

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	108.3500	108.1120	0.947	1.948
ZF	114.9906	114.3170	2.249	4.266
ZN	116.0000	116.0000	3.130	5.893
2y	99.8500	99.2720	0.947	1.967
5y	99.0219	99.0070	2.456	4.688
10y	96.2344	96.0750	3.578	8.428

Eurodollars (ED)						
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month	
EDAM09	99.3675	0.632	12	0.0322	JUN	
EDAU09	99.2850	0.715	103	0.2815	SEP	White Pack
EDAZ09	99.0550	0.945	194	0.5309	DEC	
EDAH10	98.8900	1.110	285	0.7802	MAR	
EDAM10	98.5950	1.405	376	1.0295	JUN	
EDAU10	98.2750	1.725	467	1.2788	SEP	Red Pack
EDAZ10	97.8950	2.105	558	1.5281	DEC	
EDAH11	97.5600	2.440	649	1.7774	MAR	
EDAM11	97.1850	2.815	740	2.0267	JUN	
EDAU11	96.8400	3.160	838	2.2952	SEP	Green Pack
EDAZ11	96.4850	3.515	929	2.5446	DEC	
EDAH12	96.2200	3.780	1,020	2.7939	MAR	
EDAM12	95.9750	4.025	1,111	3.0432	JUN	
EDAU12	95.7600	4.240	1,202	3.2925	SEP	Blue Pack
EDAZ12	95.5700	4.430	1,293	3.5418	DEC	
EDAH13	95.4650	4.535	1,384	3.7911	MAR	
EDAM13	95.3250	4.675	1,475	4.0404	JUN	
EDAU13	95.2100	4.790	1,566	4.2898	SEP	Gold Pack
EDAZ13	95.0800	4.920	1,657	4.5391	DEC	
EDAH14	95.0100	4.990	1,748	4.7884	MAR	

	Last Yield	Net Yield	Last Price	
White Pack	0.864	2.625	9914.94	
Red Pack	1.955	4.250	9808.13	Pack Prices
Green Pack	3.392	7.625	9668.25	
Blue Pack	4.415	10.625	9569.25	
Gold Pack	4.971	12.125	9515.63	

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)

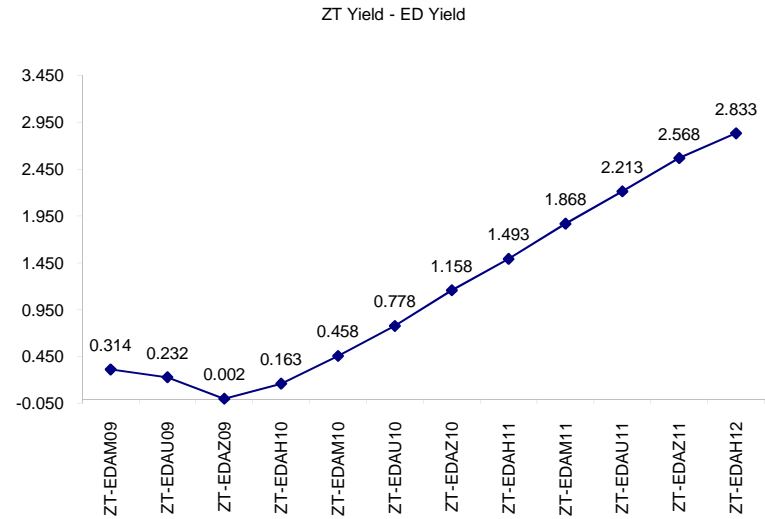
Correlations for the US Cash Treasuries are done on a YIELD basis. Therefore, you'll see negative values. The reason for this is due to the new issues. Every new issue takes too long to 'catch up' because the correlation formula looks back 10days. So, it's much easier to formulate the correlations based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

	ZT			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	8.98	0.314	ZT-EDAM09	53
EDAU09	9.07	0.232	ZT-EDAU09	86
EDAZ09	9.30	0.002	ZT-EDAZ09	92
EDAH10	9.46	0.163	ZT-EDAH10	91
EDAM10	9.76	0.458	ZT-EDAM10	87
EDAU10	10.08	0.778	ZT-EDAU10	83
EDAZ10	10.46	1.158	ZT-EDAZ10	79
EDAH11	10.79	1.493	ZT-EDAH11	74
EDAM11	11.17	1.868	ZT-EDAM11	72
EDAU11	11.51	2.213	ZT-EDAU11	70
EDAZ11	11.87	2.568	ZT-EDAZ11	70
EDAH12	12.13	2.833	ZT-EDAH12	70

