

The Morning Email: TERM TEDS & Dirty TEDS

Table of Contents

- Pg 1** Quotes
- Pg 2** Dirty TED: ZT vs Eurodollar Contracts
- Pg 3** Dirty TED: ZF vs Eurodollar Contracts
- Pg 4** Dirty TED: ZN vs Eurodollar Contracts
- Pg 5** TERM TED: 2y vs Eurodollar Contracts
- Pg 6** TERM TED: 5y vs Eurodollar Contracts
- Pg 7** TERM TED: 10y vs Eurodollar Contracts
- Pg 8** Dirty TED Curve
- Pg 9** TED Curve
- Pg 10** 2y Basis TED Curve
- Pg 11** 5y Basis TED Curve
- Pg 12** 10y Basis TED Curve
- Pg 13** Packs

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	108.4375	108.1400	0.966	1.899
ZF	115.4906	115.1570	2.170	4.176
ZN	116.5938	116.1900	3.088	5.805
2y	100.3125	100.1000	0.957	1.952
5y	100.9750	100.3120	2.414	4.644
10y	96.4844	96.1550	3.551	8.341

Eurodollars (ED)						
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month	
EDAU09	99.4050	0.595	69	0.1884	SEP	
EDAZ09	99.1950	0.805	160	0.4377	DEC	White Pack
EDAH10	99.0000	1.000	251	0.6870	MAR	
EDAM10	98.7000	1.300	342	0.9364	JUN	
EDAU10	98.3650	1.635	433	1.1857	SEP	
EDAZ10	97.9850	2.015	524	1.4350	DEC	Red Pack
EDAH11	97.6400	2.360	615	1.6843	MAR	
EDAM11	97.2850	2.715	706	1.9336	JUN	
EDAU11	96.9600	3.040	804	2.2021	SEP	
EDAZ11	96.6550	3.345	895	2.4514	DEC	Green Pack
EDAH12	96.4350	3.565	986	2.7007	MAR	
EDAM12	96.2300	3.770	1,077	2.9501	JUN	
EDAU12	96.0550	3.945	1,168	3.1994	SEP	
EDAZ12	95.8800	4.120	1,259	3.4487	DEC	Blue Pack
EDAH13	95.7700	4.230	1,350	3.6980	MAR	
EDAM13	95.6350	4.365	1,441	3.9473	JUN	
EDAU13	95.5200	4.480	1,532	4.1966	SEP	
EDAZ13	95.3750	4.625	1,623	4.4459	DEC	Gold Pack
EDAH14	95.2950	4.705	1,714	4.6953	MAR	
EDAM14	95.2150	4.785	1,805	4.9446	JUN	

	Last Yield	Net Yield	Last Price	
White Pack	0.940	-1.000	9907.50	
Red Pack	2.224	-2.000	9781.88	Pack Prices
Green Pack	3.508	-2.500	9657.00	
Blue Pack	4.267	-2.375	9583.50	
Gold Pack	4.769	-2.875	9535.13	

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:

Jan-00 Regression
Jan-00 Engineered
Jan-00 Strip with and without Stubs
Jan-00 Convexity Bias
Jan-00 Weighted
Jan-00 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.

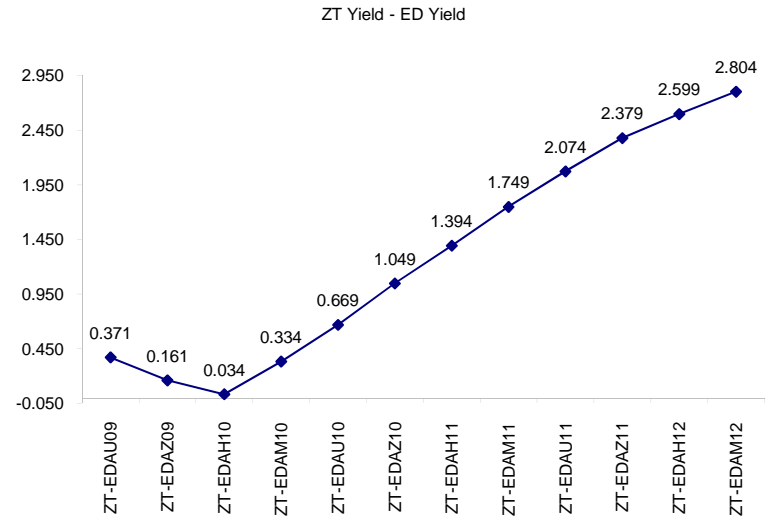
jgoulding@ghco.com

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.

