

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	108.6406	108.2050	0.862	1.895
ZF	117.7656	117.2450	1.643	1.643
ZN	122.8125	122.2600	2.418	5.976
2y	99.8500	99.2720	0.950	1.980
5y	99.4375	99.1400	1.868	4.733
10y	99.3594	99.1150	2.828	8.574

Eurodollars (ED)						
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month	
EDAM09	98.7500	1.250	81	0.2213	JUN	
EDAU09	98.7400	1.260	172	0.4706	SEP	White Pack
EDAZ09	98.5800	1.420	263	0.7199	DEC	
EDAH10	98.5100	1.490	354	0.9692	MAR	
EDAM10	98.3350	1.665	445	1.2185	JUN	
EDAU10	98.1550	1.845	536	1.4678	SEP	Red Pack
EDAZ10	97.9450	2.055	627	1.7171	DEC	
EDAH11	97.7950	2.205	718	1.9665	MAR	
EDAM11	97.6000	2.400	809	2.2158	JUN	
EDAU11	97.4100	2.590	907	2.4843	SEP	Green Pack
EDAZ11	97.2000	2.800	998	2.7336	DEC	
EDAH12	97.0750	2.925	1,089	2.9829	MAR	
EDAM12	96.9500	3.050	1,180	3.2322	JUN	
EDAU12	96.8450	3.155	1,271	3.4815	SEP	Blue Pack
EDAZ12	96.7350	3.265	1,362	3.7308	DEC	
EDAH13	96.6800	3.320	1,453	3.9802	MAR	
EDAM13	96.6050	3.395	1,544	4.2295	JUN	
EDAU13	96.5750	3.425	1,635	4.4788	SEP	Gold Pack
EDAZ13	96.4850	3.515	1,726	4.7281	DEC	
EDAH14	96.4450	3.555	1,817	4.9774	MAR	

	Last Yield	Net Yield	Last Price	
White Pack	1.379	-0.875	9864.50	
Red Pack	1.979	-3.875	9805.75	Pack Prices
Green Pack	2.734	-3.125	9732.13	
Blue Pack	3.268	-4.000	9680.25	
Gold Pack		-1.125	9653.50	

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.

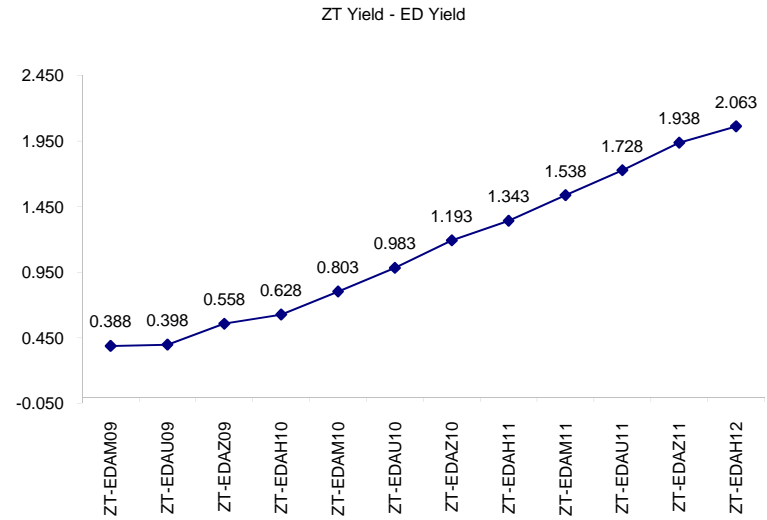
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Correlations (Important)

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.

