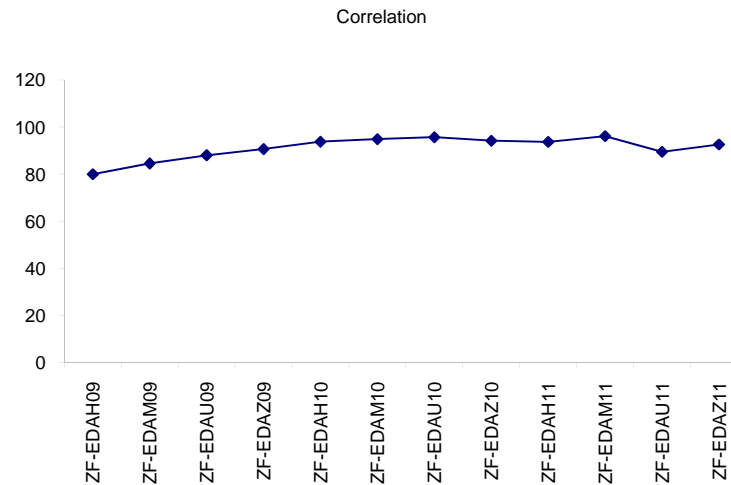
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



ED Duration as Fraction of year			
	ZF Duration	Spread Duration	
EDAH09	0.218	1.18	0.97
EDAM09	0.468	1.18	0.72
EDAU09	0.717	1.18	0.47
EDAZ09	0.966	1.18	0.22
EDAH10	1.216	1.18	(0.03)
EDAM10	1.465	1.18	(0.28)
EDAU10	1.714	1.18	(0.53)
EDAZ10	1.964	1.18	(0.78)
EDAH11	2.213	1.18	(1.03)
EDAM11	2.462	1.18	(1.28)
EDAU11	2.731	1.18	(1.55)
EDAZ11	2.980	1.18	(1.80)

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

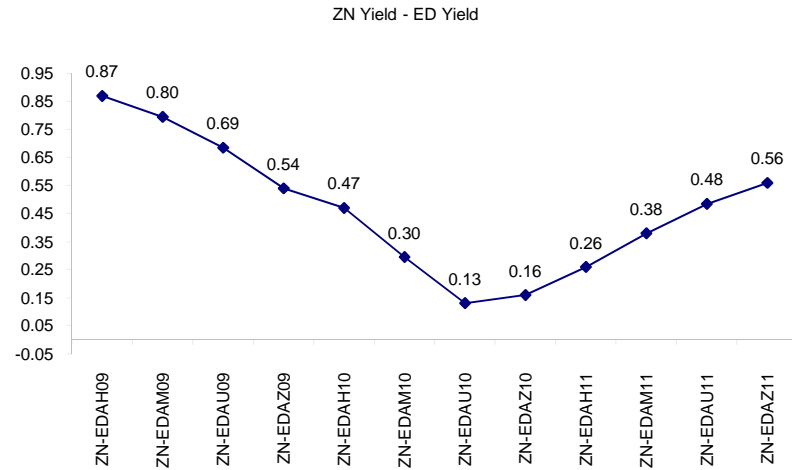


ZN				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	28.186	0.87	ZN-EDAH09	91.539
EDAM09	28.261	0.80	ZN-EDAM09	89.849
EDAU09	28.371	0.69	ZN-EDAU09	88.334
EDAZ09	28.516	0.54	ZN-EDAZ09	88.156
EDAH10	28.586	0.47	ZN-EDAH10	88.303
EDAM10	28.761	0.30	ZN-EDAM10	86.958
EDAU10	28.926	0.13	ZN-EDAU10	85.740
EDAZ10	29.216	0.16	ZN-EDAZ10	85.233
EDAH11	29.316	0.26	ZN-EDAH11	87.010
EDAM11	29.436	0.38	ZN-EDAM11	94.259
EDAU11	29.541	0.48	ZN-EDAU11	91.396
EDAZ11	29.616	0.56	ZN-EDAZ11	98.686