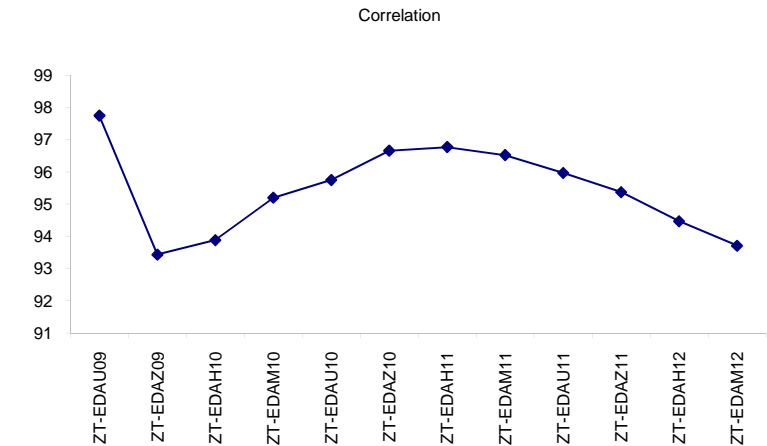
ZT				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	9.03	0.371	ZT-EDAU09	98
EDAZ09	9.24	0.161	ZT-EDAZ09	93
EDAH10	9.44	0.034	ZT-EDAH10	94
EDAM10	9.74	0.334	ZT-EDAM10	95
EDAU10	10.07	0.669	ZT-EDAU10	96
EDAZ10	10.45	1.049	ZT-EDAZ10	97
EDAH11	10.80	1.394	ZT-EDAH11	97
EDAM11	11.15	1.749	ZT-EDAM11	97
EDAU11	11.48	2.074	ZT-EDAU11	96
EDAZ11	11.78	2.379	ZT-EDAZ11	95
EDAH12	12.00	2.599	ZT-EDAH12	94
EDAM12	12.21	2.804	ZT-EDAM12	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				
	Fraction of year	ZT Duration	Spread Duration	
EDAU09	0.1884	1.8986	1.7102	ZT-EDAU09
EDAZ09	0.4377	1.8986	1.4609	ZT-EDAZ09
EDAH10	0.6870	1.8986	1.2116	ZT-EDAH10
EDAM10	0.9364	1.8986	0.9623	ZT-EDAM10
EDAU10	1.1857	1.8986	0.7129	ZT-EDAU10
EDAZ10	1.4350	1.8986	0.4636	ZT-EDAZ10
EDAH11	1.6843	1.8986	0.2143	ZT-EDAH11
EDAM11	1.9336	1.8986	-0.0350	ZT-EDAM11
EDAU11	2.2021	1.8986	-0.3035	ZT-EDAU11
EDAZ11	2.4514	1.8986	-0.5528	ZT-EDAZ11
EDAH12	2.7007	1.8986	-0.8021	ZT-EDAH12
EDAM12	2.9501	1.8986	-1.0514	ZT-EDAM12

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

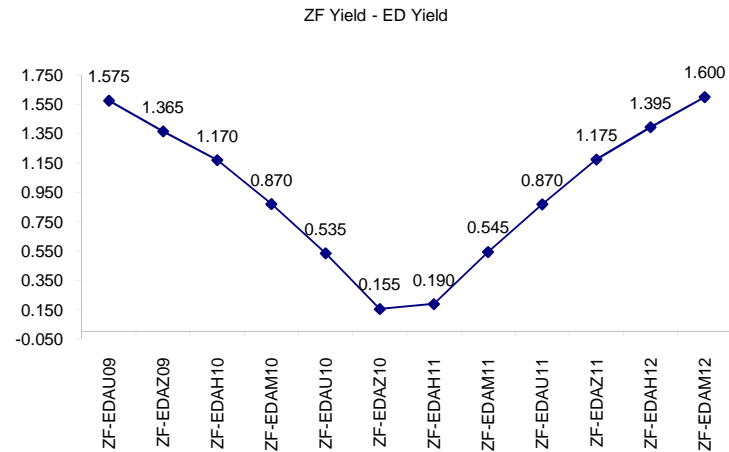


	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	16.09	1.575	ZF-EDAU09	97
EDAZ09	16.30	1.365	ZF-EDAZ09	92
EDAH10	16.49	1.170	ZF-EDAH10	93
EDAM10	16.79	0.870	ZF-EDAM10	95
EDAU10	17.13	0.535	ZF-EDAU10	96
EDAZ10	17.51	0.155	ZF-EDAZ10	97
EDAH11	17.85	0.190	ZF-EDAH11	98
EDAM11	18.21	0.545	ZF-EDAM11	99
EDAU11	18.53	0.870	ZF-EDAU11	99
EDAZ11	18.84	1.175	ZF-EDAZ11	99
EDAH12	19.06	1.395	ZF-EDAH12	98
EDAM12	19.26	1.600	ZF-EDAM12	98

Price = Outright Decimal Price - Euro Contract Price

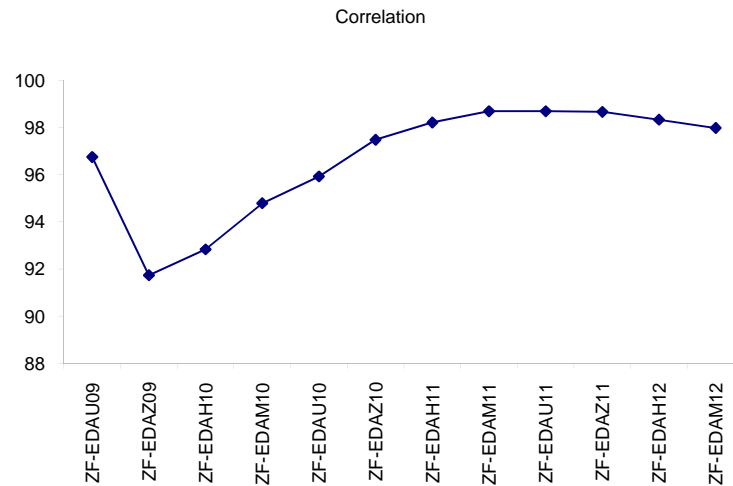
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year		ZF Duration	Spread Duration	
EDAU09	0.1884	4.1759	3.9875	ZF-EDAU09	
EDAZ09	0.4377	4.1759	3.7382	ZF-EDAZ09	
EDAH10	0.6870	4.1759	3.4889	ZF-EDAH10	
EDAM10	0.9364	4.1759	3.2396	ZF-EDAM10	
EDAU10	1.1857	4.1759	2.9902	ZF-EDAU10	
EDAZ10	1.4350	4.1759	2.7409	ZF-EDAZ10	
EDAH11	1.6843	4.1759	2.4916	ZF-EDAH11	
EDAM11	1.9336	4.1759	2.2423	ZF-EDAM11	
EDAU11	2.2021	4.1759	1.9738	ZF-EDAU11	
EDAZ11	2.4514	4.1759	1.7245	ZF-EDAZ11	
EDAH12	2.7007	4.1759	1.4752	ZF-EDAH12	
EDAM12	2.9501	4.1759	1.2259	ZF-EDAM12	