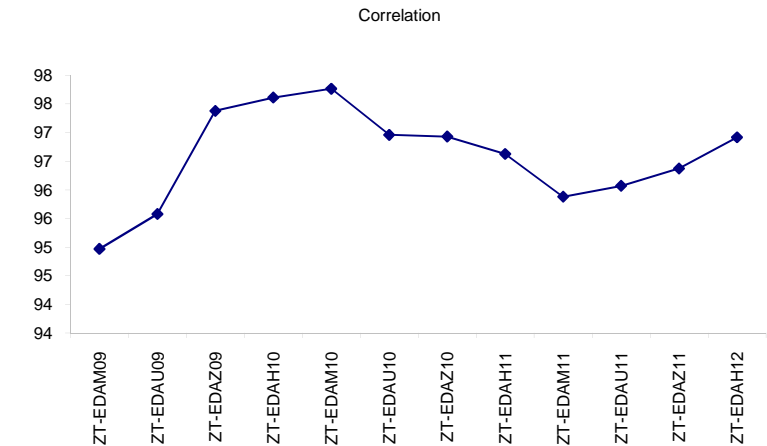
	ZT			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	9.89	0.388	ZT-EDAM09	95
EDAU09	9.90	0.398	ZT-EDAU09	96
EDAZ09	10.06	0.558	ZT-EDAZ09	97
EDAH10	10.13	0.628	ZT-EDAH10	98
EDAM10	10.31	0.803	ZT-EDAM10	98
EDAU10	10.49	0.983	ZT-EDAU10	97
EDAZ10	10.70	1.193	ZT-EDAZ10	97
EDAH11	10.85	1.343	ZT-EDAH11	97
EDAM11	11.04	1.538	ZT-EDAM11	96
EDAU11	11.23	1.728	ZT-EDAU11	96
EDAZ11	11.44	1.938	ZT-EDAZ11	96
EDAH12	11.57	2.063	ZT-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



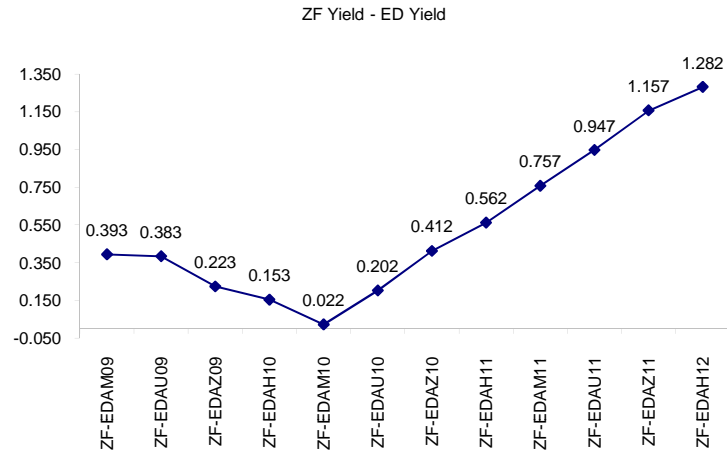
	ED Duration as Fraction of year			ZT Duration	Spread Duration	
EDAM09	0.2213	1.8954	1.6741	ZT-EDAM09		
EDAU09	0.4706	1.8954	1.4248	ZT-EDAU09		
EDAZ09	0.7199	1.8954	1.1755	ZT-EDAZ09		
EDAH10	0.9692	1.8954	0.9262	ZT-EDAH10		
EDAM10	1.2185	1.8954	0.6769	ZT-EDAM10		
EDAU10	1.4678	1.8954	0.4276	ZT-EDAU10		
EDAZ10	1.7171	1.8954	0.1783	ZT-EDAZ10		
EDAH11	1.9665	1.8954	-0.0711	ZT-EDAH11		
EDAM11	2.2158	1.8954	-0.3204	ZT-EDAM11		
EDAU11	2.4843	1.8954	-0.5889	ZT-EDAU11		
EDAZ11	2.7336	1.8954	-0.8382	ZT-EDAZ11		
EDAH12	2.9829	1.8954	-1.0875	ZT-EDAH12		