Price = Outright Decimal Price - Euro Contract Price

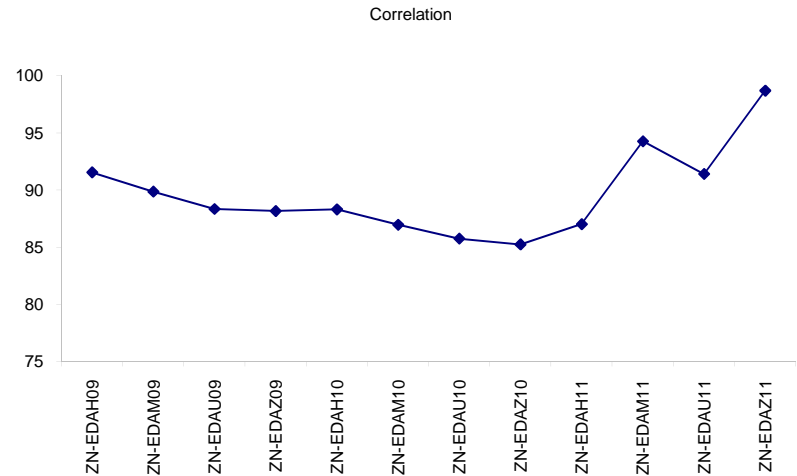
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



ED Duration as Fraction of year				ZN Duration	Spread Duration	
EDAH09	0.218	6.83	6.61	ZN-EDAH09		
EDAM09	0.468	6.83	6.36	ZN-EDAM09		
EDAU09	0.717	6.83	6.11	ZN-EDAU09		
EDAZ09	0.966	6.83	5.86	ZN-EDAZ09		
EDAH10	1.216	6.83	5.61	ZN-EDAH10		
EDAM10	1.465	6.83	5.36	ZN-EDAM10		
EDAU10	1.714	6.83	5.11	ZN-EDAU10		
EDAZ10	1.964	6.83	4.86	ZN-EDAZ10		
EDAH11	2.213	6.83	4.61	ZN-EDAH11		
EDAM11	2.462	6.83	4.37	ZN-EDAM11		
EDAU11	2.731	6.83	4.10	ZN-EDAU11		
EDAZ11	2.980	6.83	3.85	ZN-EDAZ11		

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

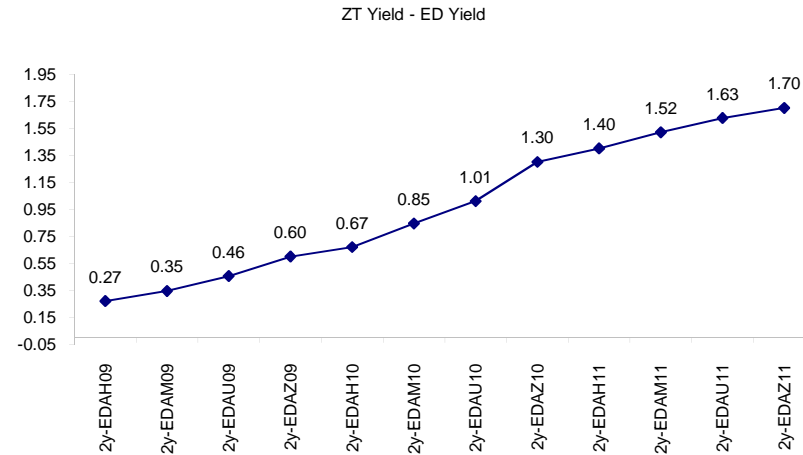


	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	1.123	0.27	2y-EDAH09	29.682
EDAM09	1.198	0.35	2y-EDAM09	18.147
EDAU09	1.308	0.46	2y-EDAU09	8.264
EDAZ09	1.453	0.60	2y-EDAZ09	0.835
EDAH10	1.523	0.67	2y-EDAH10	-12.452
EDAM10	1.698	0.85	2y-EDAM10	-21.150
EDAU10	1.863	1.01	2y-EDAU10	-30.932
EDAZ10	2.153	1.30	2y-EDAZ10	-40.265
EDAH11	2.253	1.40	2y-EDAH11	-37.933
EDAM11	2.373	1.52	2y-EDAM11	-22.336
EDAU11	2.478	1.63	2y-EDAU11	-22.862
EDAZ11	2.553	1.70	2y-EDAZ11	-1.351

