

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	108.4688	108.1500	0.946	1.877
ZF	115.8188	115.2620	2.160	4.155
ZN	117.4688	117.1500	2.988	5.789
2y	100.3438	100.1100	0.943	1.931
5y	101.1875	101.0600	2.366	4.623
10y	97.0469	97.0150	3.482	8.326

Eurodollars (ED)						
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month	
EDAU09	99.4200	0.580	61	0.1665	SEP	
EDAZ09	99.2000	0.800	152	0.4158	DEC	White Pack
EDAH10	98.9950	1.005	243	0.6651	MAR	Pack
EDAM10	98.6900	1.310	334	0.9144	JUN	
EDAU10	98.3500	1.650	425	1.1637	SEP	
EDAZ10	97.9600	2.040	516	1.4130	DEC	Red Pack
EDAH11	97.6000	2.400	607	1.6624	MAR	Pack
EDAM11	97.2450	2.755	698	1.9117	JUN	
EDAU11	96.9250	3.075	796	2.1802	SEP	
EDAZ11	96.6250	3.375	887	2.4295	DEC	Green Pack
EDAH12	96.4050	3.595	978	2.6788	MAR	Pack
EDAM12	96.2150	3.785	1,069	2.9281	JUN	
EDAU12	96.0450	3.955	1,160	3.1774	SEP	
EDAZ12	95.8850	4.115	1,251	3.4267	DEC	Blue Pack
EDAH13	95.8100	4.190	1,342	3.6761	MAR	Pack
EDAM13	95.6750	4.325	1,433	3.9254	JUN	
EDAU13	95.6050	4.395	1,524	4.1747	SEP	
EDAZ13	95.4450	4.555	1,615	4.4240	DEC	Gold Pack
EDAH14	95.3950	4.605	1,706	4.6733	MAR	Pack
EDAM14	95.2900	4.710	1,797	4.9226	JUN	

	Last Yield	Net Yield	Last Price	
White Pack	0.939	-0.250	9907.63	
Red Pack	2.255	-2.500	9778.88	Pack Prices
Green Pack	3.536	-2.625	9654.25	
Blue Pack	4.248	-4.000	9585.38	
Gold Pack	4.683	-2.750	9543.38	

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.

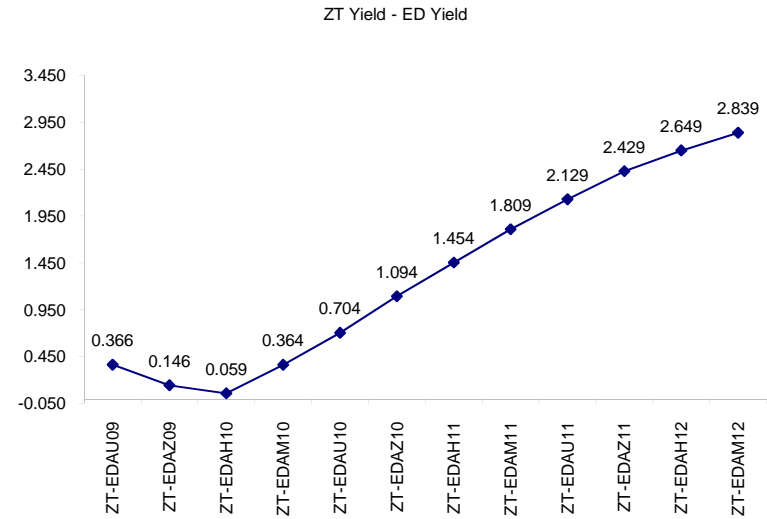
jgoulding@ghco.com

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.

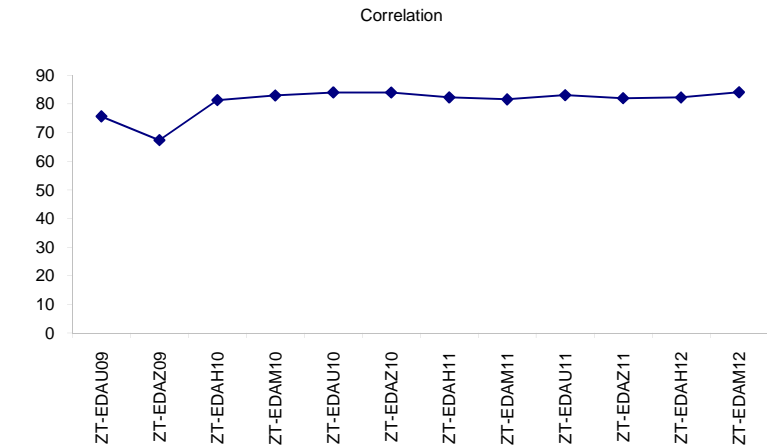
	ZT			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	9.05	0.366	ZT-EDAU09	76
EDAZ09	9.27	0.146	ZT-EDAZ09	67
EDAH10	9.47	0.059	ZT-EDAH10	81
EDAM10	9.78	0.364	ZT-EDAM10	83
EDAU10	10.12	0.704	ZT-EDAU10	84
EDAZ10	10.51	1.094	ZT-EDAZ10	84
EDAH11	10.87	1.454	ZT-EDAH11	82
EDAM11	11.22	1.809	ZT-EDAM11	82
EDAU11	11.54	2.129	ZT-EDAU11	83
EDAZ11	11.84	2.429	ZT-EDAZ11	82
EDAH12	12.06	2.649	ZT-EDAH12	82
EDAM12	12.25	2.839	ZT-EDAM12	84