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

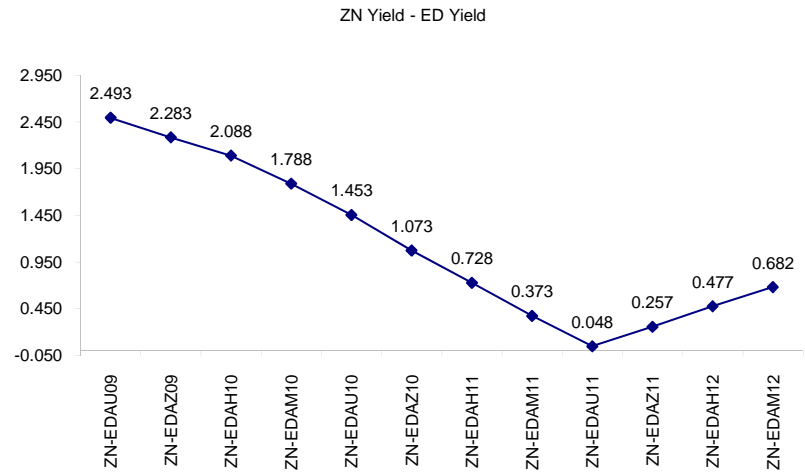


	ZN			Correlation* (percent)
	Spread Price	Spread Yield	Spread Name	
EDAU09	17.19	2.493	ZN-EDAU09	87
EDAZ09	17.40	2.283	ZN-EDAZ09	83
EDAH10	17.59	2.088	ZN-EDAH10	84
EDAM10	17.89	1.788	ZN-EDAM10	86
EDAU10	18.23	1.453	ZN-EDAU10	87
EDAZ10	18.61	1.073	ZN-EDAZ10	90
EDAH11	18.95	0.728	ZN-EDAH11	91
EDAM11	19.31	0.373	ZN-EDAM11	93
EDAU11	19.63	0.048	ZN-EDAU11	94
EDAZ11	19.94	0.257	ZN-EDAZ11	95
EDAH12	20.16	0.477	ZN-EDAH12	96
EDAM12	20.36	0.682	ZN-EDAM12	97

Price = Outright Decimal Price - Euro Contract Price

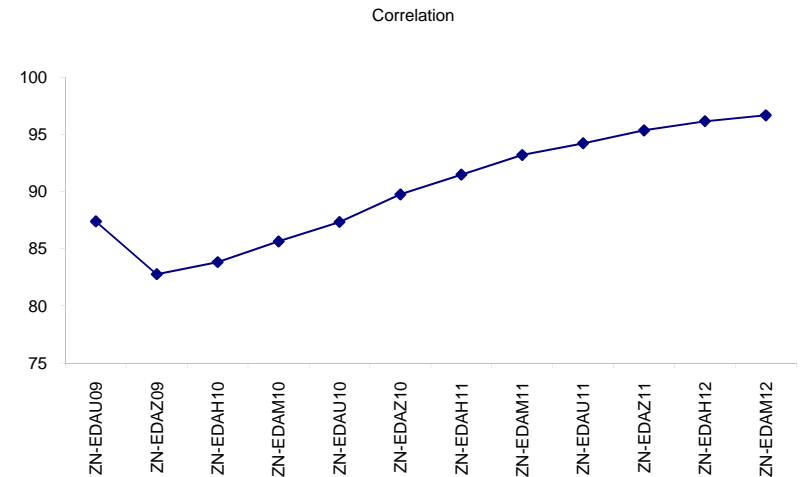
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as			ZN Spread Duration
	Fraction of year	ZN Duration	Spread Duration	
EDAU09	0.1884	5.8045	5.6161	ZN-EDAU09
EDAZ09	0.4377	5.8045	5.3668	ZN-EDAZ09
EDAH10	0.6870	5.8045	5.1175	ZN-EDAH10
EDAM10	0.9364	5.8045	4.8682	ZN-EDAM10
EDAU10	1.1857	5.8045	4.6189	ZN-EDAU10
EDAZ10	1.4350	5.8045	4.3696	ZN-EDAZ10
EDAH11	1.6843	5.8045	4.1202	ZN-EDAH11
EDAM11	1.9336	5.8045	3.8709	ZN-EDAM11
EDAU11	2.2021	5.8045	3.6024	ZN-EDAU11
EDAZ11	2.4514	5.8045	3.3531	ZN-EDAZ11
EDAH12	2.7007	5.8045	3.1038	ZN-EDAH12
EDAM12	2.9501	5.8045	2.8545	ZN-EDAM12