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



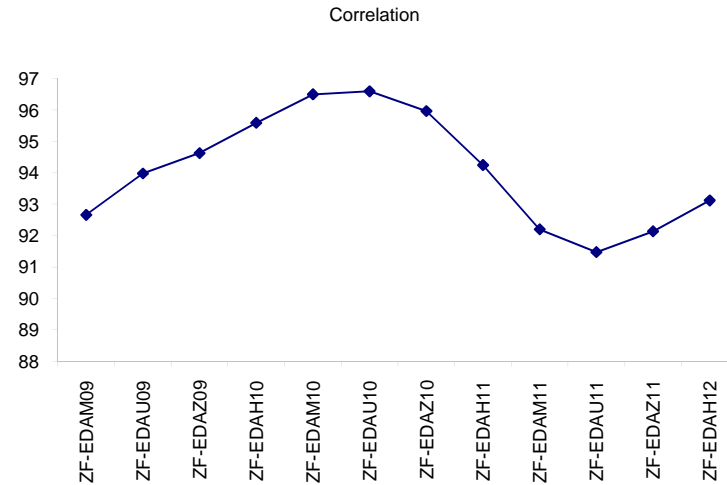
	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	19.02	0.393	ZF-EDAM09	93
EDAU09	19.03	0.383	ZF-EDAU09	94
EDAZ09	19.19	0.223	ZF-EDAZ09	95
EDAH10	19.26	0.153	ZF-EDAH10	96
EDAM10	19.43	0.022	ZF-EDAM10	96
EDAU10	19.61	0.202	ZF-EDAU10	97
EDAZ10	19.82	0.412	ZF-EDAZ10	96
EDAH11	19.97	0.562	ZF-EDAH11	94
EDAM11	20.17	0.757	ZF-EDAM11	92
EDAU11	20.36	0.947	ZF-EDAU11	91
EDAZ11	20.57	1.157	ZF-EDAZ11	92
EDAH12	20.69	1.282	ZF-EDAH12	93

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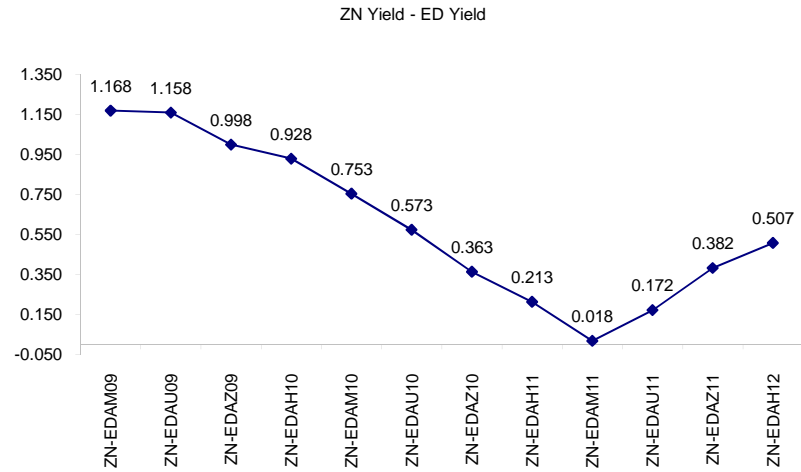
	ED Duration as Fraction of year		ZF Duration	Spread Duration	
EDAM09	0.2213	1.6433	1.4221	ZF-EDAM09	
EDAU09	0.4706	1.6433	1.1727	ZF-EDAU09	
EDAZ09	0.7199	1.6433	0.9234	ZF-EDAZ09	
EDAH10	0.9692	1.6433	0.6741	ZF-EDAH10	
EDAM10	1.2185	1.6433	0.4248	ZF-EDAM10	
EDAU10	1.4678	1.6433	0.1755	ZF-EDAU10	
EDAZ10	1.7171	1.6433	-0.0738	ZF-EDAZ10	
EDAH11	1.9665	1.6433	-0.3232	ZF-EDAH11	
EDAM11	2.2158	1.6433	-0.5725	ZF-EDAM11	
EDAU11	2.4843	1.6433	-0.8410	ZF-EDAU11	
EDAZ11	2.7336	1.6433	-1.0903	ZF-EDAZ11	
EDAH12	2.9829	1.6433	-1.3396	ZF-EDAH12	