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	
EDAU09	0.1665	1.8772	1.7107	ZT-EDAU09		
EDAZ09	0.4158	1.8772	1.4614	ZT-EDAZ09		
EDAH10	0.6651	1.8772	1.2121	ZT-EDAH10		
EDAM10	0.9144	1.8772	0.9628	ZT-EDAM10		
EDAU10	1.1637	1.8772	0.7135	ZT-EDAU10		
EDAZ10	1.4130	1.8772	0.4641	ZT-EDAZ10		
EDAH11	1.6624	1.8772	0.2148	ZT-EDAH11		
EDAM11	1.9117	1.8772	-0.0345	ZT-EDAM11		
EDAU11	2.1802	1.8772	-0.3030	ZT-EDAU11		
EDAZ11	2.4295	1.8772	-0.5523	ZT-EDAZ11		
EDAH12	2.6788	1.8772	-0.8016	ZT-EDAH12		
EDAM12	2.9281	1.8772	-1.0509	ZT-EDAM12		

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

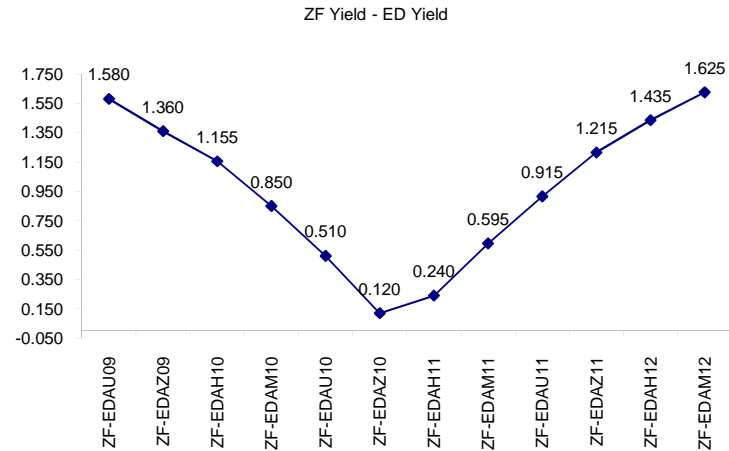


	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	16.40	1.580	ZF-EDAU09	81
EDAZ09	16.62	1.360	ZF-EDAZ09	72
EDAH10	16.82	1.155	ZF-EDAH10	83
EDAM10	17.13	0.850	ZF-EDAM10	86
EDAU10	17.47	0.510	ZF-EDAU10	87
EDAZ10	17.86	0.120	ZF-EDAZ10	89
EDAH11	18.22	0.240	ZF-EDAH11	88
EDAM11	18.57	0.595	ZF-EDAM11	88
EDAU11	18.89	0.915	ZF-EDAU11	90
EDAZ11	19.19	1.215	ZF-EDAZ11	90
EDAH12	19.41	1.435	ZF-EDAH12	90
EDAM12	19.60	1.625	ZF-EDAM12	92

Price = Outright Decimal Price - Euro Contract Price

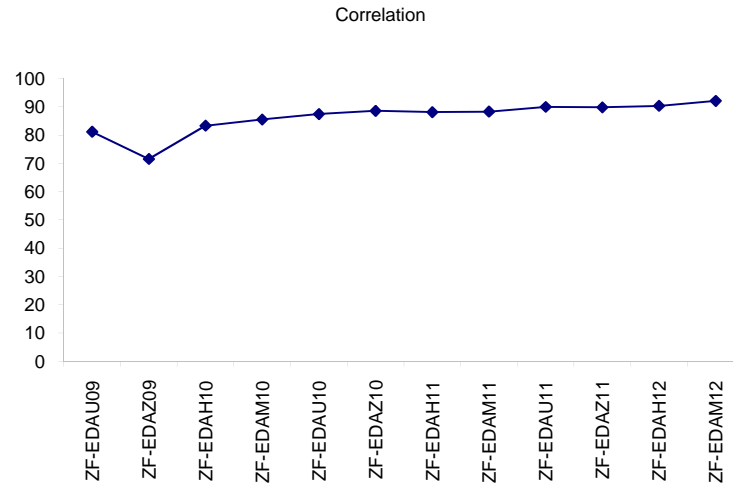
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year		ZF Duration	Spread Duration	
EDAU09	0.1665	4.1546	3.9881	ZF-EDAU09	
EDAZ09	0.4158	4.1546	3.7388	ZF-EDAZ09	
EDAH10	0.6651	4.1546	3.4895	ZF-EDAH10	
EDAM10	0.9144	4.1546	3.2401	ZF-EDAM10	
EDAU10	1.1637	4.1546	2.9908	ZF-EDAU10	
EDAZ10	1.4130	4.1546	2.7415	ZF-EDAZ10	
EDAH11	1.6624	4.1546	2.4922	ZF-EDAH11	
EDAM11	1.9117	4.1546	2.2429	ZF-EDAM11	
EDAU11	2.1802	4.1546	1.9744	ZF-EDAU11	
EDAZ11	2.4295	4.1546	1.7251	ZF-EDAZ11	
EDAH12	2.6788	4.1546	1.4758	ZF-EDAH12	
EDAM12	2.9281	4.1546	1.2264	ZF-EDAM12	

