

The Morning Email: TERM TEDS & Dirty TEDS

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Want something added? Let me know: jgoulding@ghco.com

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Treasury Futures and Cash				
	Last Decimal	Last 32	Last Yield*	MDuration
ZT	107.7250	107.2320	1.253	1.911
ZF	113.6406	113.2050	2.509	4.227
ZN	114.6250	114.2000	3.344	5.847
2y	99.3438	99.1100	1.212	1.931
5y	97.7719	97.2470	2.734	4.647
10y	94.8594	94.2750	3.751	8.377

Eurodollars (ED)						
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month	
EDAM09	99.3800	0.620	0	-0.0006	JUN	
EDAU09	99.2650	0.735	91	0.2487	SEP	White Pack
EDAZ09	98.9150	1.085	182	0.4980	DEC	
EDAH10	98.5950	1.405	273	0.7473	MAR	
EDAM10	98.2250	1.775	364	0.9966	JUN	
EDAU10	97.8550	2.145	455	1.2459	SEP	Red Pack
EDAZ10	97.4800	2.520	546	1.4952	DEC	
EDAH11	97.1500	2.850	637	1.7446	MAR	
EDAM11	96.7950	3.205	728	1.9939	JUN	
EDAU11	96.4750	3.525	826	2.2624	SEP	Green Pack
EDAZ11	96.1650	3.835	917	2.5117	DEC	
EDAH12	95.9500	4.050	1,008	2.7610	MAR	
EDAM12	95.7550	4.245	1,099	3.0103	JUN	
EDAU12	95.5850	4.415	1,190	3.2596	SEP	Blue Pack
EDAZ12	95.4400	4.560	1,281	3.5089	DEC	
EDAH13	95.3300	4.670	1,372	3.7583	MAR	
EDAM13	95.2500	4.750	1,463	4.0076	JUN	
EDAU13	95.1700	4.830	1,554	4.2569	SEP	Gold Pack
EDAZ13	94.9750	5.025	1,645	4.5062	DEC	
EDAH14	95.0200	4.980	1,736	4.7555	MAR	

	Last Yield	Net Yield	Last Price	
White Pack	0.977	1.438	9903.88	
Red Pack	2.369	7.125	9767.75	Pack Prices
Green Pack	3.739	8.375	9634.63	
Blue Pack	4.586	9.125	9552.75	
Gold Pack		8.000	9509.88	

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.

jgoulding@ghco.com

Correlations (Important)

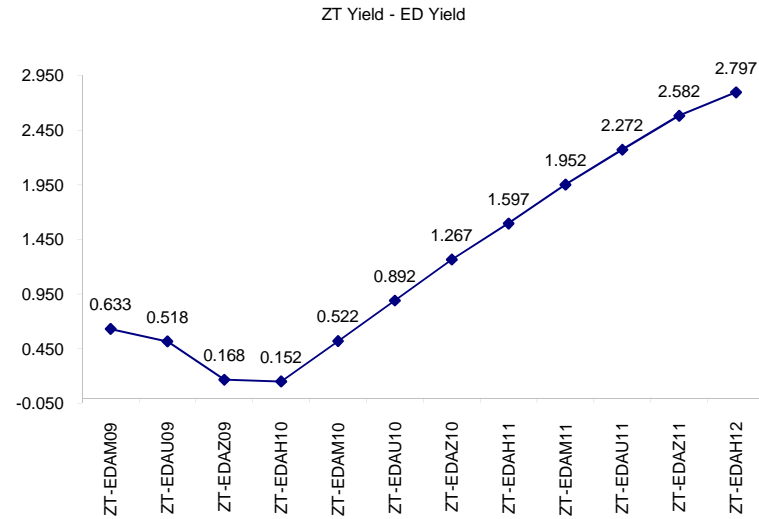
Correlations for the US Cash Treasuries are done on a YIELD basis. Therefore, you'll see negative values. The reason for this is due to the new issues. Every new issue takes too long to 'catch up' because the correlation formula looks back 10days. So, it's much easier to formulate the correlations based on yield than price.

	ZT			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	8.35	0.633	ZT-EDAM09	42
EDAU09	8.46	0.518	ZT-EDAU09	61
EDAZ09	8.81	0.168	ZT-EDAZ09	87
EDAH10	9.13	0.152	ZT-EDAH10	96
EDAM10	9.50	0.522	ZT-EDAM10	99
EDAU10	9.87	0.892	ZT-EDAU10	99
EDAZ10	10.25	1.267	ZT-EDAZ10	99
EDAH11	10.58	1.597	ZT-EDAH11	99
EDAM11	10.93	1.952	ZT-EDAM11	99
EDAU11	11.25	2.272	ZT-EDAU11	98
EDAZ11	11.56	2.582	ZT-EDAZ11	97
EDAH12	11.78	2.797	ZT-EDAH12	96