Price = Outright Decimal Price - Euro Contract Price

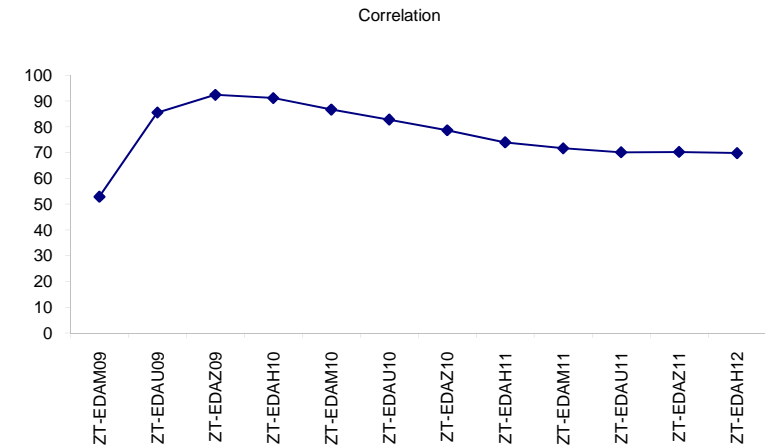
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year			ZT Duration	Spread Duration	
EDAM09	0.0322	1.9475	1.9153	ZT-EDAM09		
EDAU09	0.2815	1.9475	1.6660	ZT-EDAU09		
EDAZ09	0.5309	1.9475	1.4167	ZT-EDAZ09		
EDAH10	0.7802	1.9475	1.1674	ZT-EDAH10		
EDAM10	1.0295	1.9475	0.9181	ZT-EDAM10		
EDAU10	1.2788	1.9475	0.6687	ZT-EDAU10		
EDAZ10	1.5281	1.9475	0.4194	ZT-EDAZ10		
EDAH11	1.7774	1.9475	0.1701	ZT-EDAH11		
EDAM11	2.0267	1.9475	-0.0792	ZT-EDAM11		
EDAU11	2.2952	1.9475	-0.3477	ZT-EDAU11		
EDAZ11	2.5446	1.9475	-0.5970	ZT-EDAZ11		
EDAH12	2.7939	1.9475	-0.8463	ZT-EDAH12		

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

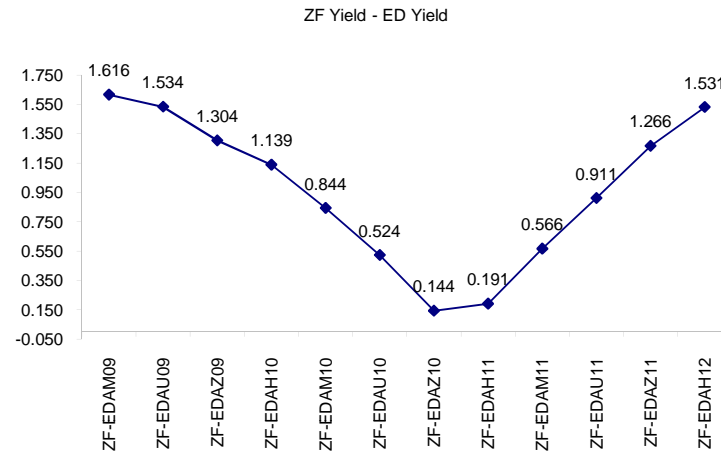


	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	15.62	1.616	ZF-EDAM09	-5
EDAU09	15.71	1.534	ZF-EDAU09	53
EDAZ09	15.94	1.304	ZF-EDAZ09	74
EDAH10	16.10	1.139	ZF-EDAH10	88
EDAM10	16.40	0.844	ZF-EDAM10	95
EDAU10	16.72	0.524	ZF-EDAU10	97
EDAZ10	17.10	0.144	ZF-EDAZ10	99
EDAH11	17.43	0.191	ZF-EDAH11	100
EDAM11	17.81	0.566	ZF-EDAM11	100
EDAU11	18.15	0.911	ZF-EDAU11	99
EDAZ11	18.51	1.266	ZF-EDAZ11	99
EDAH12	18.77	1.531	ZF-EDAH12	99

Price = Outright Decimal Price - Euro Contract Price

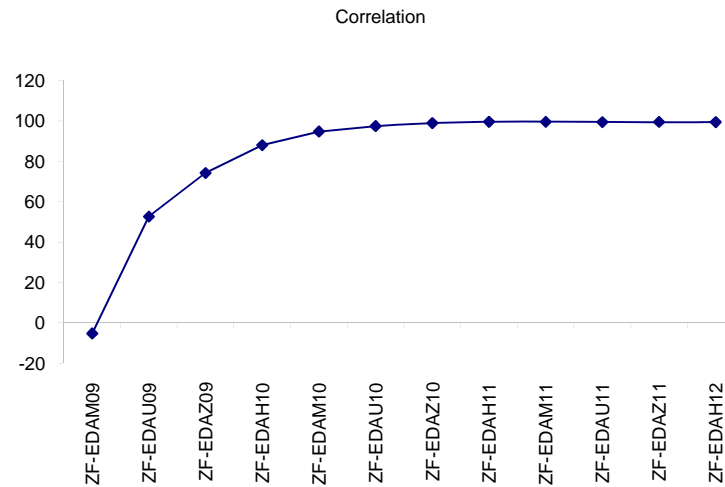
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