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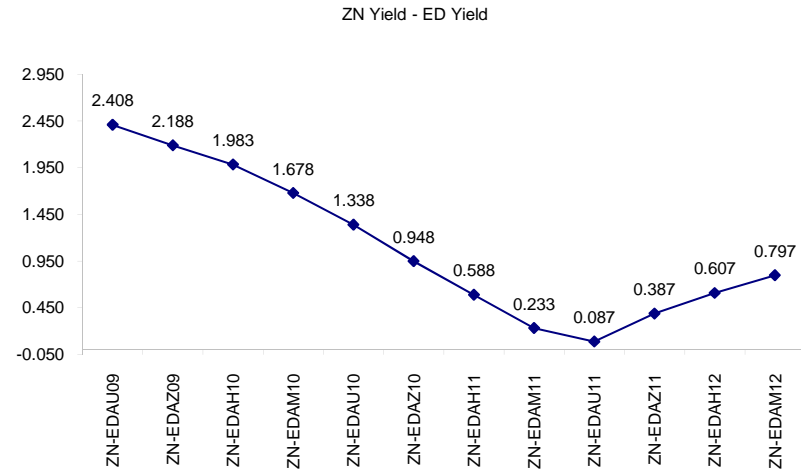


	ZN			Correlation* (percent)
	Spread Price	Spread Yield	Spread Name	
EDAU09	18.05	2.408	ZN-EDAU09	82
EDAZ09	18.27	2.188	ZN-EDAZ09	73
EDAH10	18.47	1.983	ZN-EDAH10	83
EDAM10	18.78	1.678	ZN-EDAM10	84
EDAU10	19.12	1.338	ZN-EDAU10	85
EDAZ10	19.51	0.948	ZN-EDAZ10	86
EDAH11	19.87	0.588	ZN-EDAH11	85
EDAM11	20.22	0.233	ZN-EDAM11	86
EDAU11	20.54	0.087	ZN-EDAU11	87
EDAZ11	20.84	0.387	ZN-EDAZ11	87
EDAH12	21.06	0.607	ZN-EDAH12	88
EDAM12	21.25	0.797	ZN-EDAM12	90

Price = Outright Decimal Price - Euro Contract Price

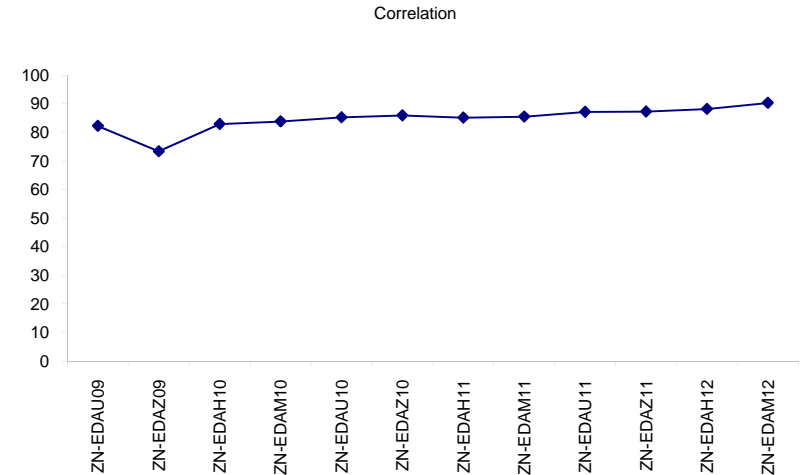
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as			ZN Spread Duration
	Fraction of year	ZN Duration	Spread Duration	
EDAU09	0.1665	5.7894	5.6229	ZN-EDAU09
EDAZ09	0.4158	5.7894	5.3736	ZN-EDAZ09
EDAH10	0.6651	5.7894	5.1243	ZN-EDAH10
EDAM10	0.9144	5.7894	4.8750	ZN-EDAM10
EDAU10	1.1637	5.7894	4.6257	ZN-EDAU10
EDAZ10	1.4130	5.7894	4.3763	ZN-EDAZ10
EDAH11	1.6624	5.7894	4.1270	ZN-EDAH11
EDAM11	1.9117	5.7894	3.8777	ZN-EDAM11
EDAU11	2.1802	5.7894	3.6092	ZN-EDAU11
EDAZ11	2.4295	5.7894	3.3599	ZN-EDAZ11
EDAH12	2.6788	5.7894	3.1106	ZN-EDAH12
EDAM12	2.9281	5.7894	2.8613	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	0.92	0.363	2y-EDAU09	-89
EDAZ09	1.14	0.143	2y-EDAZ09	-85
EDAH10	1.35	0.062	2y-EDAH10	-93
EDAM10	1.65	0.367	2y-EDAM10	-95
EDAU10	1.99	0.707	2y-EDAU10	-95
EDAZ10	2.38	1.097	2y-EDAZ10	-95
EDAH11	2.74	1.457	2y-EDAH11	-94
EDAM11	3.10	1.812	2y-EDAM11	-93
EDAU11	3.42	2.132	2y-EDAU11	-92
EDAZ11	3.72	2.432	2y-EDAZ11	-90
EDAH12	3.94	2.652	2y-EDAH12	-89
EDAM12	4.13	2.842	2y-EDAM12	-88

Price = Outright Decimal Price - Euro Contract Price

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

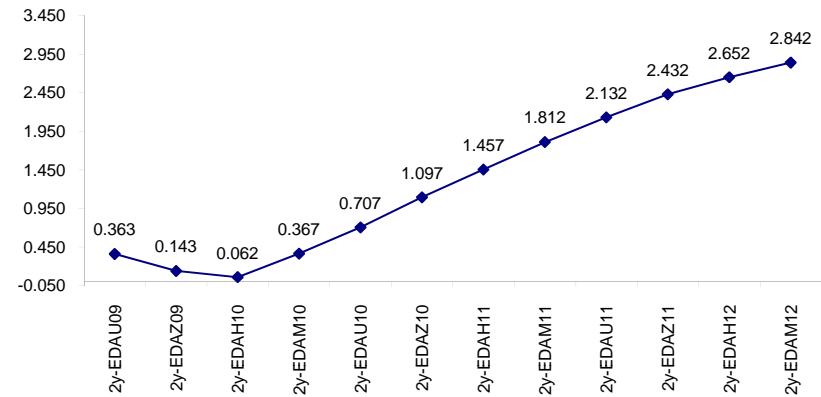
*Correlation = ED Correlation to Treasury Future over 10 days.