Price = Outright Decimal Price - Euro Contract Price

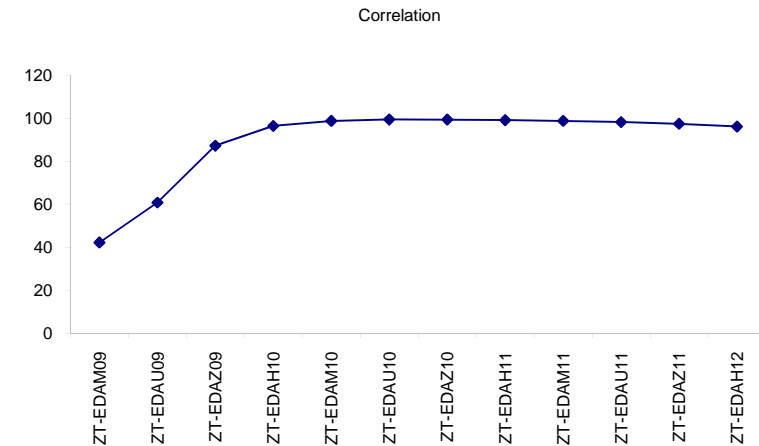
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year		ZT Duration	Spread Duration	
EDAM09	-0.0006	1.9111	1.9118	1.9118	ZT-EDAM09
EDAU09	0.2487	1.9111	1.6625	1.6625	ZT-EDAU09
EDAZ09	0.4980	1.9111	1.4132	1.4132	ZT-EDAZ09
EDAH10	0.7473	1.9111	1.1638	1.1638	ZT-EDAH10
EDAM10	0.9966	1.9111	0.9145	0.9145	ZT-EDAM10
EDAU10	1.2459	1.9111	0.6652	0.6652	ZT-EDAU10
EDAZ10	1.4952	1.9111	0.4159	0.4159	ZT-EDAZ10
EDAH11	1.7446	1.9111	0.1666	0.1666	ZT-EDAH11
EDAM11	1.9939	1.9111	-0.0827	-0.0827	ZT-EDAM11
EDAU11	2.2624	1.9111	-0.3512	-0.3512	ZT-EDAU11
EDAZ11	2.5117	1.9111	-0.6005	-0.6005	ZT-EDAZ11
EDAH12	2.7610	1.9111	-0.8499	-0.8499	ZT-EDAH12

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

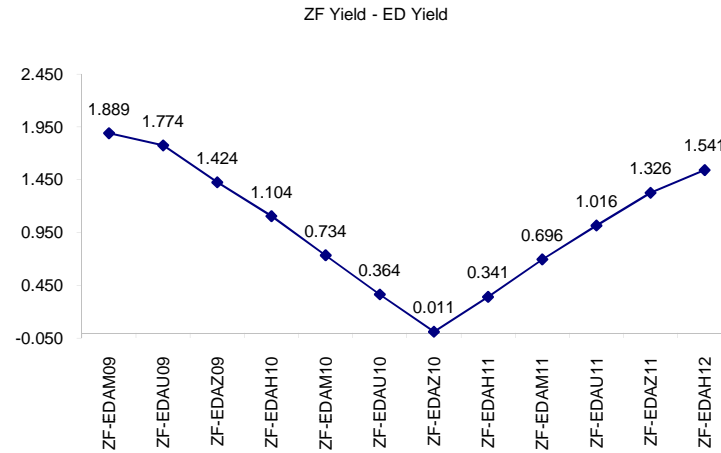


ZF				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	14.26	1.889	ZF-EDAM09	50
EDAU09	14.38	1.774	ZF-EDAU09	67
EDAZ09	14.73	1.424	ZF-EDAZ09	91
EDAH10	15.05	1.104	ZF-EDAH10	98
EDAM10	15.42	0.734	ZF-EDAM10	99
EDAU10	15.79	0.364	ZF-EDAU10	99
EDAZ10	16.16	0.011	ZF-EDAZ10	99
EDAH11	16.49	0.341	ZF-EDAH11	99
EDAM11	16.85	0.696	ZF-EDAM11	99
EDAU11	17.17	1.016	ZF-EDAU11	99
EDAZ11	17.48	1.326	ZF-EDAZ11	99
EDAH12	17.69	1.541	ZF-EDAH12	98

Price = Outright Decimal Price - Euro Contract Price

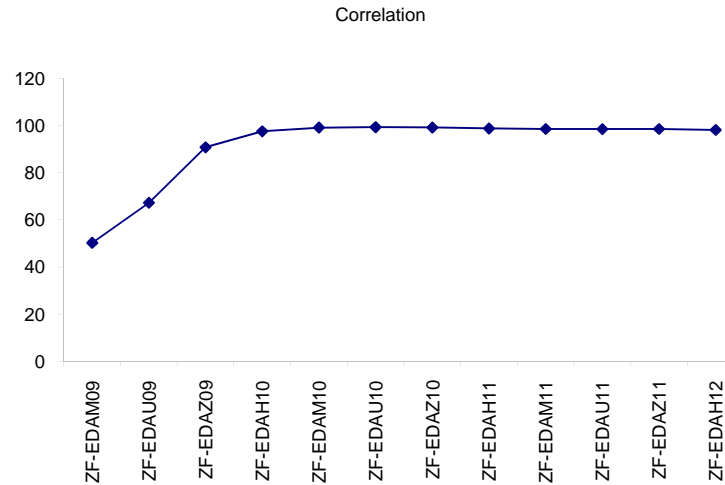
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



ED Duration as Fraction of year				ZF Duration	Spread Duration	
EDAM09	-0.0006	4.2267	4.2274	ZF-EDAM09		
EDAU09	0.2487	4.2267	3.9781	ZF-EDAU09		
EDAZ09	0.4980	4.2267	3.7287	ZF-EDAZ09		
EDAH10	0.7473	4.2267	3.4794	ZF-EDAH10		
EDAM10	0.9966	4.2267	3.2301	ZF-EDAM10		
EDAU10	1.2459	4.2267	2.9808	ZF-EDAU10		
EDAZ10	1.4952	4.2267	2.7315	ZF-EDAZ10		
EDAH11	1.7446	4.2267	2.4822	ZF-EDAH11		
EDAM11	1.9939	4.2267	2.2329	ZF-EDAM11		
EDAU11	2.2624	4.2267	1.9644	ZF-EDAU11		
EDAZ11	2.5117	4.2267	1.7150	ZF-EDAZ11		
EDAH12	2.7610	4.2267	1.4657	ZF-EDAH12		