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



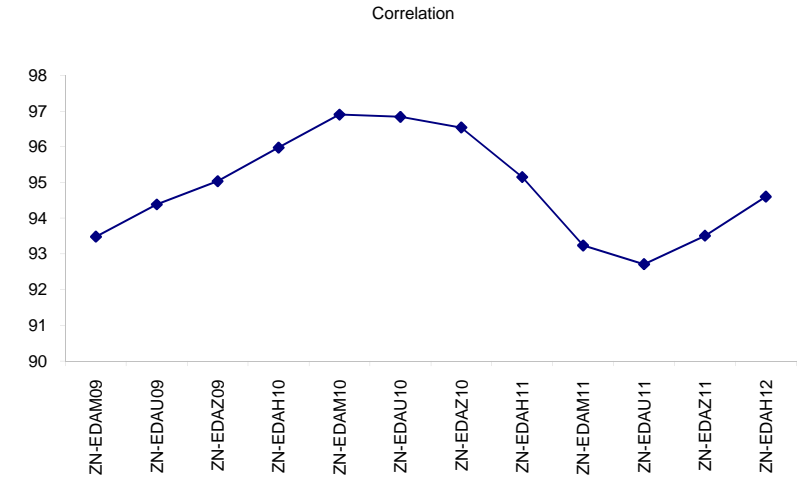
	ZN			Correlation* (percent)
	Spread Price	Spread Yield	Spread Name	
EDAM09	24.06	1.168	ZN-EDAM09	93
EDAU09	24.07	1.158	ZN-EDAU09	94
EDAZ09	24.23	0.998	ZN-EDAZ09	95
EDAH10	24.30	0.928	ZN-EDAH10	96
EDAM10	24.48	0.753	ZN-EDAM10	97
EDAU10	24.66	0.573	ZN-EDAU10	97
EDAZ10	24.87	0.363	ZN-EDAZ10	97
EDAH11	25.02	0.213	ZN-EDAH11	95
EDAM11	25.21	0.018	ZN-EDAM11	93
EDAU11	25.40	0.172	ZN-EDAU11	93
EDAZ11	25.61	0.382	ZN-EDAZ11	94
EDAH12	25.74	0.507	ZN-EDAH12	95

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 Yield = ABS (Proxy Yield - Implied Euro Contract yield)
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	ED Duration as			ZN Spread Duration
	Fraction of year	ZN Duration	Spread Duration	
EDAM09	0.2213	5.9758	5.7546	ZN-EDAM09
EDAU09	0.4706	5.9758	5.5053	ZN-EDAU09
EDAZ09	0.7199	5.9758	5.2559	ZN-EDAZ09
EDAH10	0.9692	5.9758	5.0066	ZN-EDAH10
EDAM10	1.2185	5.9758	4.7573	ZN-EDAM10
EDAU10	1.4678	5.9758	4.5080	ZN-EDAU10
EDAZ10	1.7171	5.9758	4.2587	ZN-EDAZ10
EDAH11	1.9665	5.9758	4.0094	ZN-EDAH11
EDAM11	2.2158	5.9758	3.7601	ZN-EDAM11
EDAU11	2.4843	5.9758	3.4916	ZN-EDAU11
EDAZ11	2.7336	5.9758	3.2423	ZN-EDAZ11
EDAH12	2.9829	5.9758	2.9929	ZN-EDAH12

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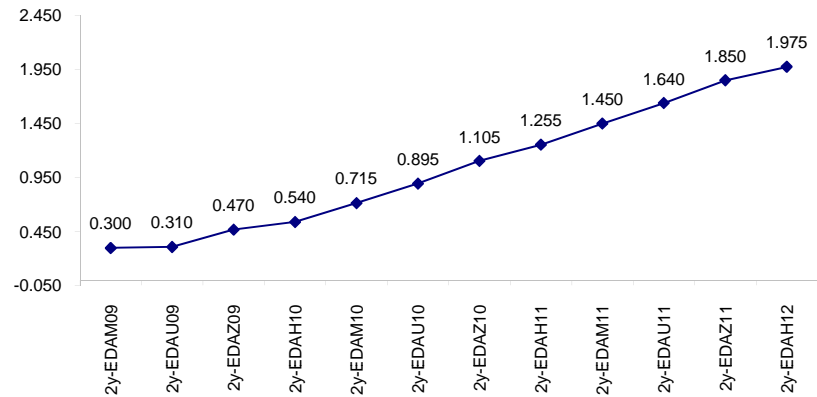
	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	1.10	0.300	2y-EDAM09	-87
EDAU09	1.11	0.310	2y-EDAU09	-86
EDAZ09	1.27	0.470	2y-EDAZ09	-86
EDAH10	1.34	0.540	2y-EDAH10	-87
EDAM10	1.52	0.715	2y-EDAM10	-89
EDAU10	1.70	0.895	2y-EDAU10	-89
EDAZ10	1.91	1.105	2y-EDAZ10	-89
EDAH11	2.06	1.255	2y-EDAH11	-86
EDAM11	2.25	1.450	2y-EDAM11	-83
EDAU11	2.44	1.640	2y-EDAU11	-82
EDAZ11	2.65	1.850	2y-EDAZ11	-83
EDAH12	2.78	1.975	2y-EDAH12	-85