ED Duration as

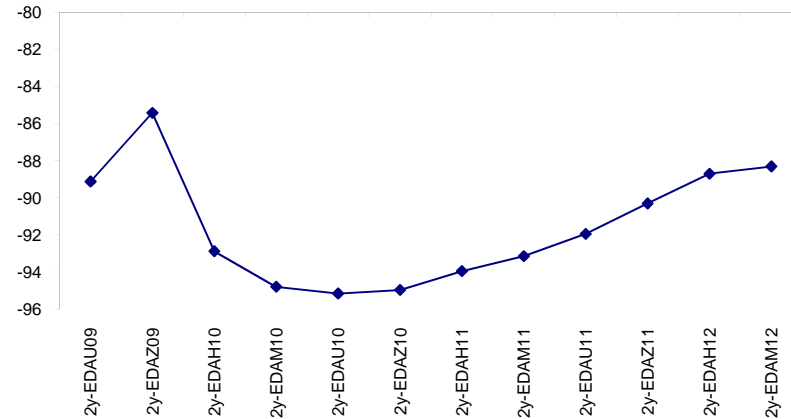
	Fraction of year	2Y Duration	Spread Duration	
EDAU09	0.1665	1.9307	1.7643	2y-EDAU09
EDAZ09	0.4158	1.9307	1.5150	2y-EDAZ09
EDAH10	0.6651	1.9307	1.2656	2y-EDAH10
EDAM10	0.9144	1.9307	1.0163	2y-EDAM10
EDAU10	1.1637	1.9307	0.7670	2y-EDAU10
EDAZ10	1.4130	1.9307	0.5177	2y-EDAZ10
EDAH11	1.6624	1.9307	0.2684	2y-EDAH11
EDAM11	1.9117	1.9307	0.0191	2y-EDAM11
EDAU11	2.1802	1.9307	-0.2494	2y-EDAU11
EDAZ11	2.4295	1.9307	-0.4987	2y-EDAZ11
EDAH12	2.6788	1.9307	-0.7481	2y-EDAH12
EDAM12	2.9281	1.9307	-0.9974	2y-EDAM12

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

ZT Yield - ED Yield



Correlation

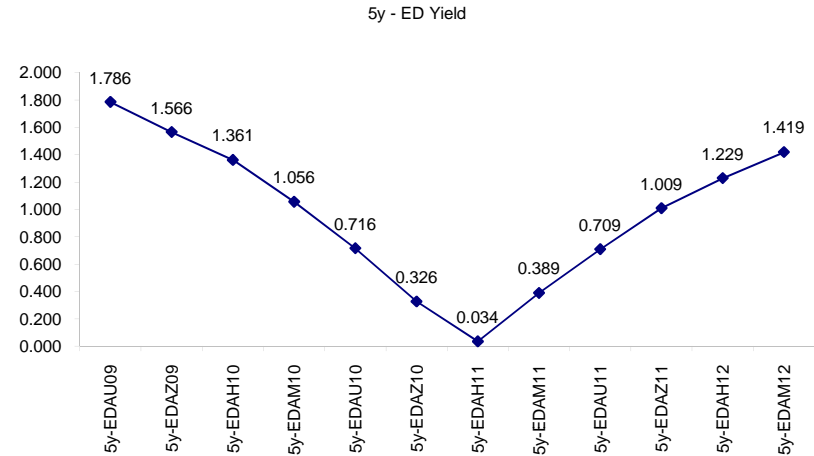


5y				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	1.77	1.786	5y-EDAU09	-91
EDAZ09	1.99	1.566	5y-EDAZ09	-87
EDAH10	2.19	1.361	5y-EDAH10	-92
EDAM10	2.50	1.056	5y-EDAM10	-94
EDAU10	2.84	0.716	5y-EDAU10	-94
EDAZ10	3.23	0.326	5y-EDAZ10	-95
EDAH11	3.59	0.034	5y-EDAH11	-96
EDAM11	3.94	0.389	5y-EDAM11	-96
EDAU11	4.26	0.709	5y-EDAU11	-96
EDAZ11	4.56	1.009	5y-EDAZ11	-96
EDAH12	4.78	1.229	5y-EDAH12	-96
EDAM12	4.97	1.419	5y-EDAM12	-96