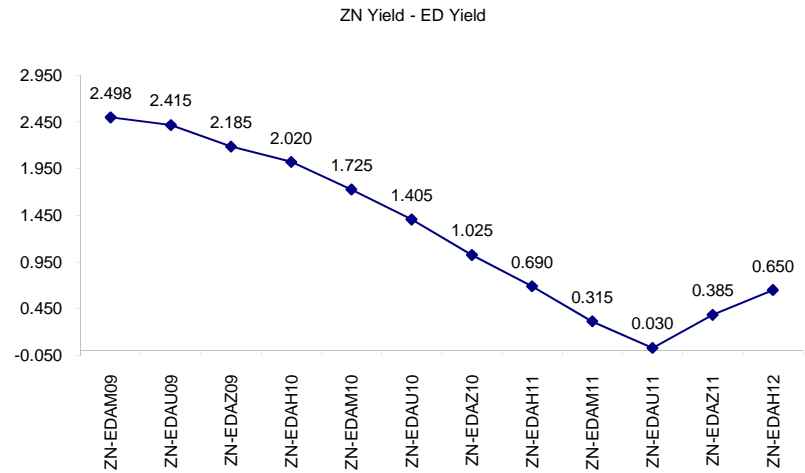
	ED Duration as Fraction of year		ZF Duration	Spread Duration	
EDAM09	0.0322	4.2658	4.2336	ZF-EDAM09	
EDAU09	0.2815	4.2658	3.9843	ZF-EDAU09	
EDAZ09	0.5309	4.2658	3.7349	ZF-EDAZ09	
EDAH10	0.7802	4.2658	3.4856	ZF-EDAH10	
EDAM10	1.0295	4.2658	3.2363	ZF-EDAM10	
EDAU10	1.2788	4.2658	2.9870	ZF-EDAU10	
EDAZ10	1.5281	4.2658	2.7377	ZF-EDAZ10	
EDAH11	1.7774	4.2658	2.4884	ZF-EDAH11	
EDAM11	2.0267	4.2658	2.2391	ZF-EDAM11	
EDAU11	2.2952	4.2658	1.9706	ZF-EDAU11	
EDAZ11	2.5446	4.2658	1.7212	ZF-EDAZ11	
EDAH12	2.7939	4.2658	1.4719	ZF-EDAH12	

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



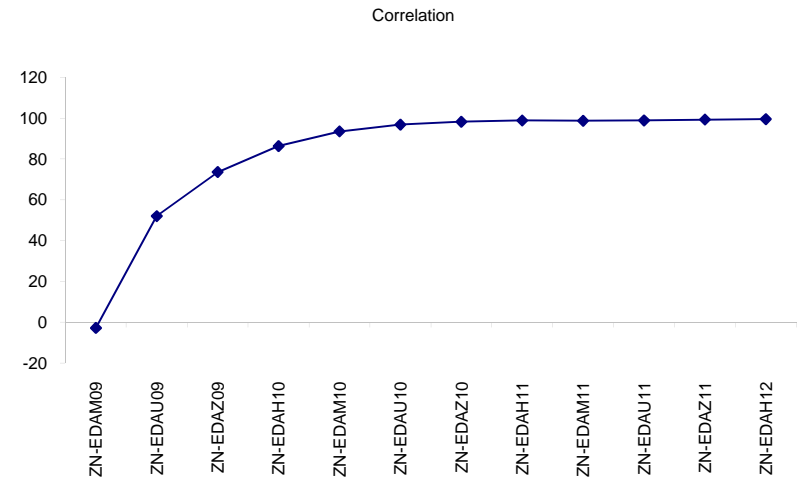
ZN				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	16.63	2.498	ZN-EDAM09	-3
EDAU09	16.72	2.415	ZN-EDAU09	52
EDAZ09	16.95	2.185	ZN-EDAZ09	74
EDAH10	17.11	2.020	ZN-EDAH10	86
EDAM10	17.41	1.725	ZN-EDAM10	93
EDAU10	17.73	1.405	ZN-EDAU10	97
EDAZ10	18.11	1.025	ZN-EDAZ10	98
EDAH11	18.44	0.690	ZN-EDAH11	99
EDAM11	18.82	0.315	ZN-EDAM11	99
EDAU11	19.16	0.030	ZN-EDAU11	99
EDAZ11	19.52	0.385	ZN-EDAZ11	99
EDAH12	19.78	0.650	ZN-EDAH12	100

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	0.0322	5.8929	5.8607
EDAU09	0.2815	5.8929	5.6114
EDAZ09	0.5309	5.8929	5.3621
EDAH10	0.7802	5.8929	5.1127
EDAM10	1.0295	5.8929	4.8634
EDAU10	1.2788	5.8929	4.6141
EDAZ10	1.5281	5.8929	4.3648
EDAH11	1.7774	5.8929	4.1155
EDAM11	2.0267	5.8929	3.8662
EDAU11	2.2952	5.8929	3.5977
EDAZ11	2.5446	5.8929	3.3484
EDAH12	2.7939	5.8929	3.0990

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



	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	0.48	0.314	2y-EDAM09	-44
EDAU09	0.57	0.232	2y-EDAU09	-74
EDAZ09	0.80	0.002	2y-EDAZ09	-86
EDAH10	0.96	0.163	2y-EDAH10	-92
EDAM10	1.26	0.458	2y-EDAM10	-96
EDAU10	1.58	0.778	2y-EDAU10	-96
EDAZ10	1.96	1.158	2y-EDAZ10	-95
EDAH11	2.29	1.493	2y-EDAH11	-93
EDAM11	2.67	1.868	2y-EDAM11	-92
EDAU11	3.01	2.213	2y-EDAU11	-93
EDAZ11	3.37	2.568	2y-EDAZ11	-94
EDAH12	3.63	2.833	2y-EDAH12	-94

Price = Outright Decimal Price - Euro Contract Price

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

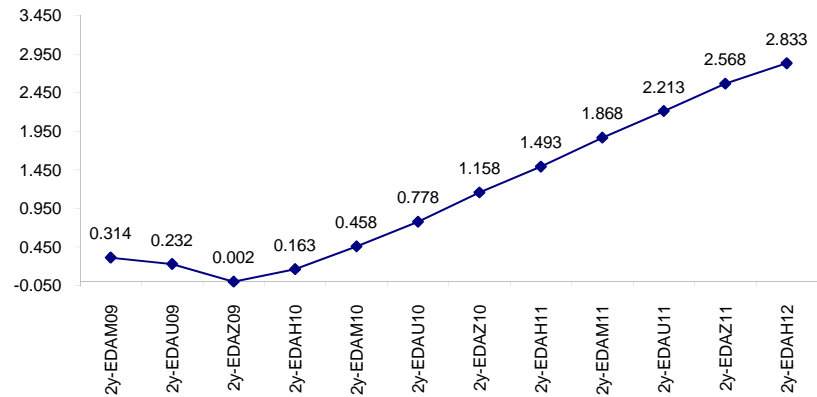
*Correlation = ED Correlation to Treasury Future over 10 days.