Price = Outright Decimal Price - Euro Contract Price

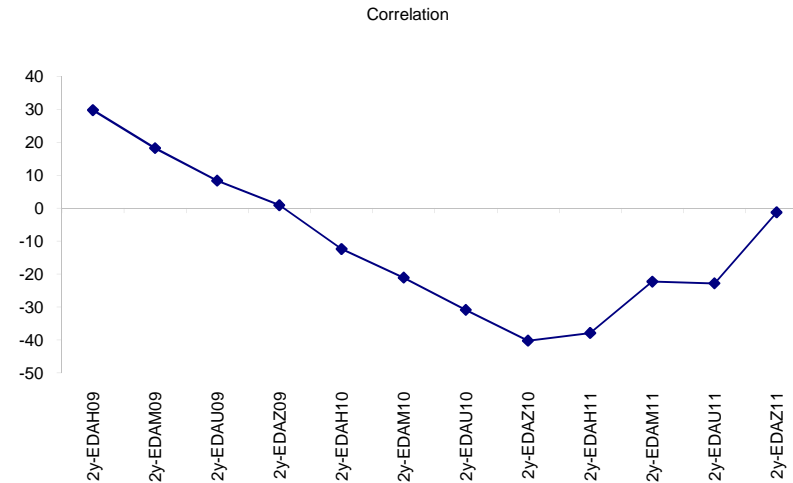
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

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



	ED Duration as Fraction of year		2Y Duration	Spread Duration	
EDAH09	0.218	1.97	1.76	2y-EDAH09	
EDAM09	0.468	1.97	1.51	2y-EDAM09	
EDAU09	0.717	1.97	1.26	2y-EDAU09	
EDAZ09	0.966	1.97	1.01	2y-EDAZ09	
EDAH10	1.216	1.97	0.76	2y-EDAH10	
EDAM10	1.465	1.97	0.51	2y-EDAM10	
EDAU10	1.714	1.97	0.26	2y-EDAU10	
EDAZ10	1.964	1.97	0.01	2y-EDAZ10	
EDAH11	2.213	1.97	(0.24)	2y-EDAH11	
EDAM11	2.462	1.97	(0.49)	2y-EDAM11	
EDAU11	2.731	1.97	(0.76)	2y-EDAU11	
EDAZ11	2.980	1.97	(1.01)	2y-EDAZ11	

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

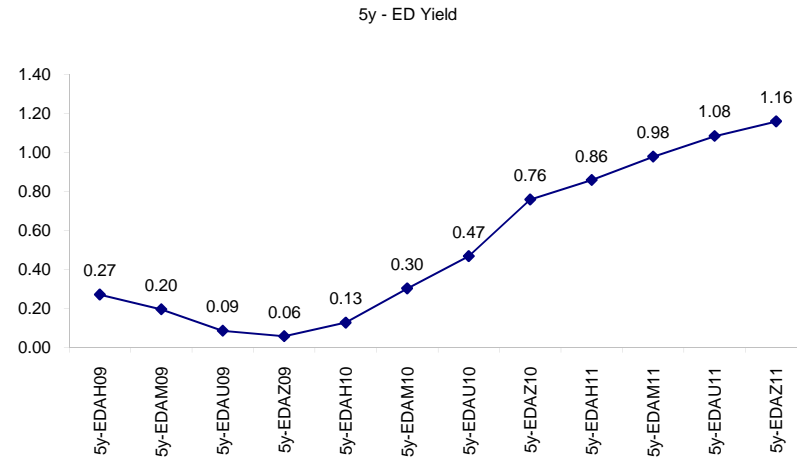


	5y			Correlation* (percent)
	Spread Price	Spread Yield	Spread Name	
EDAH09	1.139	0.27	5y-EDAH09	-35.846
EDAM09	1.214	0.20	5y-EDAM09	-43.364
EDAU09	1.324	0.09	5y-EDAU09	-49.549
EDAZ09	1.469	0.06	5y-EDAZ09	-55.178
EDAH10	1.539	0.13	5y-EDAH10	-65.731
EDAM10	1.714	0.30	5y-EDAM10	-70.794
EDAU10	1.879	0.47	5y-EDAU10	-77.553
EDAZ10	2.169	0.76	5y-EDAZ10	-84.724
EDAH11	2.269	0.86	5y-EDAH11	-83.614
EDAM11	2.389	0.98	5y-EDAM11	-75.813
EDAU11	2.494	1.08	5y-EDAU11	-76.619
EDAZ11	2.569	1.16	5y-EDAZ11	-63.183