Price = Outright Decimal Price - Euro Contract Price

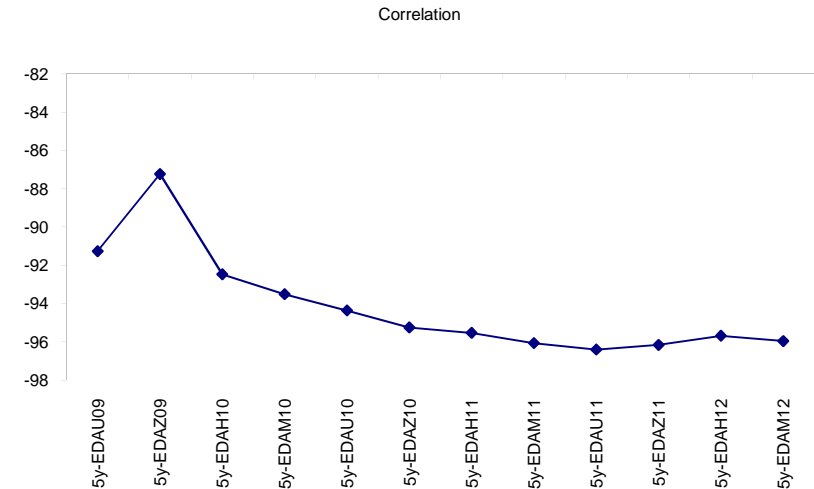
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



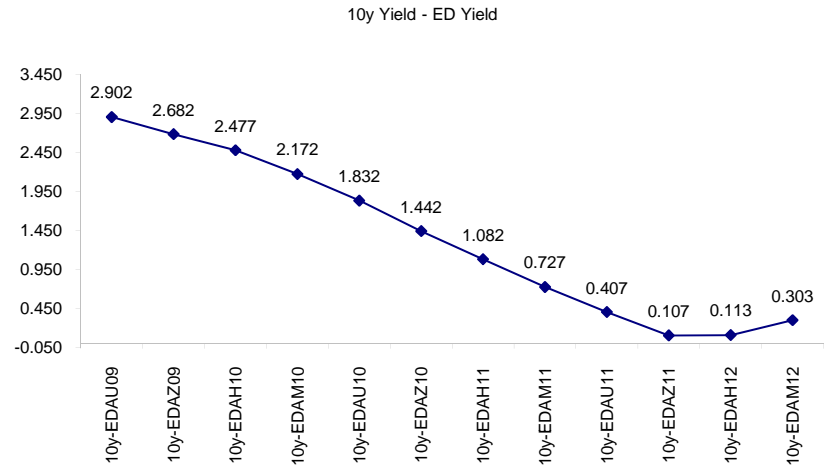
ED Duration as Fraction of year				5Y Duration	Spread Duration	
EDAU09	0.1665	4.6235	4.4570	5y-EDAU09		
EDAZ09	0.4158	4.6235	4.2077	5y-EDAZ09		
EDAH10	0.6651	4.6235	3.9584	5y-EDAH10		
EDAM10	0.9144	4.6235	3.7091	5y-EDAM10		
EDAU10	1.1637	4.6235	3.4598	5y-EDAU10		
EDAZ10	1.4130	4.6235	3.2104	5y-EDAZ10		
EDAH11	1.6624	4.6235	2.9611	5y-EDAH11		
EDAM11	1.9117	4.6235	2.7118	5y-EDAM11		
EDAU11	2.1802	4.6235	2.4433	5y-EDAU11		
EDAZ11	2.4295	4.6235	2.1940	5y-EDAZ11		
EDAH12	2.6788	4.6235	1.9447	5y-EDAH12		
EDAM12	2.9281	4.6235	1.6954	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	1.77	2.902	10y-EDAU09	-82
EDAZ09	1.99	2.682	10y-EDAZ09	-81
EDAH10	2.19	2.477	10y-EDAH10	-83
EDAM10	2.50	2.172	10y-EDAM10	-82
EDAU10	2.84	1.832	10y-EDAU10	-83
EDAZ10	3.23	1.442	10y-EDAZ10	-85
EDAH11	3.59	1.082	10y-EDAH11	-87
EDAM11	3.94	0.727	10y-EDAM11	-90
EDAU11	4.26	0.407	10y-EDAU11	-93
EDAZ11	4.56	0.107	10y-EDAZ11	-95
EDAH12	4.78	0.113	10y-EDAH12	-96
EDAM12	4.97	0.303	10y-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				10Y Duration	Spread Duration	
EDAU09	0.1665	8.3263	8.1599	10y-EDAU09		
EDAZ09	0.4158	8.3263	7.9106	10y-EDAZ09		
EDAH10	0.6651	8.3263	7.6612	10y-EDAH10		
EDAM10	0.9144	8.3263	7.4119	10y-EDAM10		
EDAU10	1.1637	8.3263	7.1626	10y-EDAU10		
EDAZ10	1.4130	8.3263	6.9133	10y-EDAZ10		
EDAH11	1.6624	8.3263	6.6640	10y-EDAH11		
EDAM11	1.9117	8.3263	6.4147	10y-EDAM11		
EDAU11	2.1802	8.3263	6.1662	10y-EDAU11		
EDAZ11	2.4295	8.3263	5.8969	10y-EDAZ11		
EDAH12	2.6788	8.3263	5.6476	10y-EDAH12		
EDAM12	2.9281	8.3263	5.3982	10y-EDAM12		