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

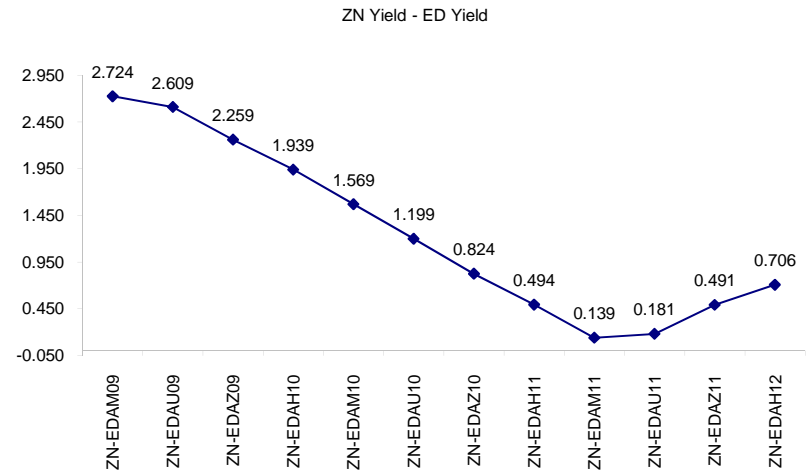


ZN				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	15.25	2.724	ZN-EDAM09	61
EDAU09	15.36	2.609	ZN-EDAU09	75
EDAZ09	15.71	2.259	ZN-EDAZ09	94
EDAH10	16.03	1.939	ZN-EDAH10	97
EDAM10	16.40	1.569	ZN-EDAM10	97
EDAU10	16.77	1.199	ZN-EDAU10	96
EDAZ10	17.15	0.824	ZN-EDAZ10	96
EDAH11	17.48	0.494	ZN-EDAH11	95
EDAM11	17.83	0.139	ZN-EDAM11	95
EDAU11	18.15	0.181	ZN-EDAU11	95
EDAZ11	18.46	0.491	ZN-EDAZ11	96
EDAH12	18.68	0.706	ZN-EDAH12	97

Price = Outright Decimal Price - Euro Contract Price

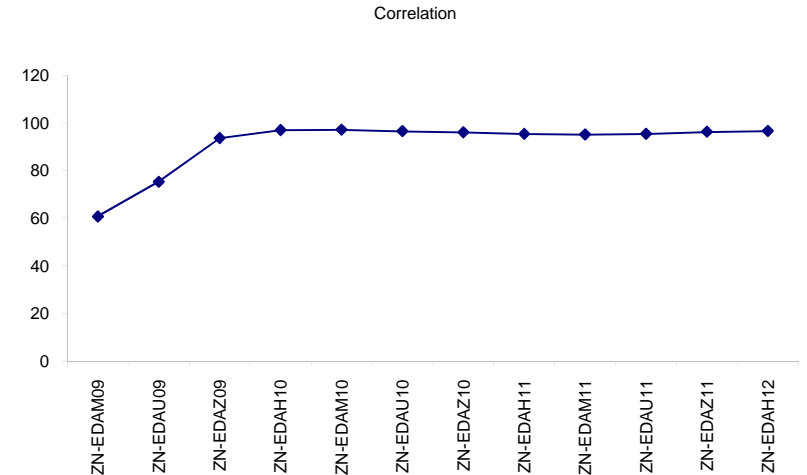
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



ED Duration as Fraction of year			
	Fraction of year	ZN Duration	Spread Duration
EDAM09	-0.0006	5.8474	5.8481
EDAU09	0.2487	5.8474	5.5988
EDAZ09	0.4980	5.8474	5.3495
EDAH10	0.7473	5.8474	5.1001
EDAM10	0.9966	5.8474	4.8508
EDAU10	1.2459	5.8474	4.6015
EDAZ10	1.4952	5.8474	4.3522
EDAH11	1.7446	5.8474	4.1029
EDAM11	1.9939	5.8474	3.8536
EDAU11	2.2624	5.8474	3.5851
EDAZ11	2.5117	5.8474	3.3358
EDAH12	2.7610	5.8474	3.0865

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



	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	-0.04	0.592	2y-EDAM09	-39
EDAU09	0.08	0.477	2y-EDAU09	-58
EDAZ09	0.43	0.127	2y-EDAZ09	-86
EDAH10	0.75	0.193	2y-EDAH10	-96
EDAM10	1.12	0.563	2y-EDAM10	-98
EDAU10	1.49	0.933	2y-EDAU10	-99
EDAZ10	1.86	1.308	2y-EDAZ10	-99
EDAH11	2.19	1.638	2y-EDAH11	-99
EDAM11	2.55	1.993	2y-EDAM11	-99
EDAU11	2.87	2.313	2y-EDAU11	-98
EDAZ11	3.18	2.623	2y-EDAZ11	-98
EDAH12	3.39	2.838	2y-EDAH12	-96