Price = Outright Decimal Price - Euro Contract Price

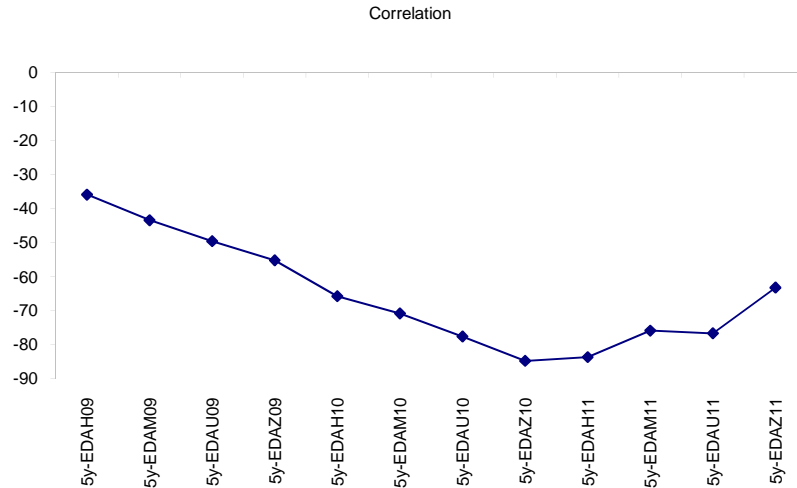
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as			
	Fraction of year	5Y Duration	Spread Duration	
EDAH09	0.218	4.67	4.46	5y-EDAH09
EDAM09	0.468	4.67	4.21	5y-EDAM09
EDAU09	0.717	4.67	3.96	5y-EDAU09
EDAZ09	0.966	4.67	3.71	5y-EDAZ09
EDAH10	1.216	4.67	3.46	5y-EDAH10
EDAM10	1.465	4.67	3.21	5y-EDAM10
EDAU10	1.714	4.67	2.96	5y-EDAU10
EDAZ10	1.964	4.67	2.71	5y-EDAZ10
EDAH11	2.213	4.67	2.46	5y-EDAH11
EDAM11	2.462	4.67	2.21	5y-EDAM11
EDAU11	2.731	4.67	1.94	5y-EDAU11
EDAZ11	2.980	4.67	1.69	5y-EDAZ11

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

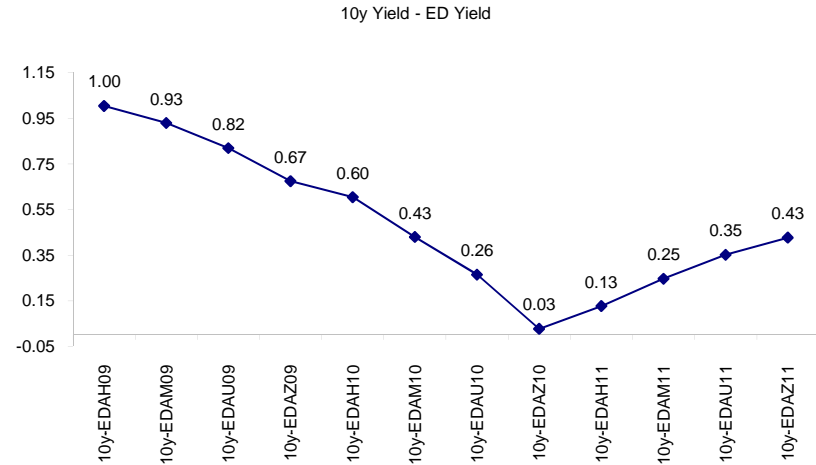


	10y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	1.139	1.00	10y-EDAH09	-94.872
EDAM09	1.214	0.93	10y-EDAM09	-91.269
EDAU09	1.324	0.82	10y-EDAU09	-88.580
EDAZ09	1.469	0.67	10y-EDAZ09	-87.453
EDAH10	1.539	0.60	10y-EDAH10	-85.976
EDAM10	1.714	0.43	10y-EDAM10	-82.777
EDAU10	1.879	0.26	10y-EDAU10	-80.127
EDAZ10	2.169	0.03	10y-EDAZ10	-78.151
EDAH11	2.269	0.13	10y-EDAH11	-79.378
EDAM11	2.389	0.25	10y-EDAM11	-88.153
EDAU11	2.494	0.35	10y-EDAU11	-87.814
EDAZ11	2.569	0.43	10y-EDAZ11	-96.141