ED Duration as

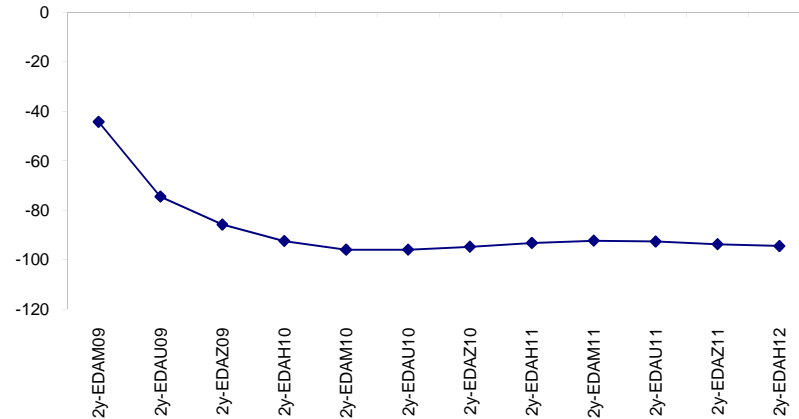
	Fraction of year	2Y Duration	Spread Duration	
EDAM09	0.0322	1.9667	1.9345	2y-EDAM09
EDAU09	0.2815	1.9667	1.6852	2y-EDAU09
EDAZ09	0.5309	1.9667	1.4359	2y-EDAZ09
EDAH10	0.7802	1.9667	1.1866	2y-EDAH10
EDAM10	1.0295	1.9667	0.9372	2y-EDAM10
EDAU10	1.2788	1.9667	0.6879	2y-EDAU10
EDAZ10	1.5281	1.9667	0.4386	2y-EDAZ10
EDAH11	1.7774	1.9667	0.1893	2y-EDAH11
EDAM11	2.0267	1.9667	-0.0600	2y-EDAM11
EDAU11	2.2952	1.9667	-0.3285	2y-EDAU11
EDAZ11	2.5446	1.9667	-0.5778	2y-EDAZ11
EDAH12	2.7939	1.9667	-0.8271	2y-EDAH12

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

ZT Yield - ED Yield



Correlation

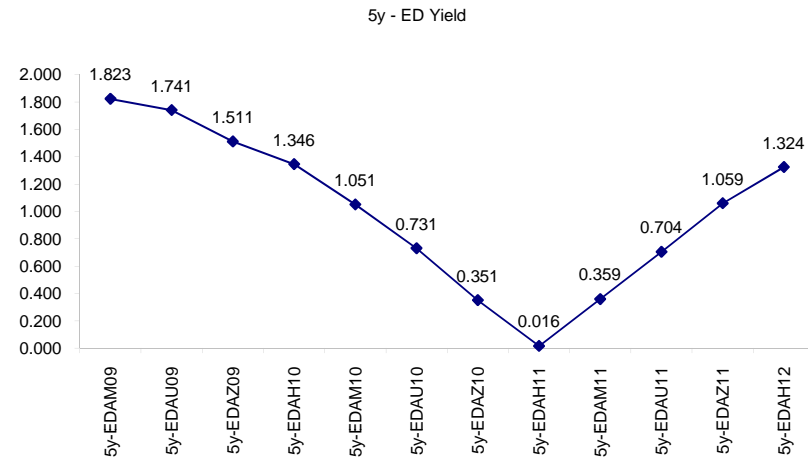


	5y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	-0.35	1.823	5y-EDAM09	-30
EDAU09	-0.26	1.741	5y-EDAU09	-69
EDAZ09	-0.03	1.511	5y-EDAZ09	-82
EDAH10	0.13	1.346	5y-EDAH10	-92
EDAM10	0.43	1.051	5y-EDAM10	-97
EDAU10	0.75	0.731	5y-EDAU10	-97
EDAZ10	1.13	0.351	5y-EDAZ10	-98
EDAH11	1.46	0.016	5y-EDAH11	-98
EDAM11	1.84	0.359	5y-EDAM11	-98
EDAU11	2.18	0.704	5y-EDAU11	-98
EDAZ11	2.54	1.059	5y-EDAZ11	-98
EDAH12	2.80	1.324	5y-EDAH12	-99