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



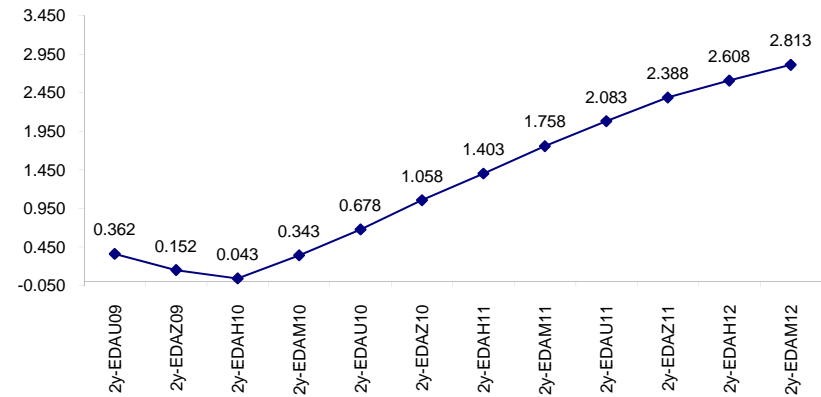
	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	0.91	0.362	2y-EDAU09	-88
EDAZ09	1.12	0.152	2y-EDAZ09	-88
EDAH10	1.31	0.043	2y-EDAH10	-89
EDAM10	1.61	0.343	2y-EDAM10	-90
EDAU10	1.95	0.678	2y-EDAU10	-90
EDAZ10	2.33	1.058	2y-EDAZ10	-90
EDAH11	2.67	1.403	2y-EDAH11	-89
EDAM11	3.03	1.758	2y-EDAM11	-88
EDAU11	3.35	2.083	2y-EDAU11	-86
EDAZ11	3.66	2.388	2y-EDAZ11	-84
EDAH12	3.88	2.608	2y-EDAH12	-82
EDAM12	4.08	2.813	2y-EDAM12	-81

Price = Outright Decimal Price - Euro Contract Price

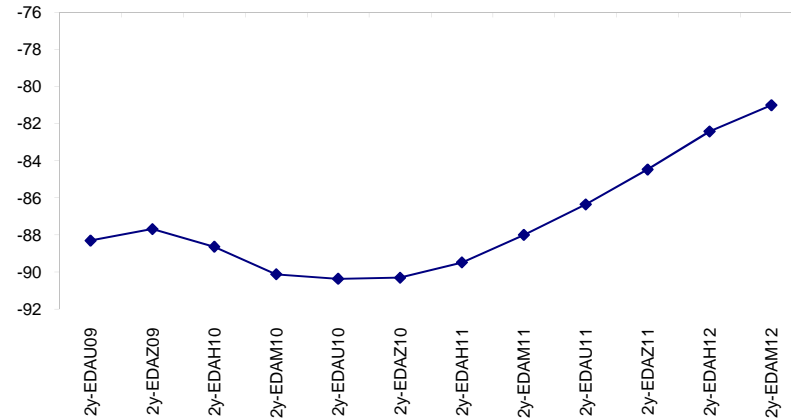
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

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

ZT Yield - ED Yield



Correlation



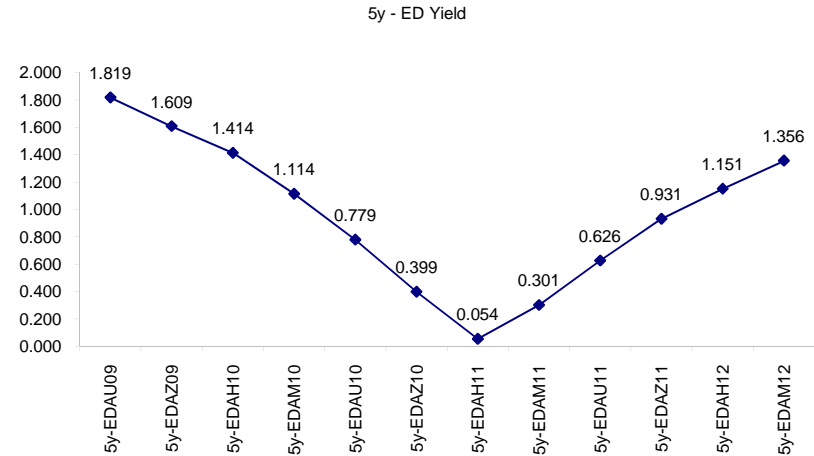
ED Duration as

	Fraction of year	2Y Duration	Spread Duration	
EDAU09	0.1884	1.9522	1.7638	2y-EDAU09
EDAZ09	0.4377	1.9522	1.5145	2y-EDAZ09
EDAH10	0.6870	1.9522	1.2652	2y-EDAH10
EDAM10	0.9364	1.9522	1.0159	2y-EDAM10
EDAU10	1.1857	1.9522	0.7666	2y-EDAU10
EDAZ10	1.4350	1.9522	0.5173	2y-EDAZ10
EDAH11	1.6843	1.9522	0.2679	2y-EDAH11
EDAM11	1.9336	1.9522	0.0186	2y-EDAM11
EDAU11	2.2021	1.9522	-0.2499	2y-EDAU11
EDAZ11	2.4514	1.9522	-0.4992	2y-EDAZ11
EDAH12	2.7007	1.9522	-0.7485	2y-EDAH12
EDAM12	2.9501	1.9522	-0.9978	2y-EDAM12