Price = Outright Decimal Price - Euro Contract Price

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

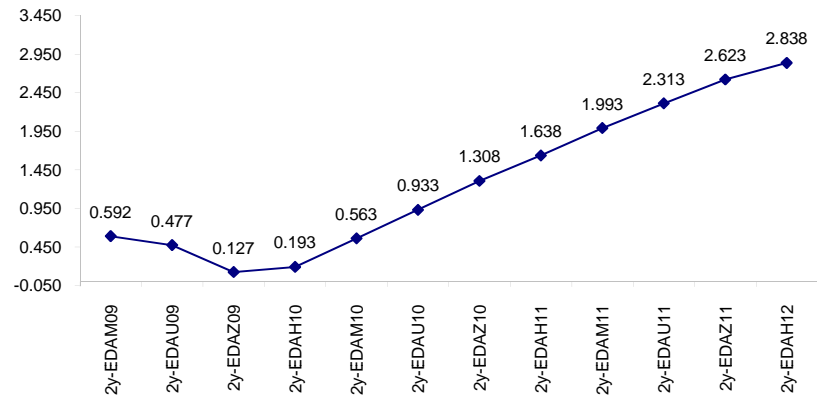
*Correlation = ED Correlation to Treasury Future over 10 days.

ED Duration as

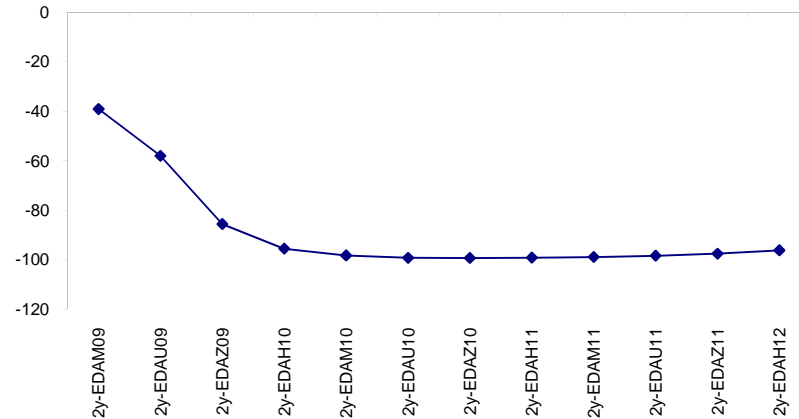
	Fraction of year	2Y Duration	Spread Duration	
EDAM09	-0.0006	1.9311	1.9317	2y-EDAM09
EDAU09	0.2487	1.9311	1.6824	2y-EDAU09
EDAZ09	0.4980	1.9311	1.4331	2y-EDAZ09
EDAH10	0.7473	1.9311	1.1838	2y-EDAH10
EDAM10	0.9966	1.9311	0.9345	2y-EDAM10
EDAU10	1.2459	1.9311	0.6852	2y-EDAU10
EDAZ10	1.4952	1.9311	0.4359	2y-EDAZ10
EDAH11	1.7446	1.9311	0.1865	2y-EDAH11
EDAM11	1.9939	1.9311	-0.0628	2y-EDAM11
EDAU11	2.2624	1.9311	-0.3313	2y-EDAU11
EDAZ11	2.5117	1.9311	-0.5806	2y-EDAZ11
EDAH12	2.7610	1.9311	-0.8299	2y-EDAH12

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

ZT Yield - ED Yield

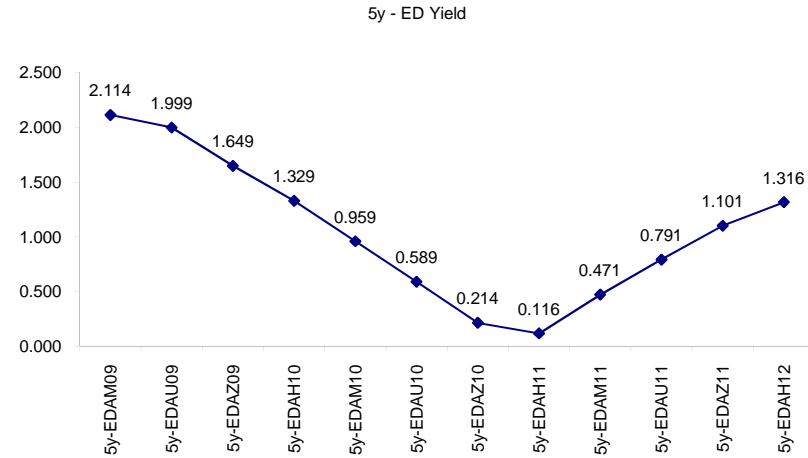


Correlation



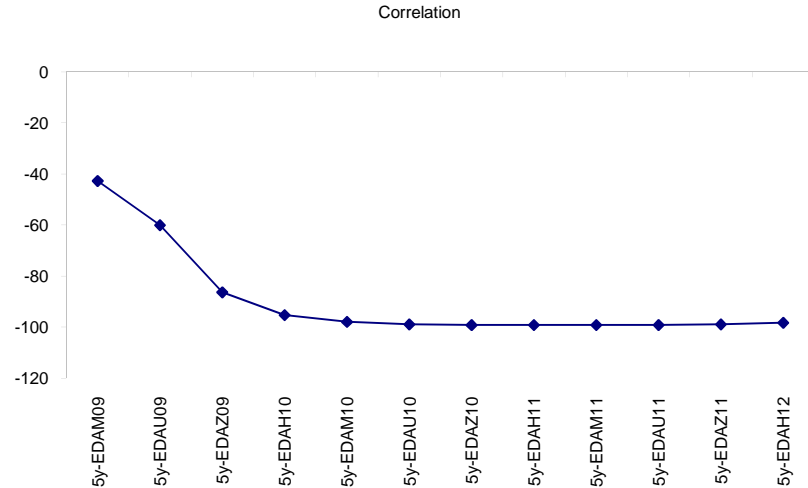
5y				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	-1.61	2.114	5y-EDAM09	-43
EDAU09	-1.49	1.999	5y-EDAU09	-60
EDAZ09	-1.14	1.649	5y-EDAZ09	-86
EDAH10	-0.82	1.329	5y-EDAH10	-95
EDAM10	-0.45	0.959	5y-EDAM10	-98
EDAU10	-0.08	0.589	5y-EDAU10	-99
EDAZ10	0.29	0.214	5y-EDAZ10	-99
EDAH11	0.62	0.116	5y-EDAH11	-99
EDAM11	0.98	0.471	5y-EDAM11	-99
EDAU11	1.30	0.791	5y-EDAU11	-99
EDAZ11	1.61	1.101	5y-EDAZ11	-99
EDAH12	1.82	1.316	5y-EDAH12	-98