Price = Outright Decimal Price - Euro Contract Price

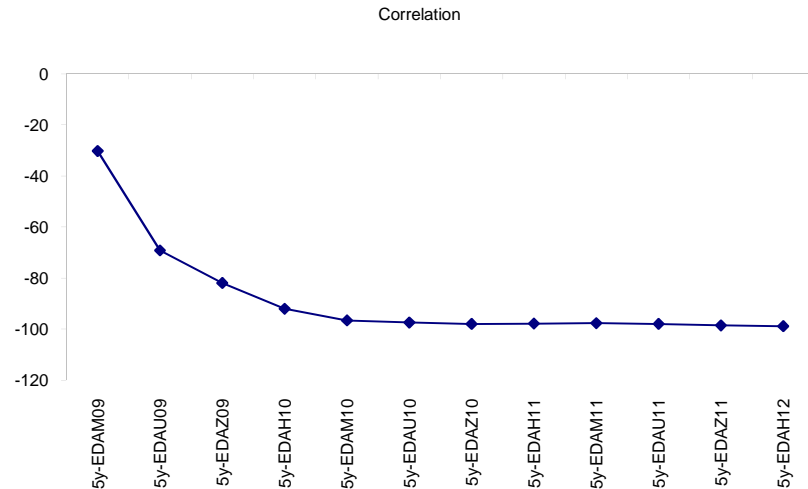
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year		5Y Duration	Spread Duration	
EDAM09	0.0322	4.6877	4.6555	5y-EDAM09	
EDAU09	0.2815	4.6877	4.4062	5y-EDAU09	
EDAZ09	0.5309	4.6877	4.1569	5y-EDAZ09	
EDAH10	0.7802	4.6877	3.9076	5y-EDAH10	
EDAM10	1.0295	4.6877	3.6582	5y-EDAM10	
EDAU10	1.2788	4.6877	3.4089	5y-EDAU10	
EDAZ10	1.5281	4.6877	3.1596	5y-EDAZ10	
EDAH11	1.7774	4.6877	2.9103	5y-EDAH11	
EDAM11	2.0267	4.6877	2.6610	5y-EDAM11	
EDAU11	2.2952	4.6877	2.3925	5y-EDAU11	
EDAZ11	2.5446	4.6877	2.1432	5y-EDAZ11	
EDAH12	2.7939	4.6877	1.8939	5y-EDAH12	

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

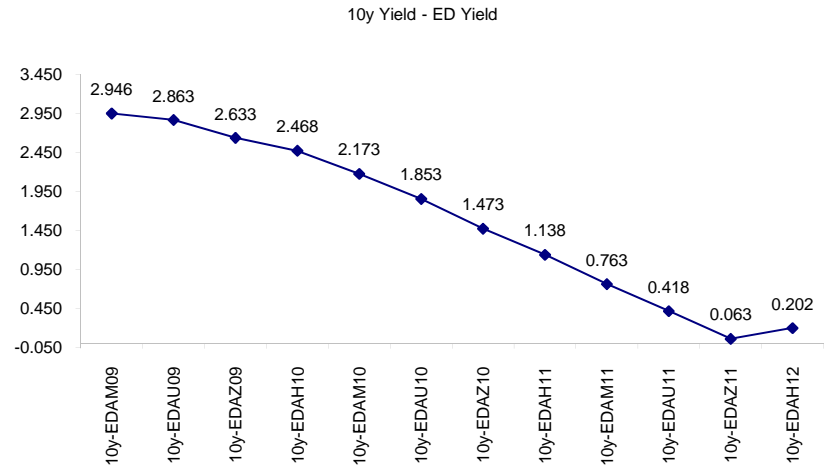


	10y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	-0.35	2.946	10y-EDAM09	-58
EDAU09	-0.26	2.863	10y-EDAU09	-85
EDAZ09	-0.03	2.633	10y-EDAZ09	-94
EDAH10	0.13	2.468	10y-EDAH10	-97
EDAM10	0.43	2.173	10y-EDAM10	-97
EDAU10	0.75	1.853	10y-EDAU10	-95
EDAZ10	1.13	1.473	10y-EDAZ10	-93
EDAH11	1.46	1.138	10y-EDAH11	-90
EDAM11	1.84	0.763	10y-EDAM11	-89
EDAU11	2.18	0.418	10y-EDAU11	-90
EDAZ11	2.54	0.063	10y-EDAZ11	-91
EDAH12	2.80	0.202	10y-EDAH12	-92

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	0.0322	8.4281	8.3958	10y-EDAM09
EDAU09	0.2815	8.4281	8.1465	10y-EDAU09
EDAZ09	0.5309	8.4281	7.8972	10y-EDAZ09
EDAH10	0.7802	8.4281	7.6479	10y-EDAH10
EDAM10	1.0295	8.4281	7.3986	10y-EDAM10
EDAU10	1.2788	8.4281	7.1493	10y-EDAU10
EDAZ10	1.5281	8.4281	6.8999	10y-EDAZ10
EDAH11	1.7774	8.4281	6.6506	10y-EDAH11
EDAM11	2.0267	8.4281	6.4013	10y-EDAM11
EDAU11	2.2952	8.4281	6.1328	10y-EDAU11
EDAZ11	2.5446	8.4281	5.8835	10y-EDAZ11
EDAH12	2.7939	8.4281	5.6342	10y-EDAH12

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

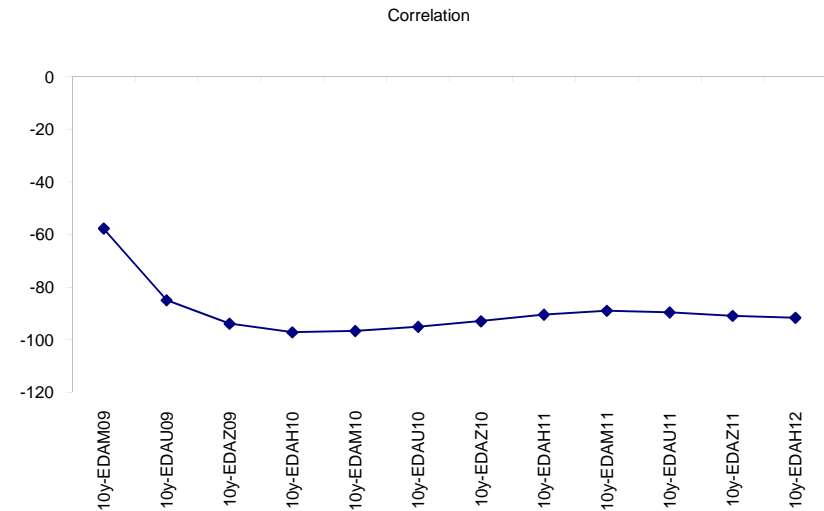


Chart values show the differences between ED contract and Treasury Futures contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.