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

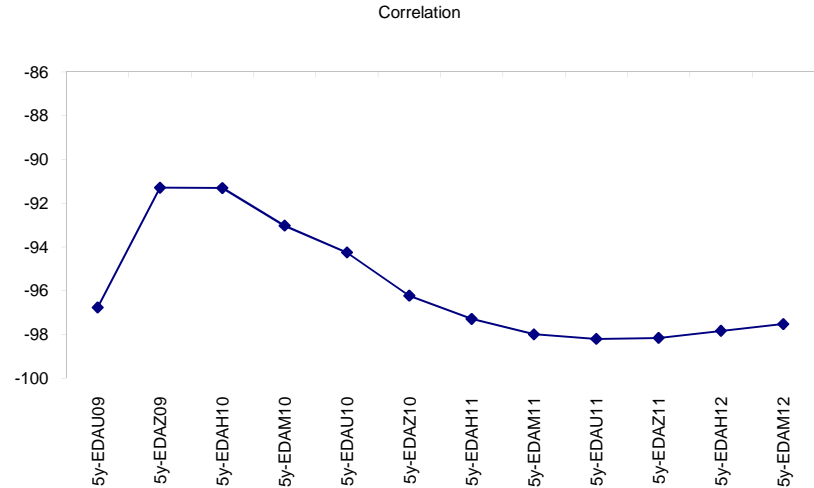
5y				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	1.57	1.819	5y-EDAU09	-97
EDAZ09	1.78	1.609	5y-EDAZ09	-91
EDAH10	1.97	1.414	5y-EDAH10	-91
EDAM10	2.27	1.114	5y-EDAM10	-93
EDAU10	2.61	0.779	5y-EDAU10	-94
EDAZ10	2.99	0.399	5y-EDAZ10	-96
EDAH11	3.33	0.054	5y-EDAH11	-97
EDAM11	3.69	0.301	5y-EDAM11	-98
EDAU11	4.01	0.626	5y-EDAU11	-98
EDAZ11	4.32	0.931	5y-EDAZ11	-98
EDAH12	4.54	1.151	5y-EDAH12	-98
EDAM12	4.74	1.356	5y-EDAM12	-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



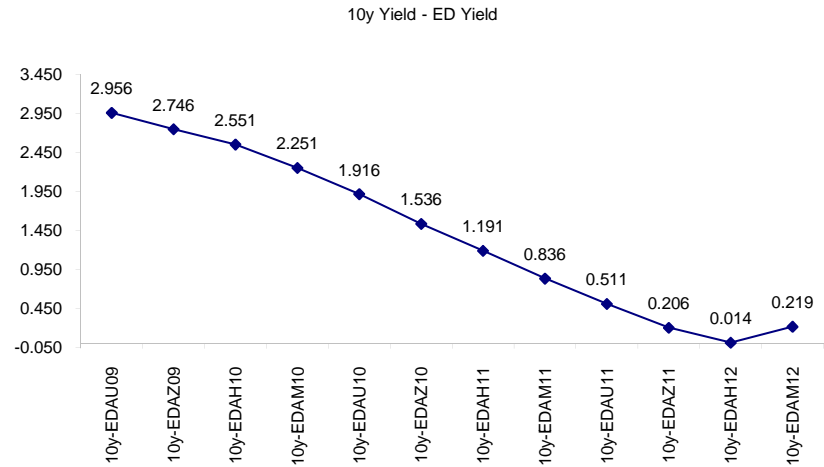
	ED Duration as		Spread Duration	
	Fraction of year	5Y Duration		
EDAU09	0.1884	4.6439	4.4555	5y-EDAU09
EDAZ09	0.4377	4.6439	4.2062	5y-EDAZ09
EDAH10	0.6870	4.6439	3.9569	5y-EDAH10
EDAM10	0.9364	4.6439	3.7075	5y-EDAM10
EDAU10	1.1857	4.6439	3.4582	5y-EDAU10
EDAZ10	1.4350	4.6439	3.2089	5y-EDAZ10
EDAH11	1.6843	4.6439	2.9596	5y-EDAH11
EDAM11	1.9336	4.6439	2.7103	5y-EDAM11
EDAU11	2.2021	4.6439	2.4418	5y-EDAU11
EDAZ11	2.4514	4.6439	2.1925	5y-EDAZ11
EDAH12	2.7007	4.6439	1.9432	5y-EDAH12
EDAM12	2.9501	4.6439	1.6938	5y-EDAM12

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



10y				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	1.57	2.956	10y-EDAU09	-69
EDAZ09	1.78	2.746	10y-EDAZ09	-62
EDAH10	1.97	2.551	10y-EDAH10	-62
EDAM10	2.27	2.251	10y-EDAM10	-63
EDAU10	2.61	1.916	10y-EDAU10	-65
EDAZ10	2.99	1.536	10y-EDAZ10	-69
EDAH11	3.33	1.191	10y-EDAH11	-73
EDAM11	3.69	0.836	10y-EDAM11	-76
EDAU11	4.01	0.511	10y-EDAU11	-79
EDAZ11	4.32	0.206	10y-EDAZ11	-81
EDAH12	4.54	0.014	10y-EDAH12	-83
EDAM12	4.74	0.219	10y-EDAM12	-85

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	
EDAU09	0.1884	8.3407	8.1523	10y-EDAU09		
EDAZ09	0.4377	8.3407	7.9030	10y-EDAZ09		
EDAH10	0.6870	8.3407	7.6537	10y-EDAH10		
EDAM10	0.9364	8.3407	7.4044	10y-EDAM10		
EDAU10	1.1857	8.3407	7.1551	10y-EDAU10		
EDAZ10	1.4350	8.3407	6.9057	10y-EDAZ10		
EDAH11	1.6843	8.3407	6.6564	10y-EDAH11		
EDAM11	1.9336	8.3407	6.4071	10y-EDAM11		
EDAU11	2.2021	8.3407	6.1386	10y-EDAU11		
EDAZ11	2.4514	8.3407	5.8893	10y-EDAZ11		
EDAH12	2.7007	8.3407	5.6400	10y-EDAH12		
EDAM12	2.9501	8.3407	5.3907	10y-EDAM12		