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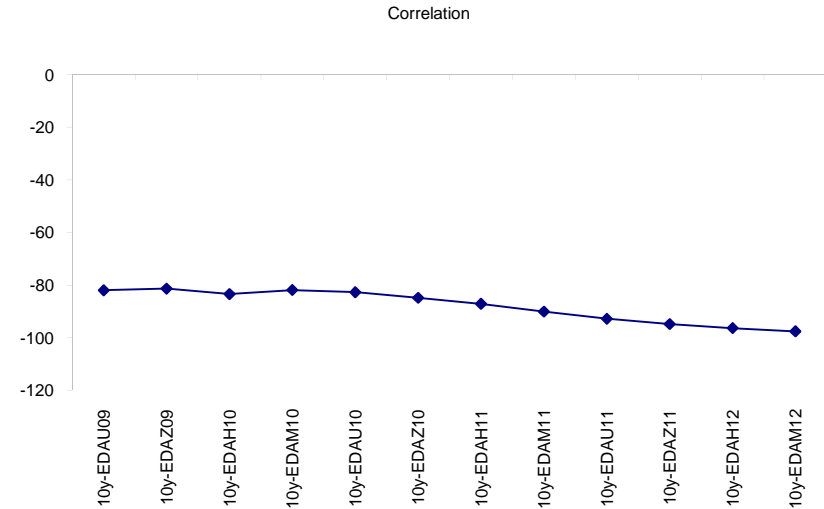


Chart values show the differences between ED contract and Treasury Futures contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.