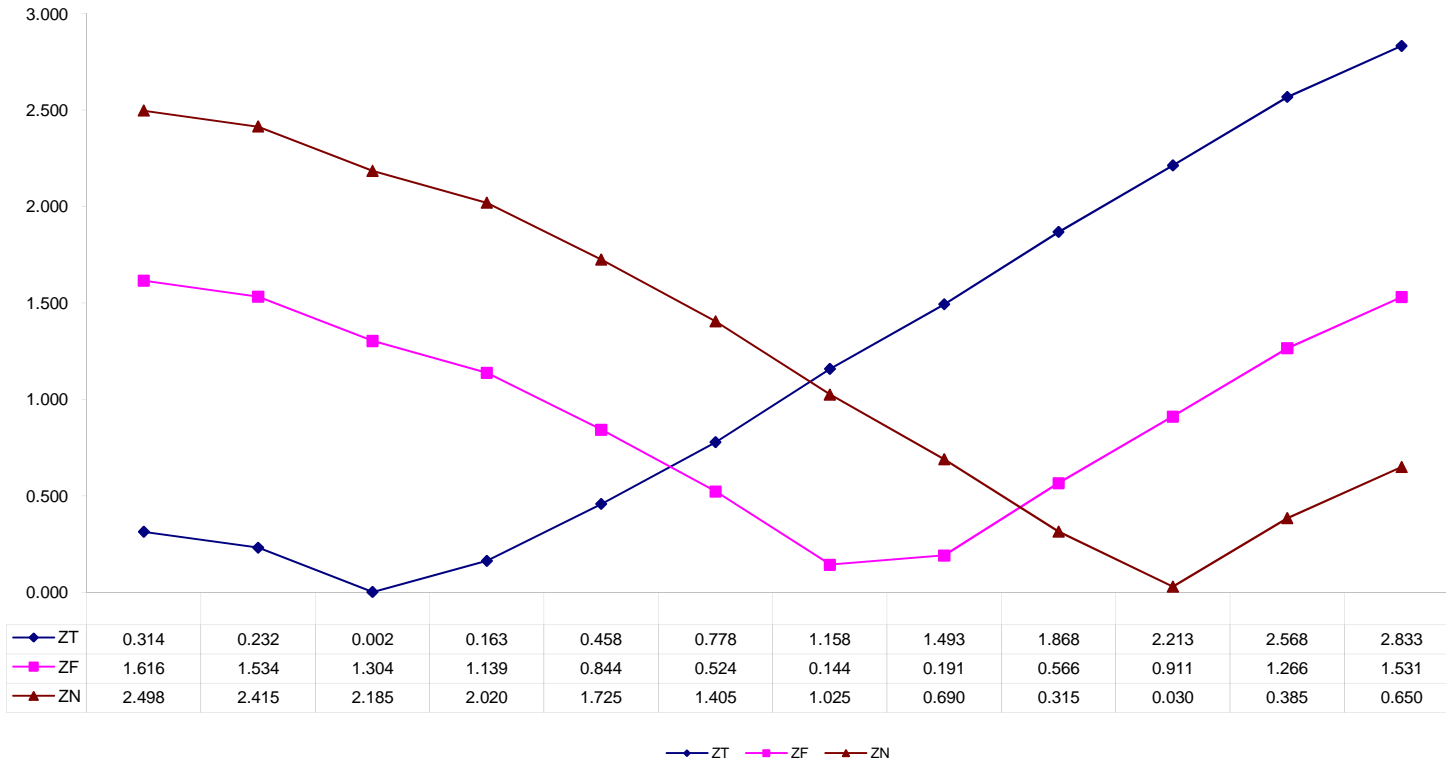
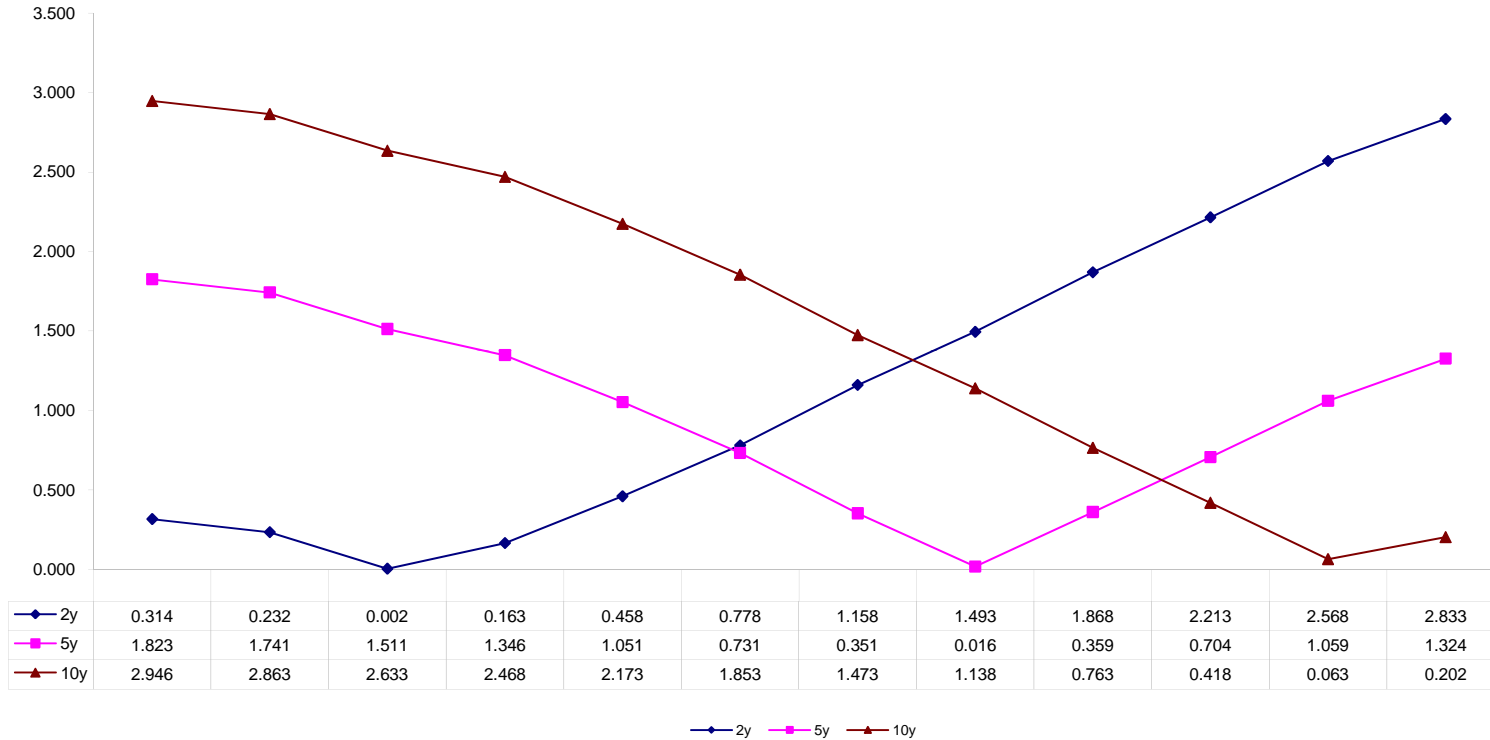