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



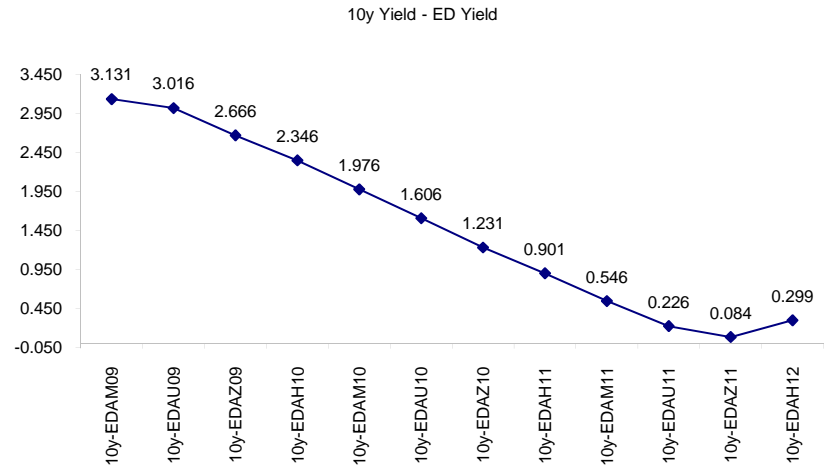
ED Duration as Fraction of year			
	5Y Duration	Spread Duration	
EDAM09	-0.0006	4.6466	4.6473 5y-EDAM09
EDAU09	0.2487	4.6466	4.3980 5y-EDAU09
EDAZ09	0.4980	4.6466	4.1486 5y-EDAZ09
EDAH10	0.7473	4.6466	3.8993 5y-EDAH10
EDAM10	0.9966	4.6466	3.6500 5y-EDAM10
EDAU10	1.2459	4.6466	3.4007 5y-EDAU10
EDAZ10	1.4952	4.6466	3.1514 5y-EDAZ10
EDAH11	1.7446	4.6466	2.9021 5y-EDAH11
EDAM11	1.9939	4.6466	2.6527 5y-EDAM11
EDAU11	2.2624	4.6466	2.3843 5y-EDAU11
EDAZ11	2.5117	4.6466	2.1349 5y-EDAZ11
EDAH12	2.7610	4.6466	1.8856 5y-EDAH12

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



10y				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	-1.61	3.131	10y-EDAM09	-41
EDAU09	-1.49	3.016	10y-EDAU09	-56
EDAZ09	-1.14	2.666	10y-EDAZ09	-81
EDAH10	-0.82	2.346	10y-EDAH10	-89
EDAM10	-0.45	1.976	10y-EDAM10	-93
EDAU10	-0.08	1.606	10y-EDAU10	-94
EDAZ10	0.29	1.231	10y-EDAZ10	-95
EDAH11	0.62	0.901	10y-EDAH11	-96
EDAM11	0.98	0.546	10y-EDAM11	-96
EDAU11	1.30	0.226	10y-EDAU11	-97
EDAZ11	1.61	0.084	10y-EDAZ11	-97
EDAH12	1.82	0.299	10y-EDAH12	-97

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		
EDAM09	-0.0006	8.3769	8.3776	10y-EDAM09
EDAU09	0.2487	8.3769	8.1283	10y-EDAU09
EDAZ09	0.4980	8.3769	7.8790	10y-EDAZ09
EDAH10	0.7473	8.3769	7.6296	10y-EDAH10
EDAM10	0.9966	8.3769	7.3803	10y-EDAM10
EDAU10	1.2459	8.3769	7.1310	10y-EDAU10
EDAZ10	1.4952	8.3769	6.8817	10y-EDAZ10
EDAH11	1.7446	8.3769	6.6324	10y-EDAH11
EDAM11	1.9939	8.3769	6.3831	10y-EDAM11
EDAU11	2.2624	8.3769	6.1146	10y-EDAU11
EDAZ11	2.5117	8.3769	5.8653	10y-EDAZ11
EDAH12	2.7610	8.3769	5.6160	10y-EDAH12