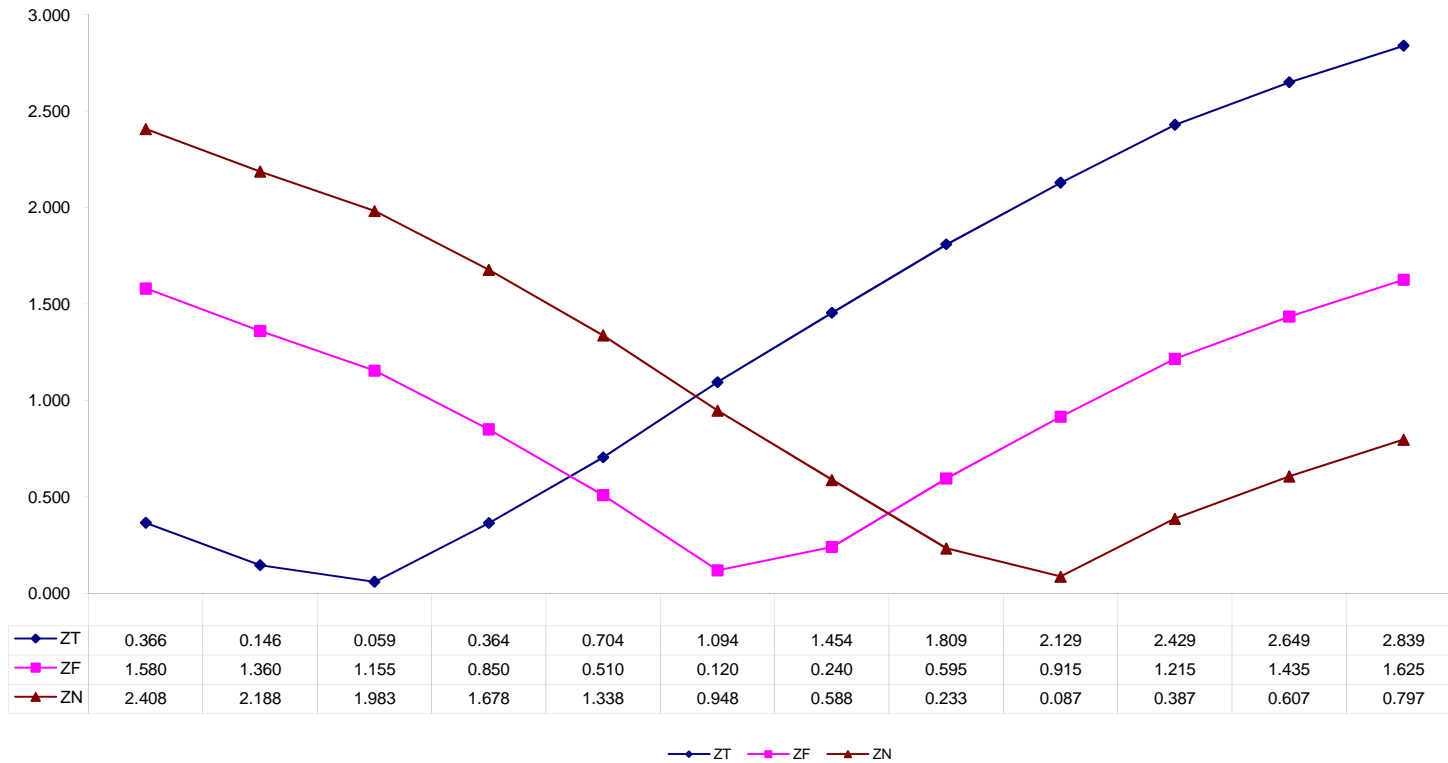
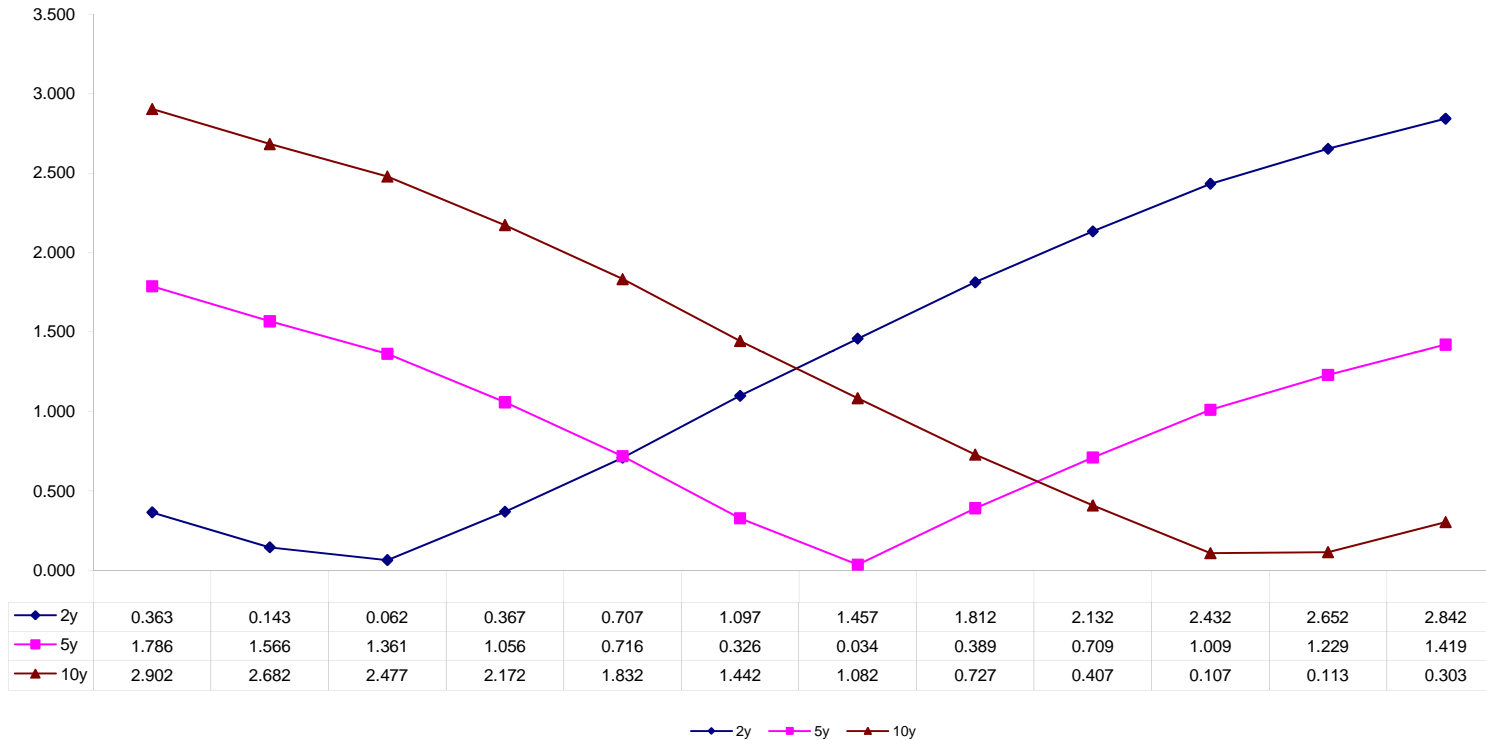
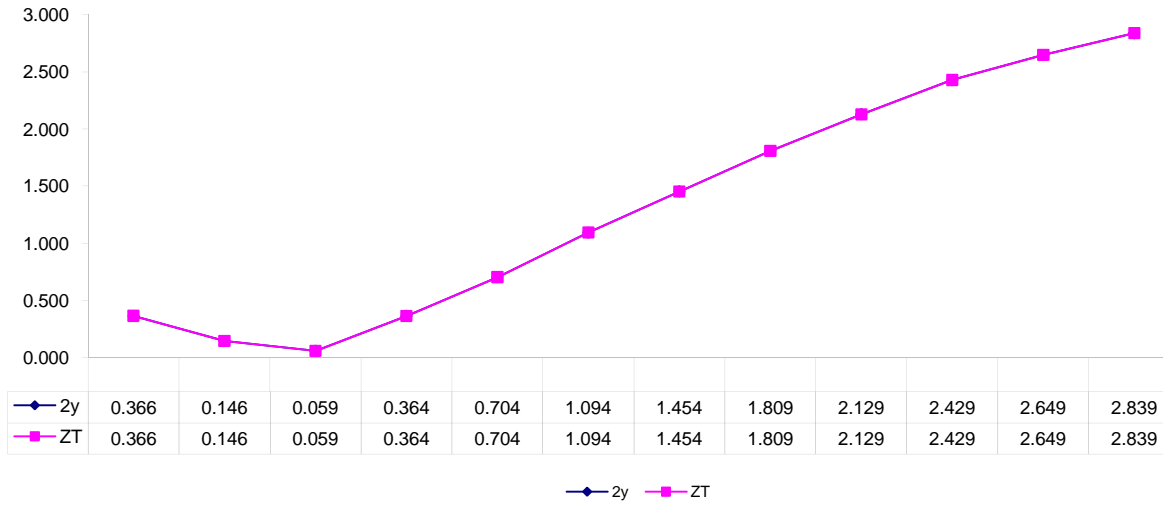
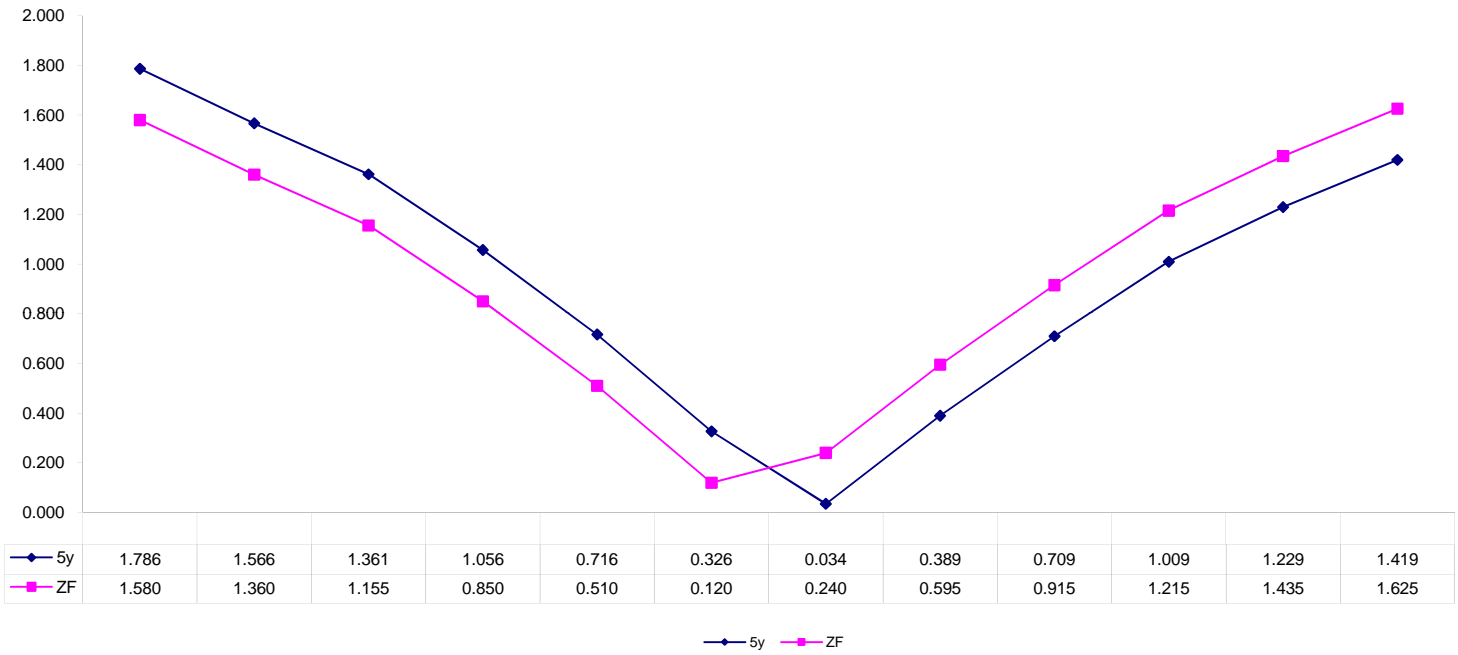