Price = Outright Decimal Price - Euro Contract Price

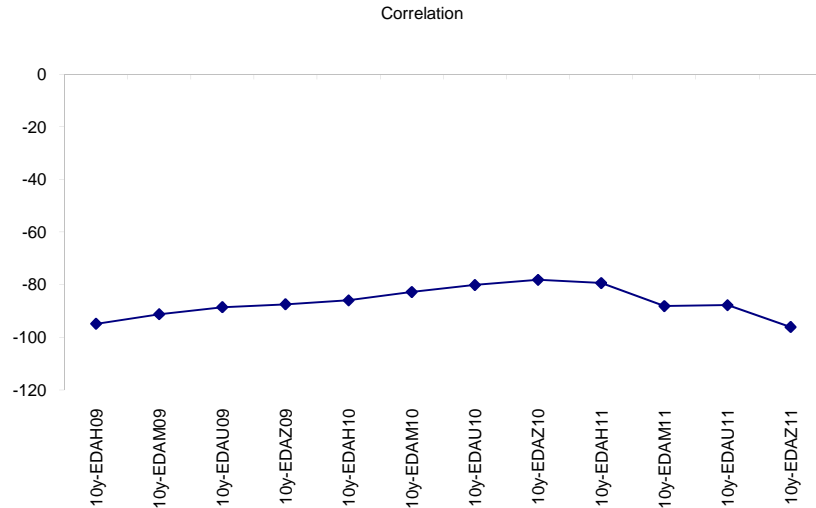
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as			
	Fraction of year	10Y Duration	Spread Duration	
EDAH09	0.218	8.34	8.12	10y-EDAH09
EDAM09	0.468	8.34	7.87	10y-EDAM09
EDAU09	0.717	8.34	7.62	10y-EDAU09
EDAZ09	0.966	8.34	7.37	10y-EDAZ09
EDAH10	1.216	8.34	7.12	10y-EDAH10
EDAM10	1.465	8.34	6.87	10y-EDAM10
EDAU10	1.714	8.34	6.62	10y-EDAU10
EDAZ10	1.964	8.34	6.37	10y-EDAZ10
EDAH11	2.213	8.34	6.13	10y-EDAH11
EDAM11	2.462	8.34	5.88	10y-EDAM11
EDAU11	2.731	8.34	5.61	10y-EDAU11
EDAZ11	2.980	8.34	5.36	10y-EDAZ11

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.