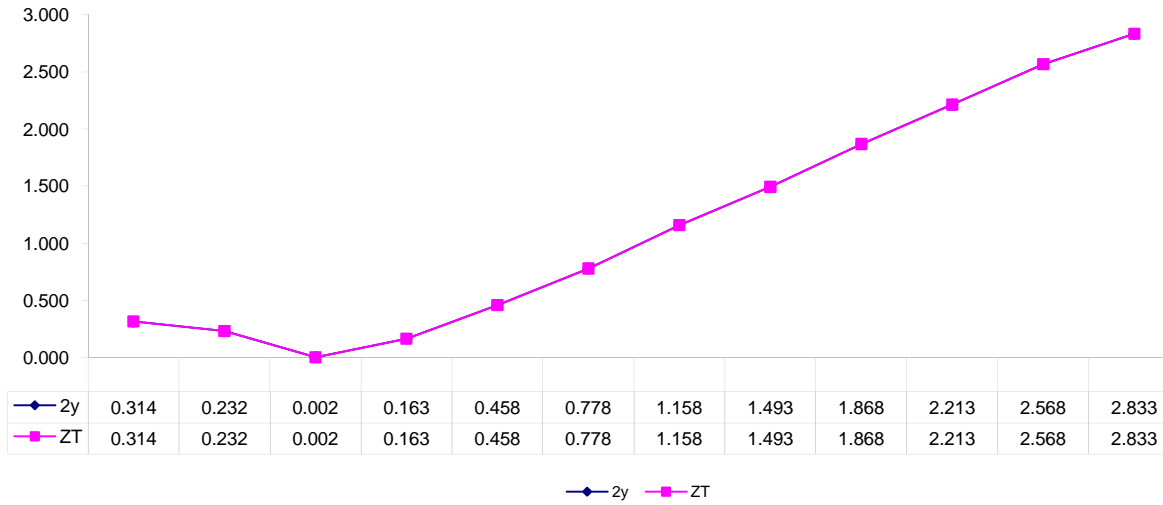
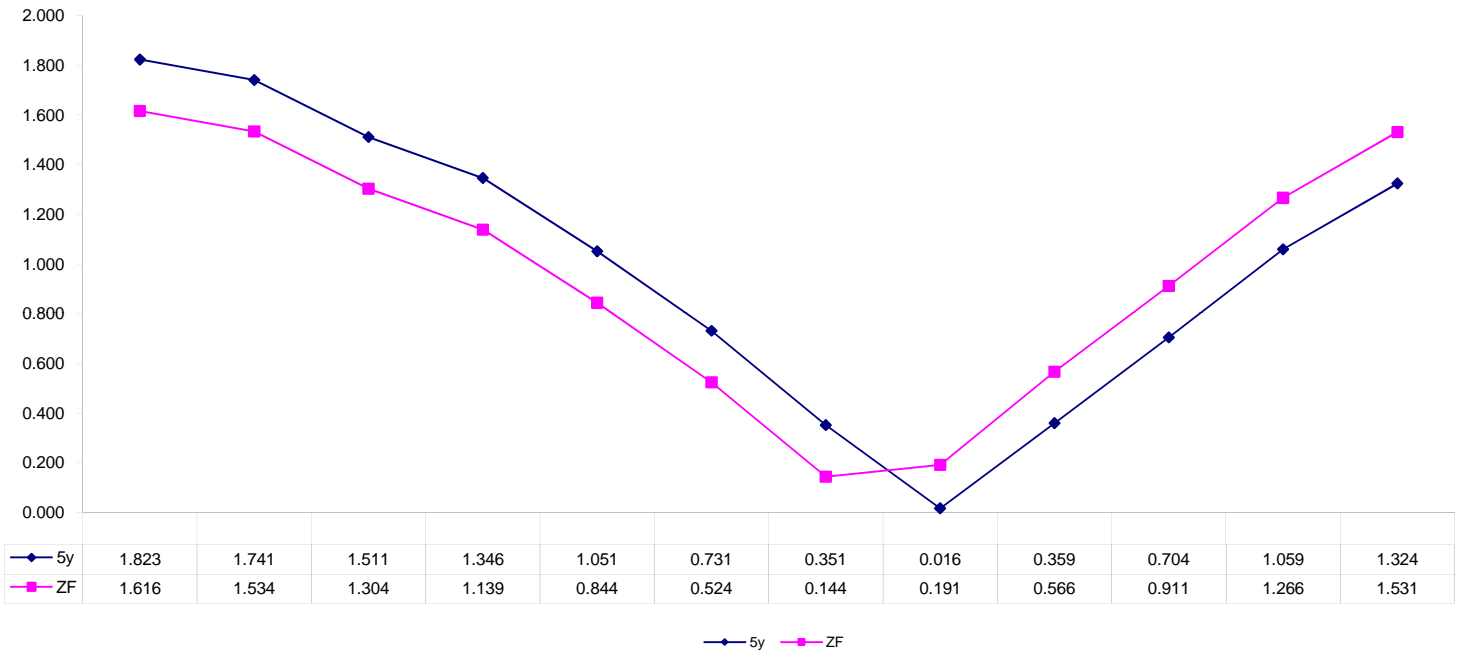