Price = Outright Decimal Price - Euro Contract Price

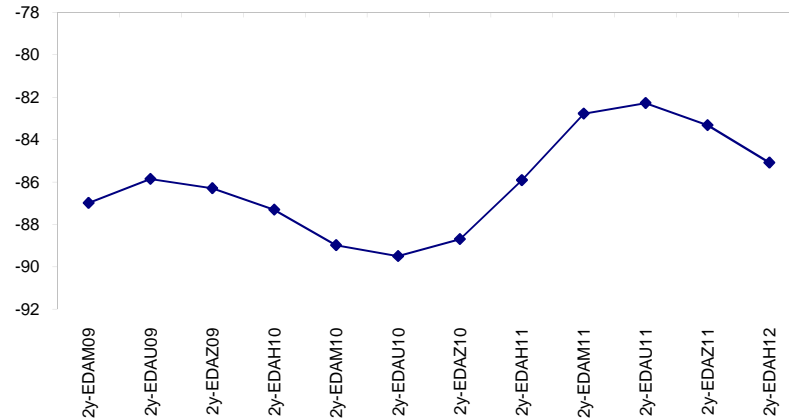
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

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ZT Yield - ED Yield



Correlation

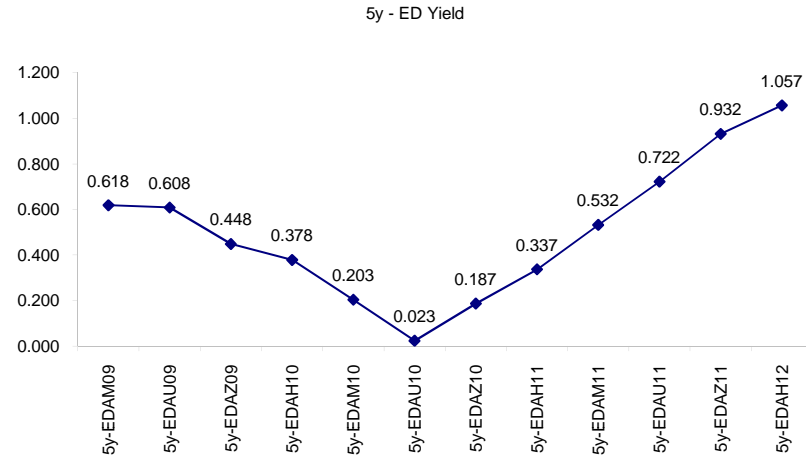


	ED Duration as			
	Fraction of year	2Y Duration	Spread Duration	
EDAM09	0.2213	1.9799	1.7586	2y-EDAM09
EDAU09	0.4706	1.9799	1.5093	2y-EDAU09
EDAZ09	0.7199	1.9799	1.2600	2y-EDAZ09
EDAH10	0.9692	1.9799	1.0107	2y-EDAH10
EDAM10	1.2185	1.9799	0.7614	2y-EDAM10
EDAU10	1.4678	1.9799	0.5120	2y-EDAU10
EDAZ10	1.7171	1.9799	0.2627	2y-EDAZ10
EDAH11	1.9665	1.9799	0.0134	2y-EDAH11
EDAM11	2.2158	1.9799	-0.2359	2y-EDAM11
EDAU11	2.4843	1.9799	-0.5044	2y-EDAU11
EDAZ11	2.7336	1.9799	-0.7537	2y-EDAZ11
EDAH12	2.9829	1.9799	-1.0030	2y-EDAH12