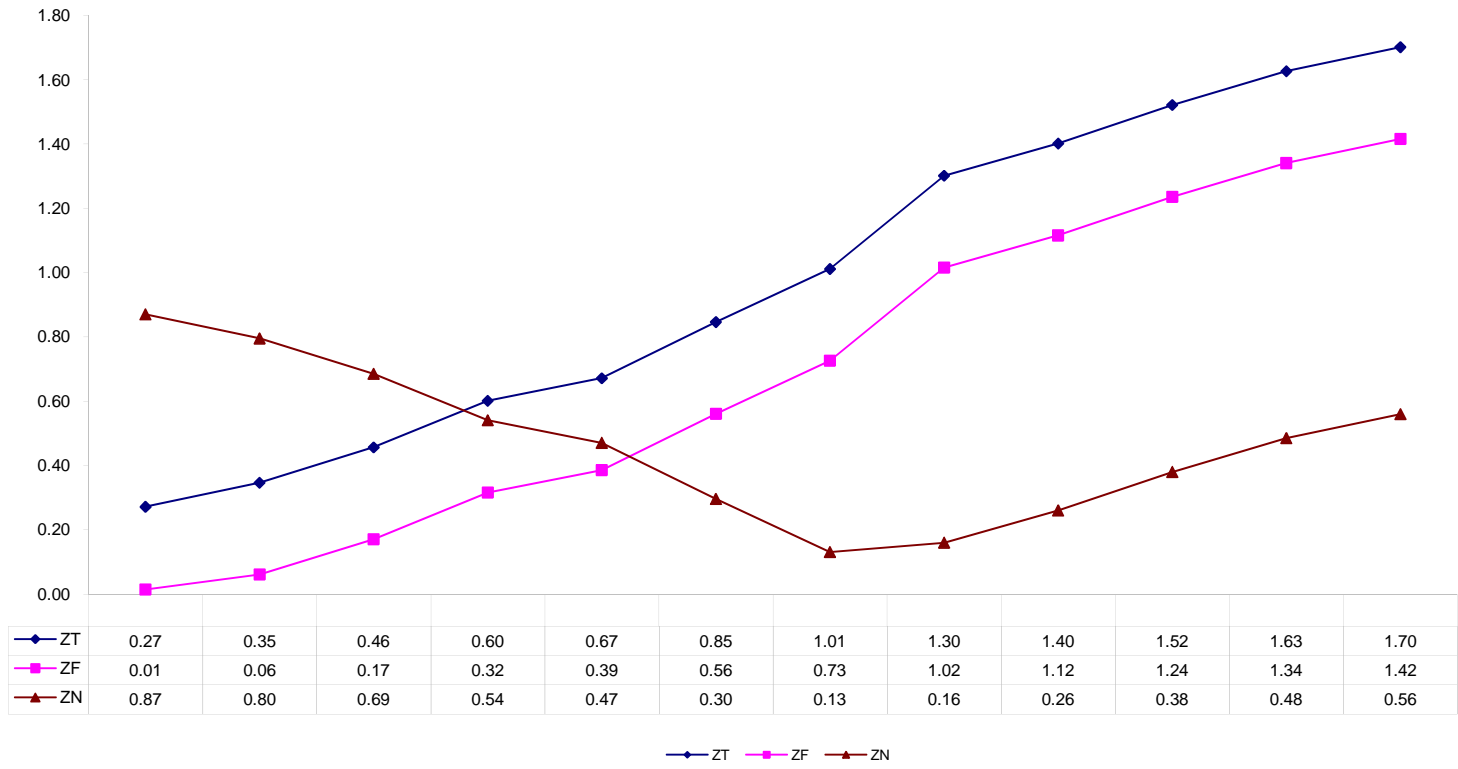
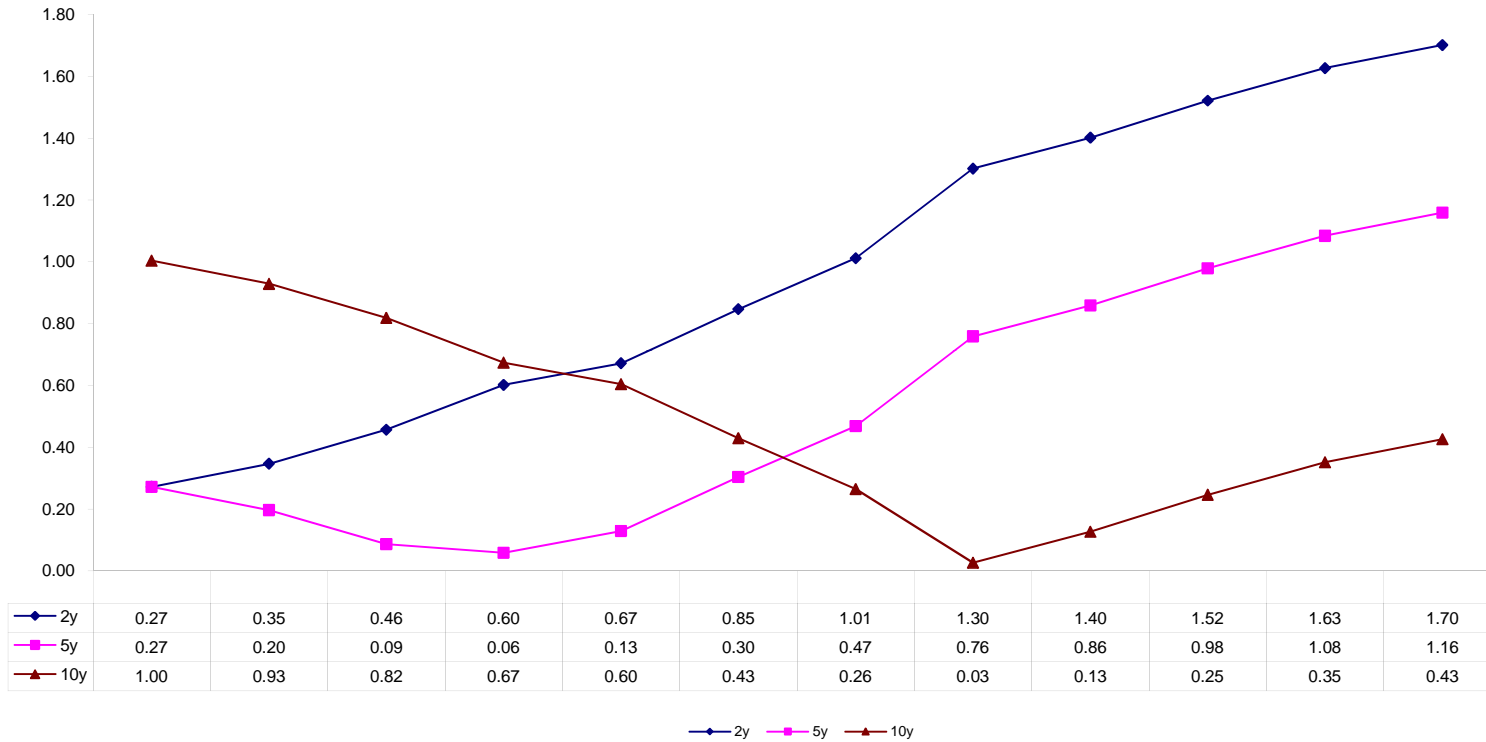
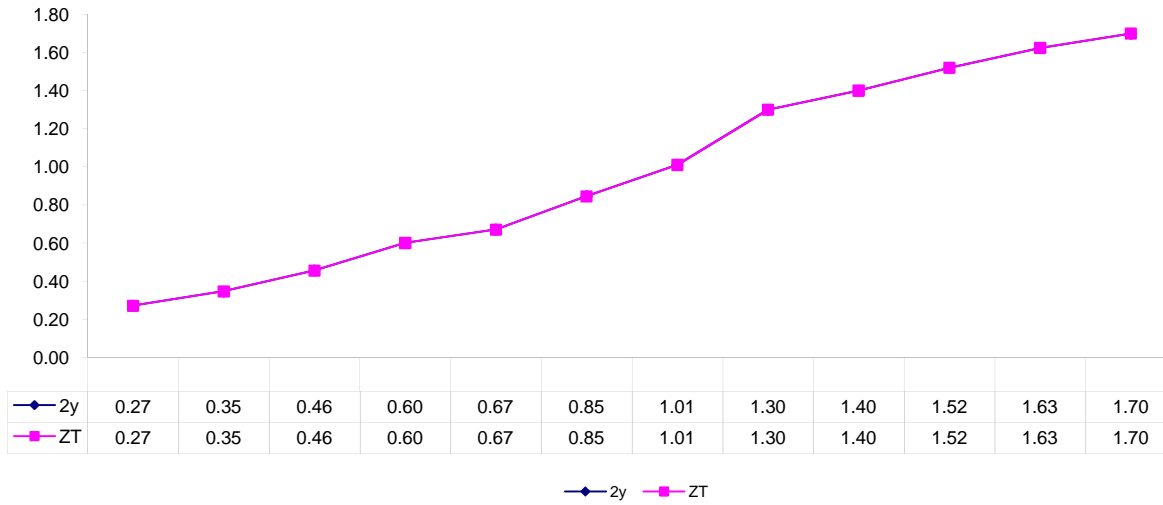