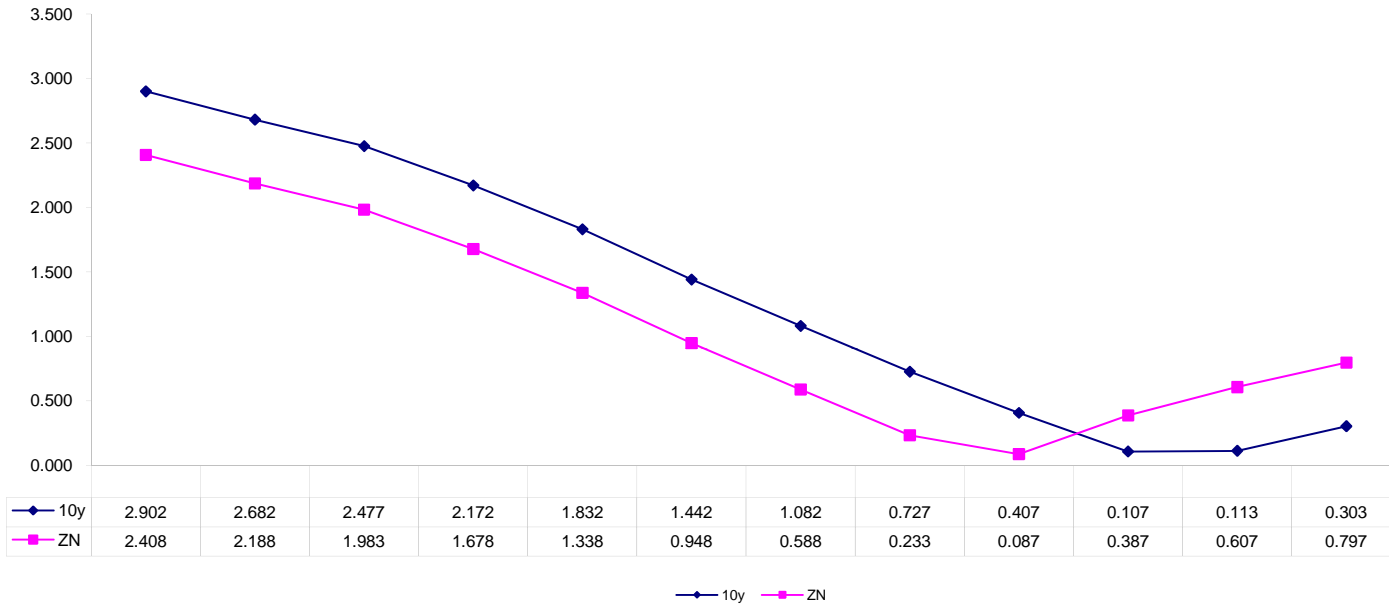
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



2y Basis TED Curve







	Last Yield	Net Last Yield	Last Price
White Pack	0.939	-0.250	9907.6250
Red Pack	2.255	-2.500	9778.8750
Green Pack	3.536	-2.625	9654.2500
Blue Pack	4.248	-4.000	9585.3750
Gold Pack	4.683	-2.750	9543.3750