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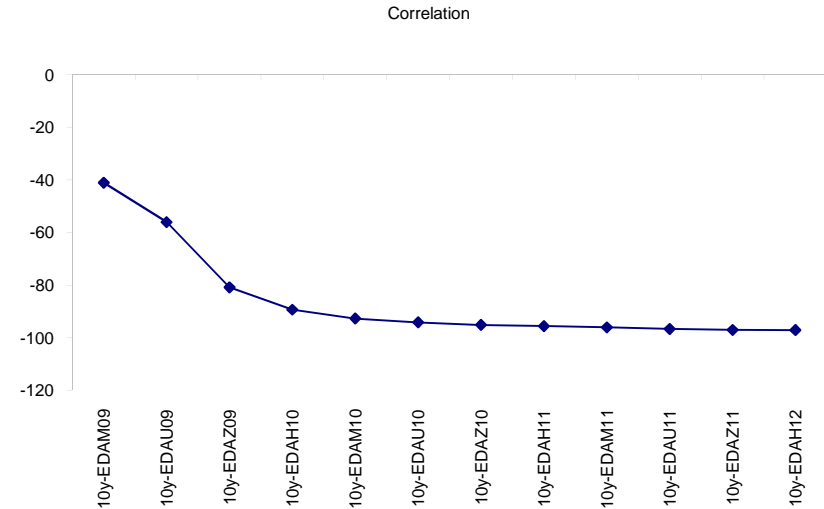


Chart values show the differences between ED contract and Treasury Futures contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.