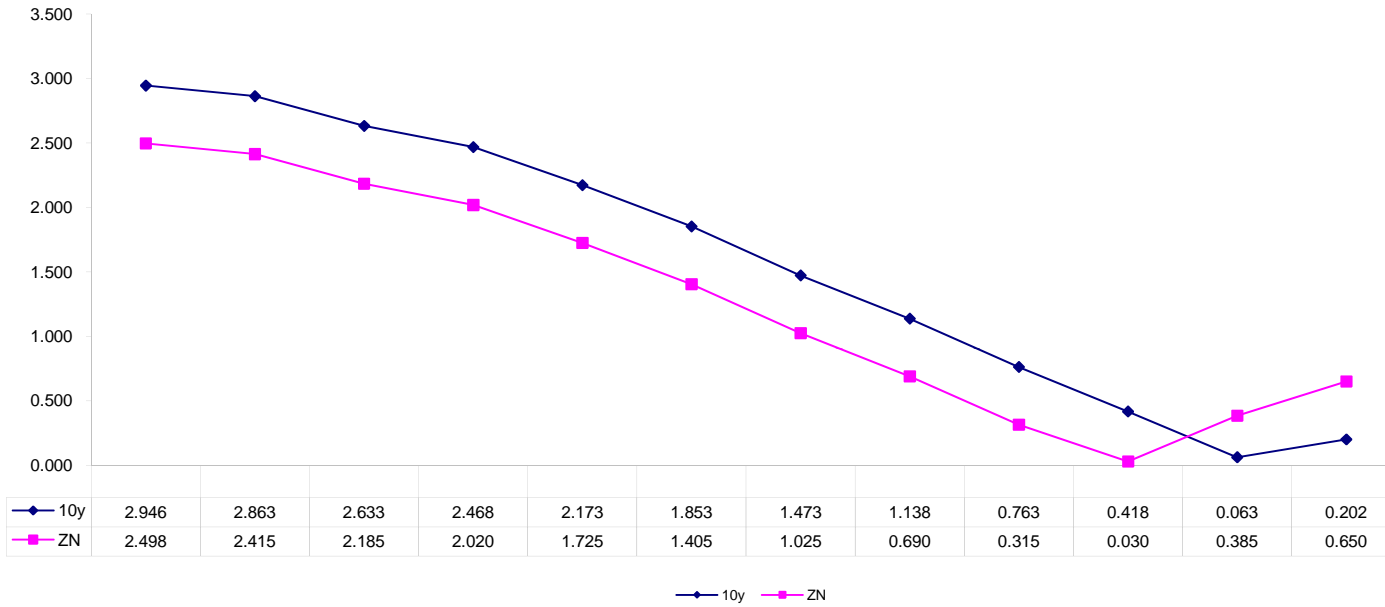
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



2y Basis TED Curve







	Last Yield	Net Last Yield	Last Price
White Pack	0.864	2.625	9914.9375
Red Pack	1.955	4.250	9808.1250
Green Pack	3.392	7.625	9668.2500
Blue Pack	4.415	10.625	9569.2500
Gold Pack	4.971	12.125	9515.6250