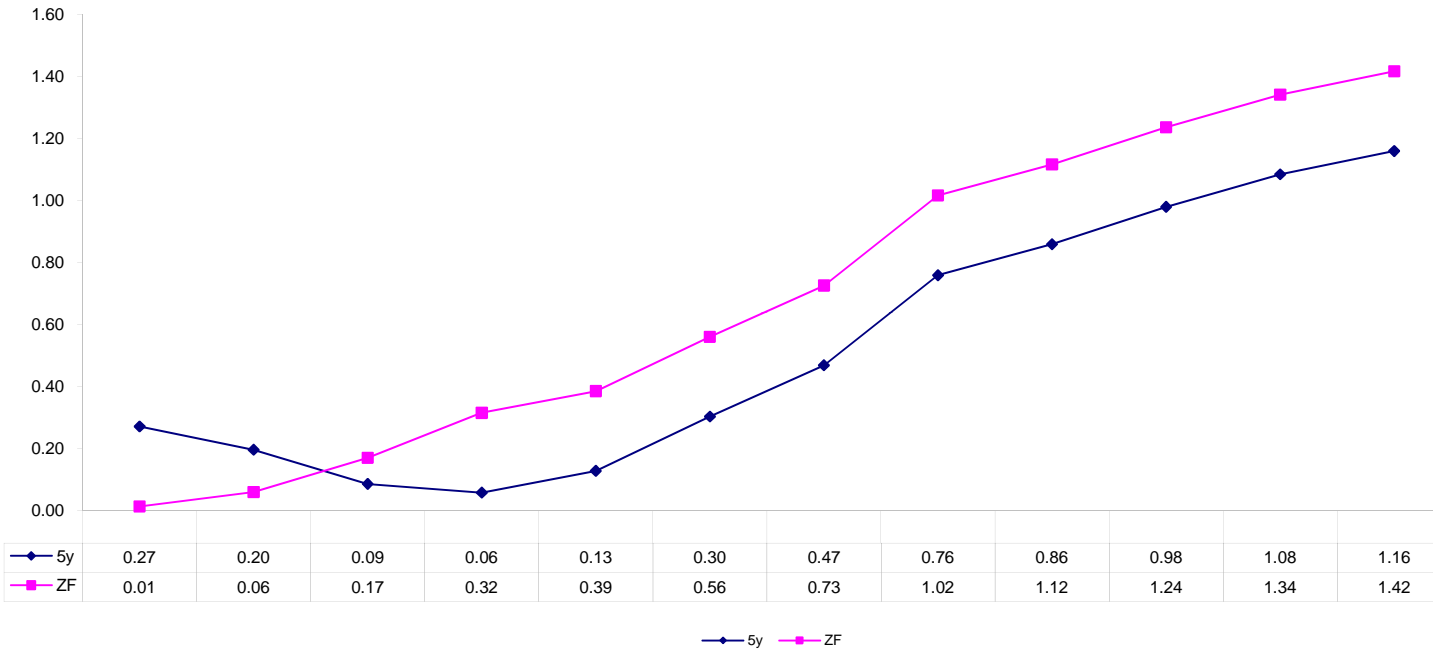
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