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

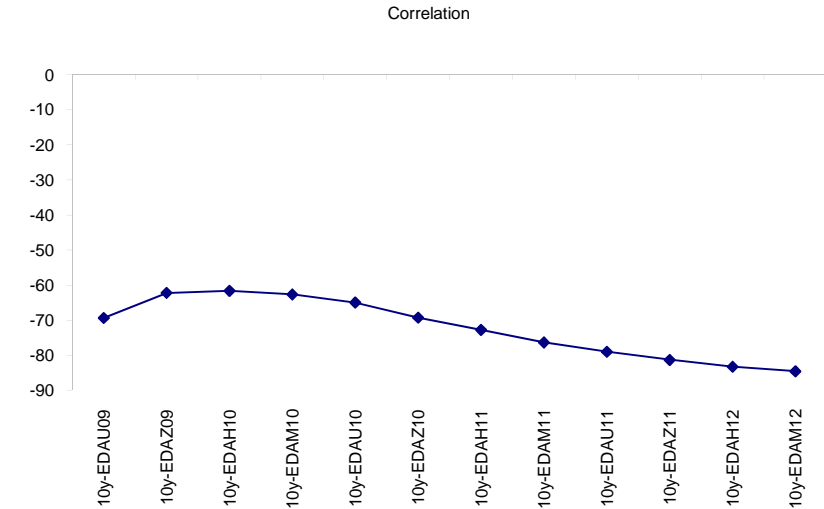


Chart values show the differences between ED contract and Treasury Futures contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.