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

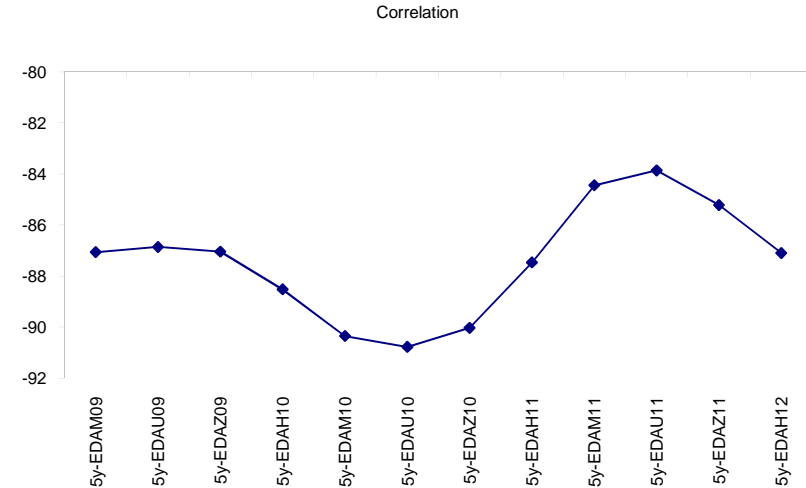
	5y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	0.69	0.618	5y-EDAM09	-87
EDAU09	0.70	0.608	5y-EDAU09	-87
EDAZ09	0.86	0.448	5y-EDAZ09	-87
EDAH10	0.93	0.378	5y-EDAH10	-89
EDAM10	1.10	0.203	5y-EDAM10	-90
EDAU10	1.28	0.023	5y-EDAU10	-91
EDAZ10	1.49	0.187	5y-EDAZ10	-90
EDAH11	1.64	0.337	5y-EDAH11	-87
EDAM11	1.84	0.532	5y-EDAM11	-84
EDAU11	2.03	0.722	5y-EDAU11	-84
EDAZ11	2.24	0.932	5y-EDAZ11	-85
EDAH12	2.36	1.057	5y-EDAH12	-87

Price = Outright Decimal Price - Euro Contract Price
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 *Correlation = ED Correlation to Treasury Future over 10 days



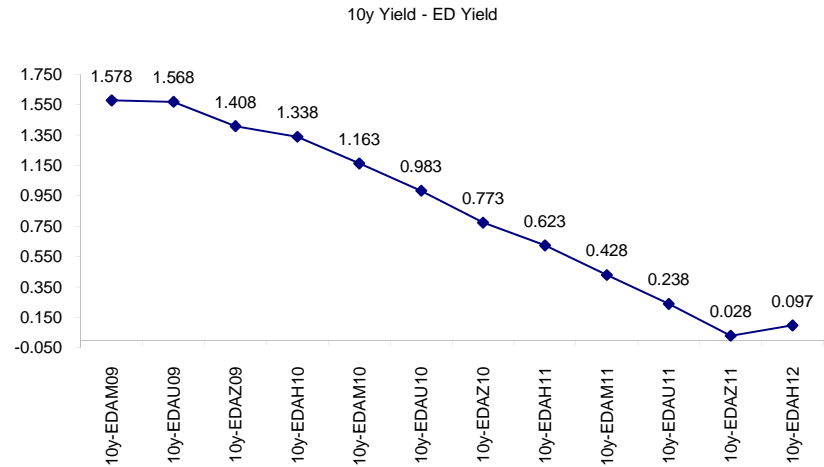
	ED Duration as Fraction of year		5Y Duration	Spread Duration	
EDAM09	0.2213	4.7334	4.5122	5y-EDAM09	
EDAU09	0.4706	4.7334	4.2629	5y-EDAU09	
EDAZ09	0.7199	4.7334	4.0136	5y-EDAZ09	
EDAH10	0.9692	4.7334	3.7642	5y-EDAH10	
EDAM10	1.2185	4.7334	3.5149	5y-EDAM10	
EDAU10	1.4678	4.7334	3.2656	5y-EDAU10	
EDAZ10	1.7171	4.7334	3.0163	5y-EDAZ10	
EDAH11	1.9665	4.7334	2.7670	5y-EDAH11	
EDAM11	2.2158	4.7334	2.5177	5y-EDAM11	
EDAU11	2.4843	4.7334	2.2492	5y-EDAU11	
EDAZ11	2.7336	4.7334	1.9999	5y-EDAZ11	
EDAH12	2.9829	4.7334	1.7505	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	0.69	1.578	10y-EDAM09	-92
EDAU09	0.70	1.568	10y-EDAU09	-92
EDAZ09	0.86	1.408	10y-EDAZ09	-93
EDAH10	0.93	1.338	10y-EDAH10	-94
EDAM10	1.10	1.163	10y-EDAM10	-95
EDAU10	1.28	0.983	10y-EDAU10	-95
EDAZ10	1.49	0.773	10y-EDAZ10	-94
EDAH11	1.64	0.623	10y-EDAH11	-92
EDAM11	1.84	0.428	10y-EDAM11	-90
EDAU11	2.03	0.238	10y-EDAU11	-89
EDAZ11	2.24	0.028	10y-EDAZ11	-90
EDAH12	2.36	0.097	10y-EDAH12	-92