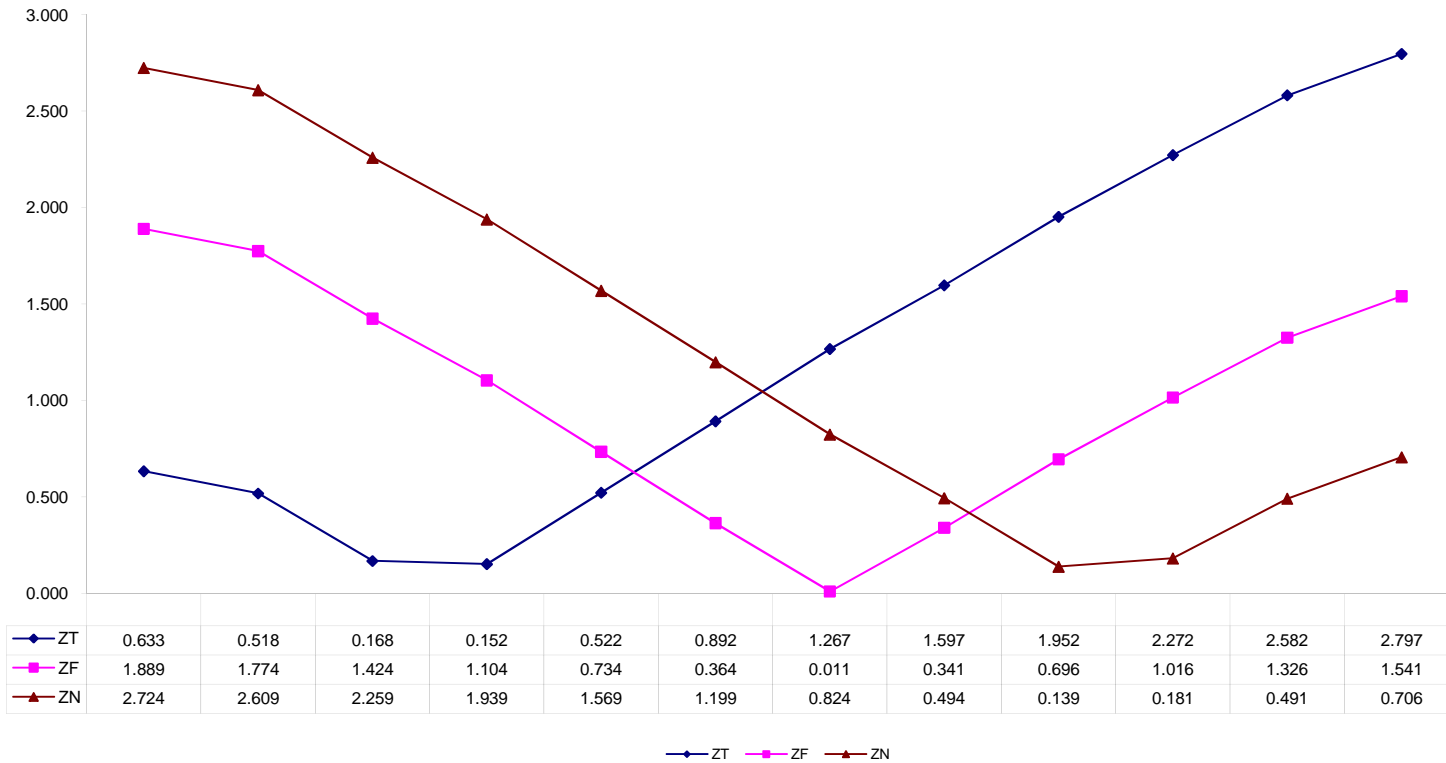
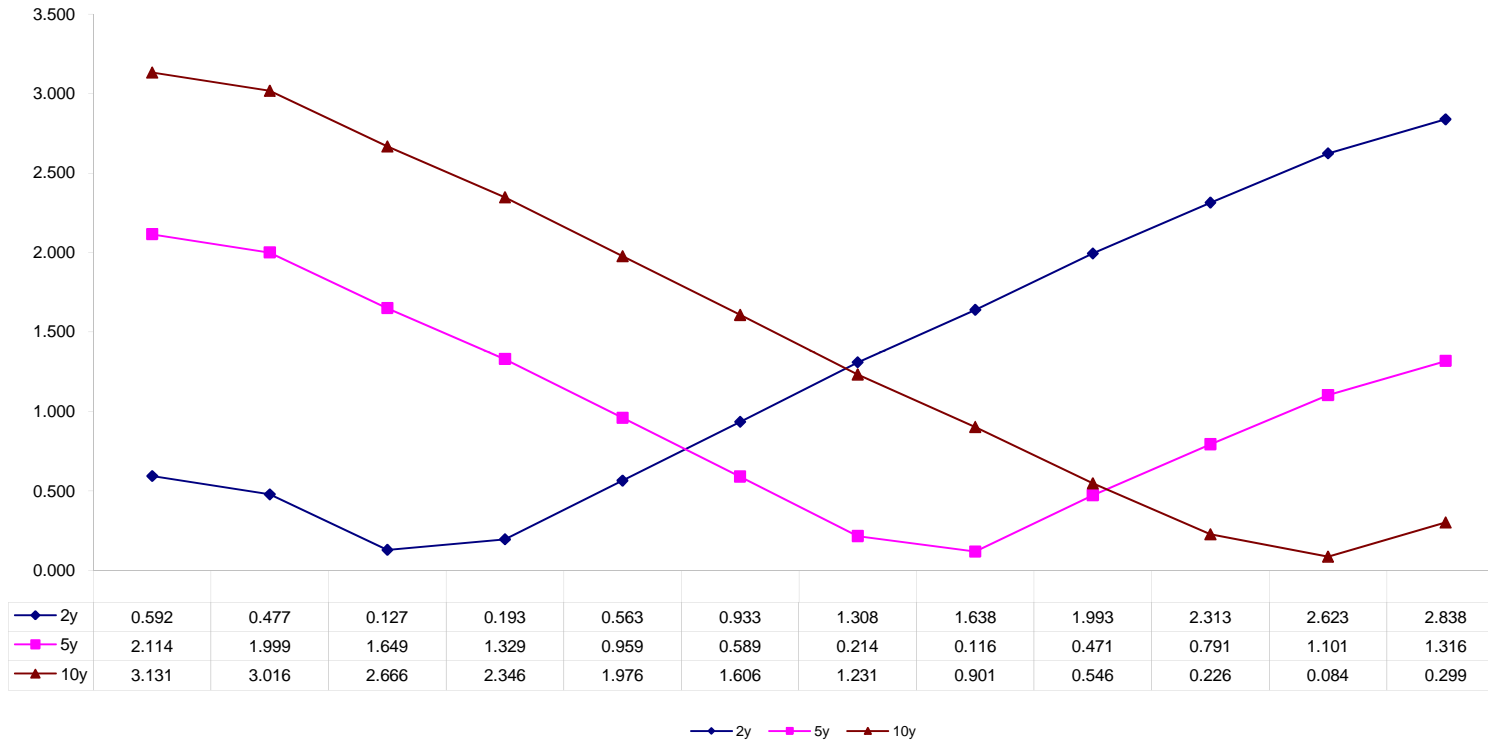
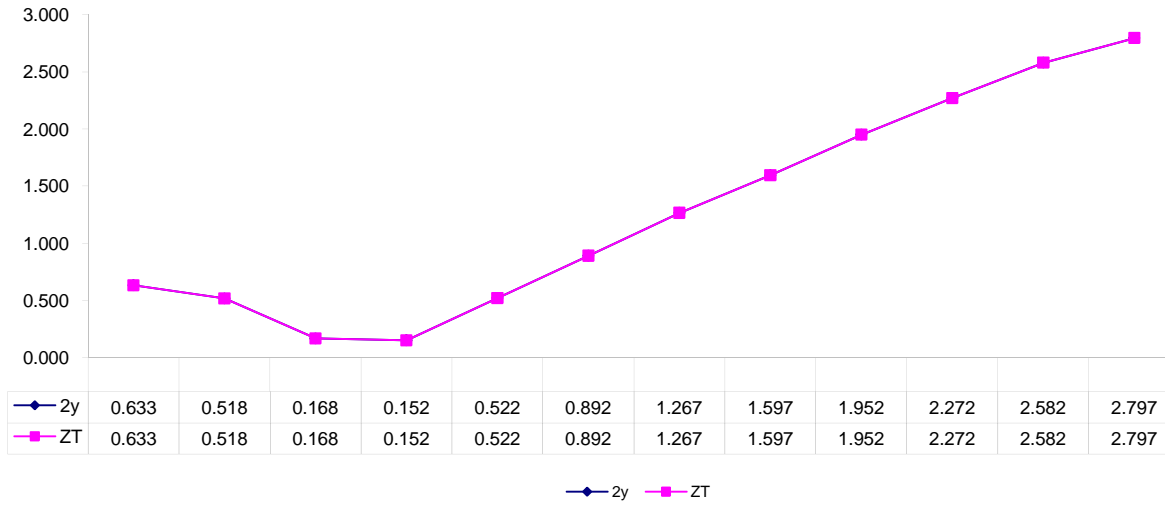
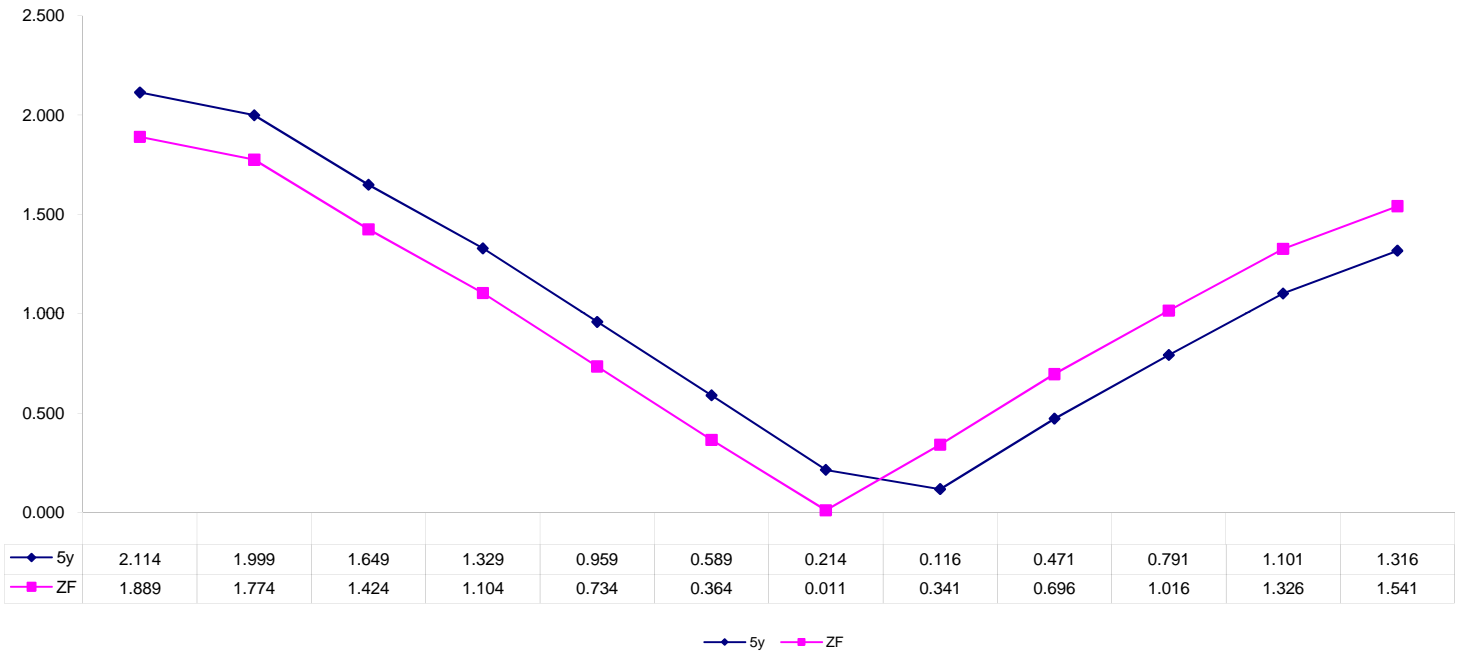