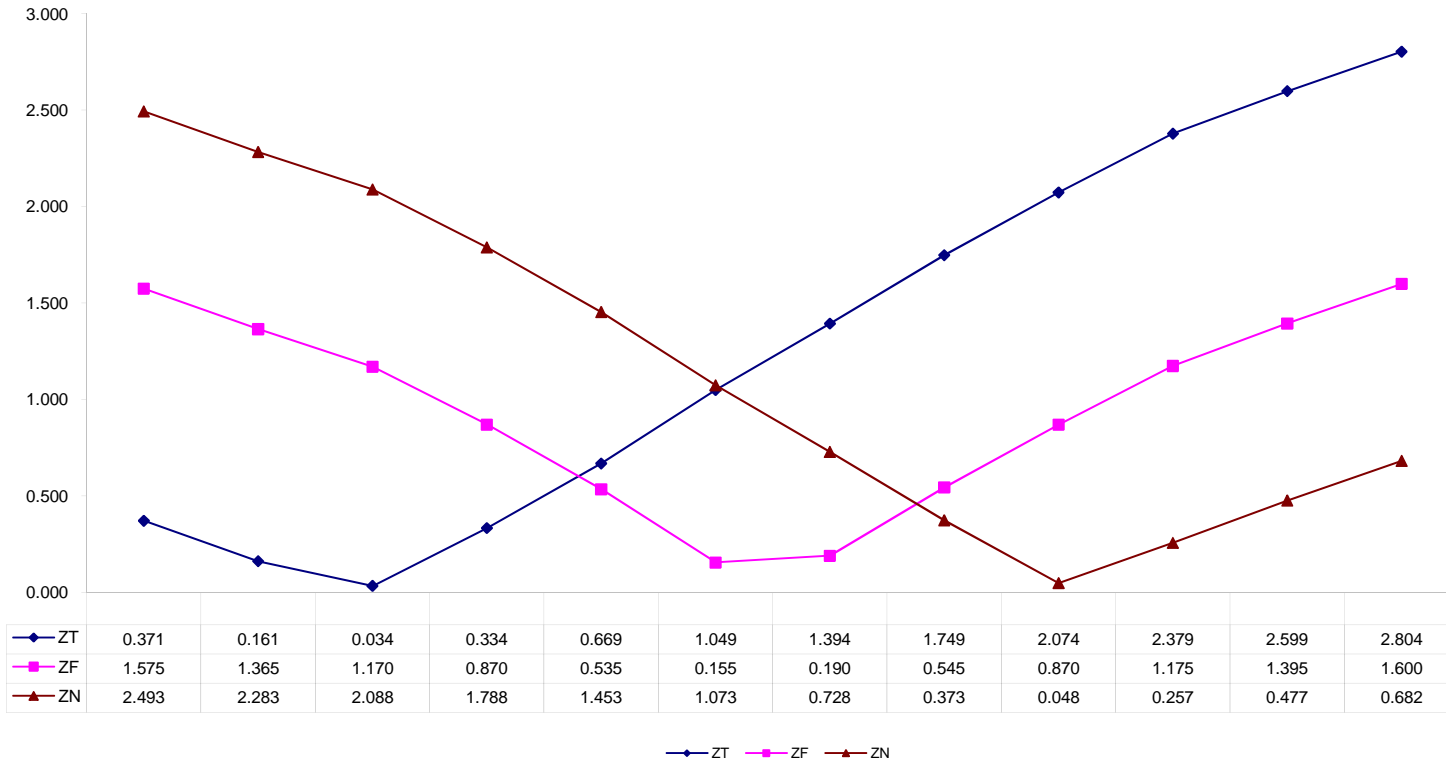
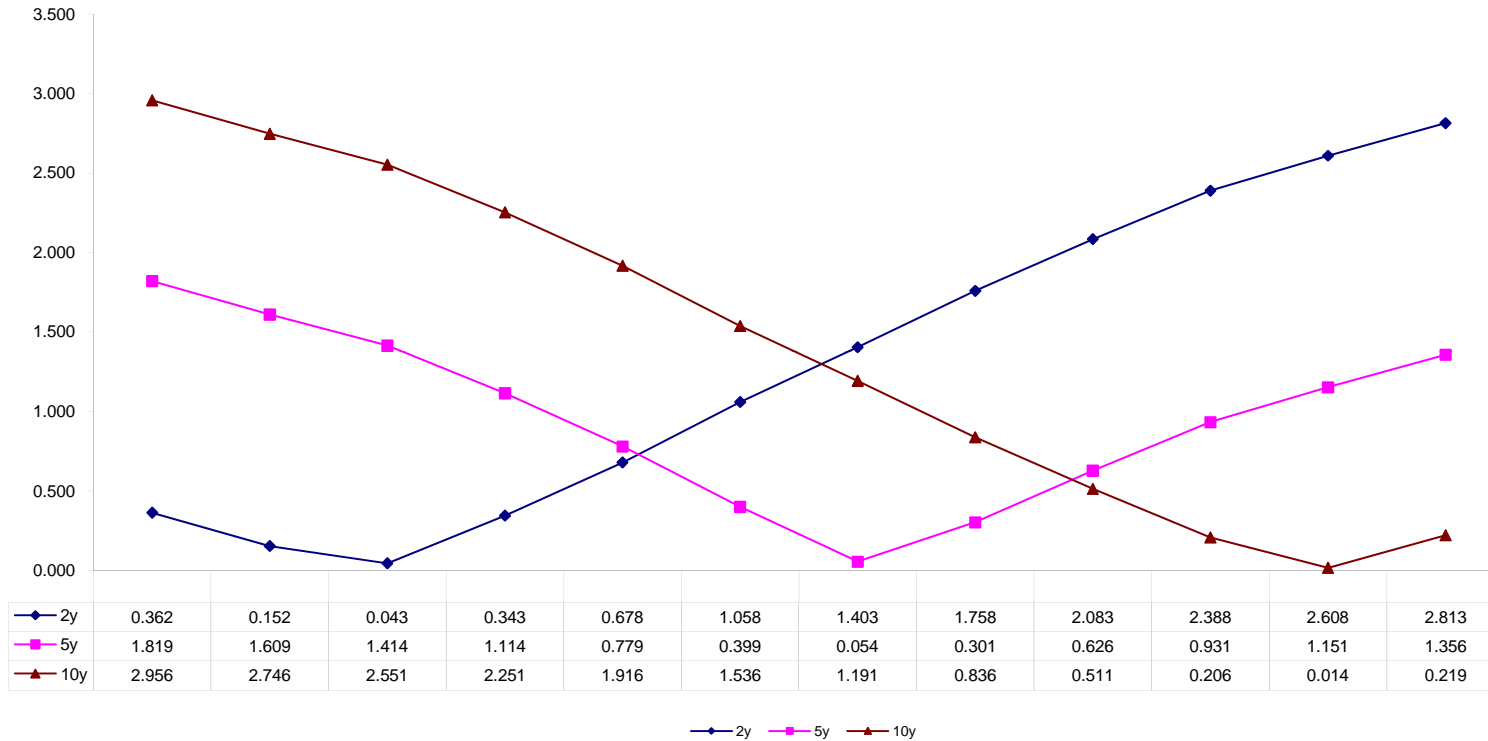
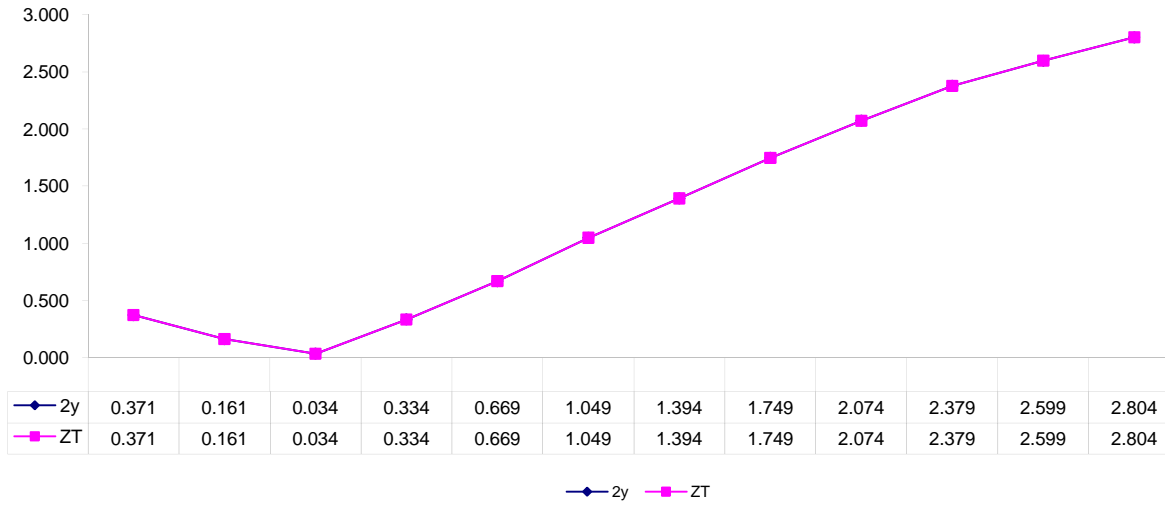
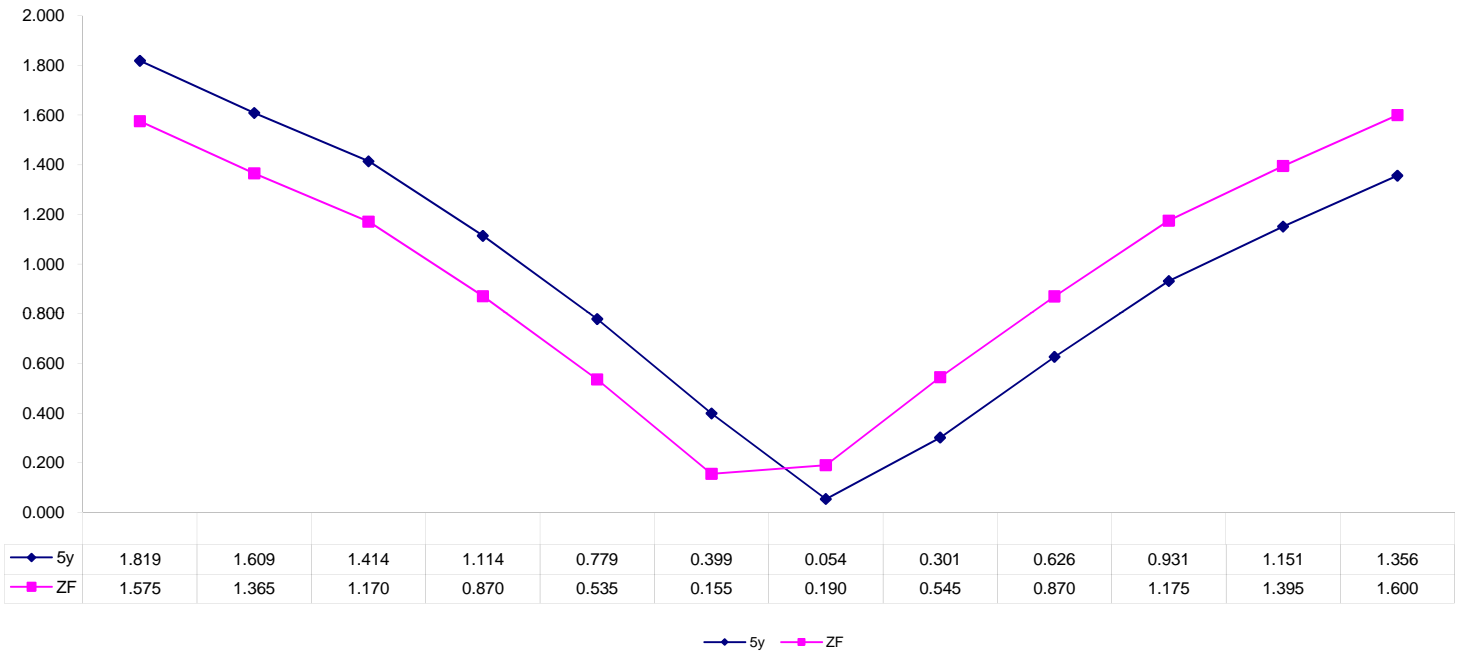