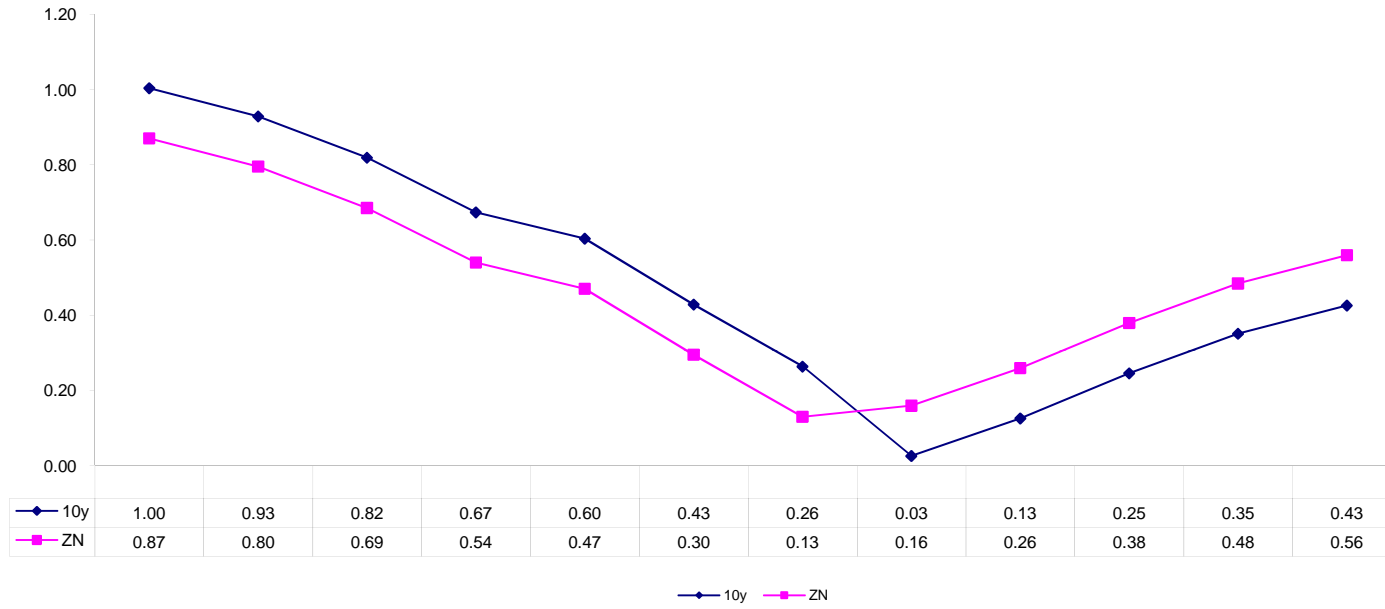
2y Basis TED Curve



5y Basis TED Curve



10y Basis TED Curve



Packs

	Last Yield	Net Last Yield	Last Price
White Pack	1.340	2.375	9868.250
Red Pack	9.000	9.000	9814.250
Green Pack	0.000	0.000	9753.875
Blue Pack	0.000	0.000	9733.250
Gold Pack	0.000	0.000	9715.000