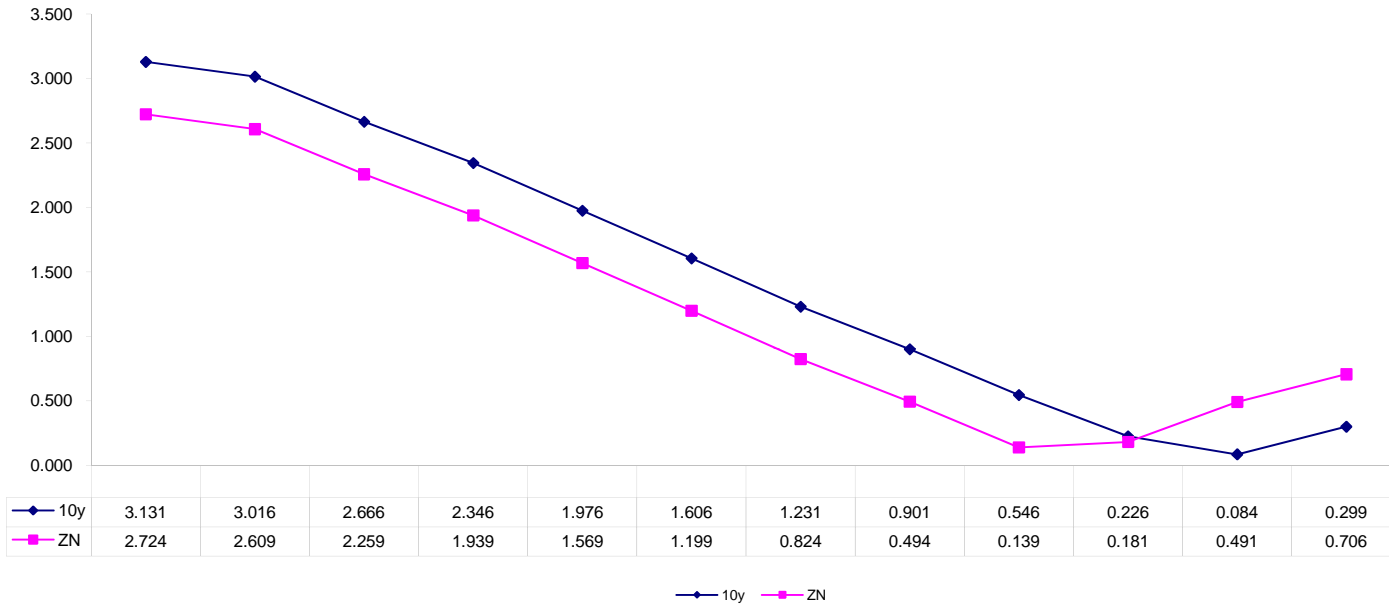
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



2y Basis TED Curve







	Last Yield	Net Last Yield	Last Price
White Pack	0.977	1.438	9903.8750
Red Pack	2.369	7.125	9767.7500
Green Pack	3.739	8.375	9634.6250
Blue Pack	4.586	9.125	9552.7500
Gold Pack		8.000	9509.8750