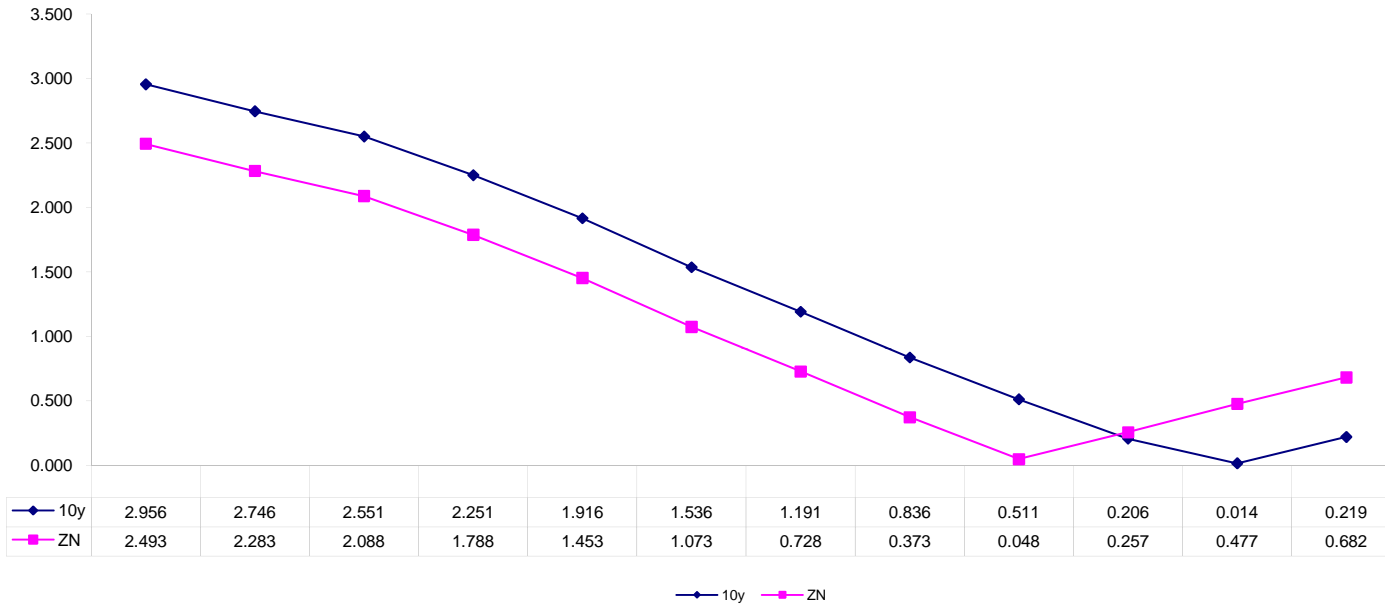
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



2y Basis TED Curve







	Last Yield	Net Last Yield	Last Price
White Pack	0.940	-1.000	9907.5000
Red Pack	2.224	-2.000	9781.8750
Green Pack	3.508	-2.500	9657.0000
Blue Pack	4.267	-2.375	9583.5000
Gold Pack	4.769	-2.875	9535.1250