Price = Outright Decimal Price - Euro Contract Price
 Yield = ABS (Proxy Yield - Implied Euro Contract yield)
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	ED Duration as Fraction of year			
	10Y Duration	Spread Duration		
EDAM09	0.2213	8.5738	8.3525	10y-EDAM09
EDAU09	0.4706	8.5738	8.1032	10y-EDAU09
EDAZ09	0.7199	8.5738	7.8539	10y-EDAZ09
EDAH10	0.9692	8.5738	7.6046	10y-EDAH10
EDAM10	1.2185	8.5738	7.3553	10y-EDAM10
EDAU10	1.4678	8.5738	7.1060	10y-EDAU10
EDAZ10	1.7171	8.5738	6.8566	10y-EDAZ10
EDAH11	1.9665	8.5738	6.6073	10y-EDAH11
EDAM11	2.2158	8.5738	6.3580	10y-EDAM11
EDAU11	2.4843	8.5738	6.0895	10y-EDAU11
EDAZ11	2.7336	8.5738	5.8402	10y-EDAZ11
EDAH12	2.9829	8.5738	5.5909	10y-EDAH12

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

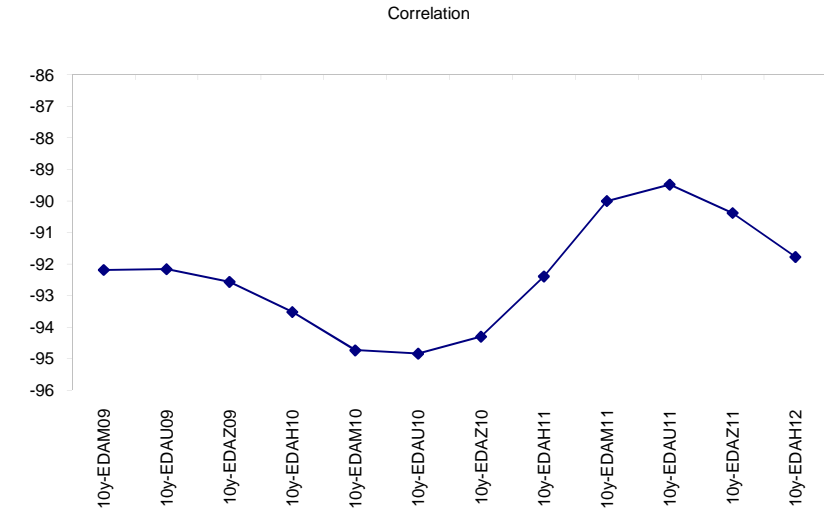


Chart values show the differences between ED contract and Treasury Futures contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.

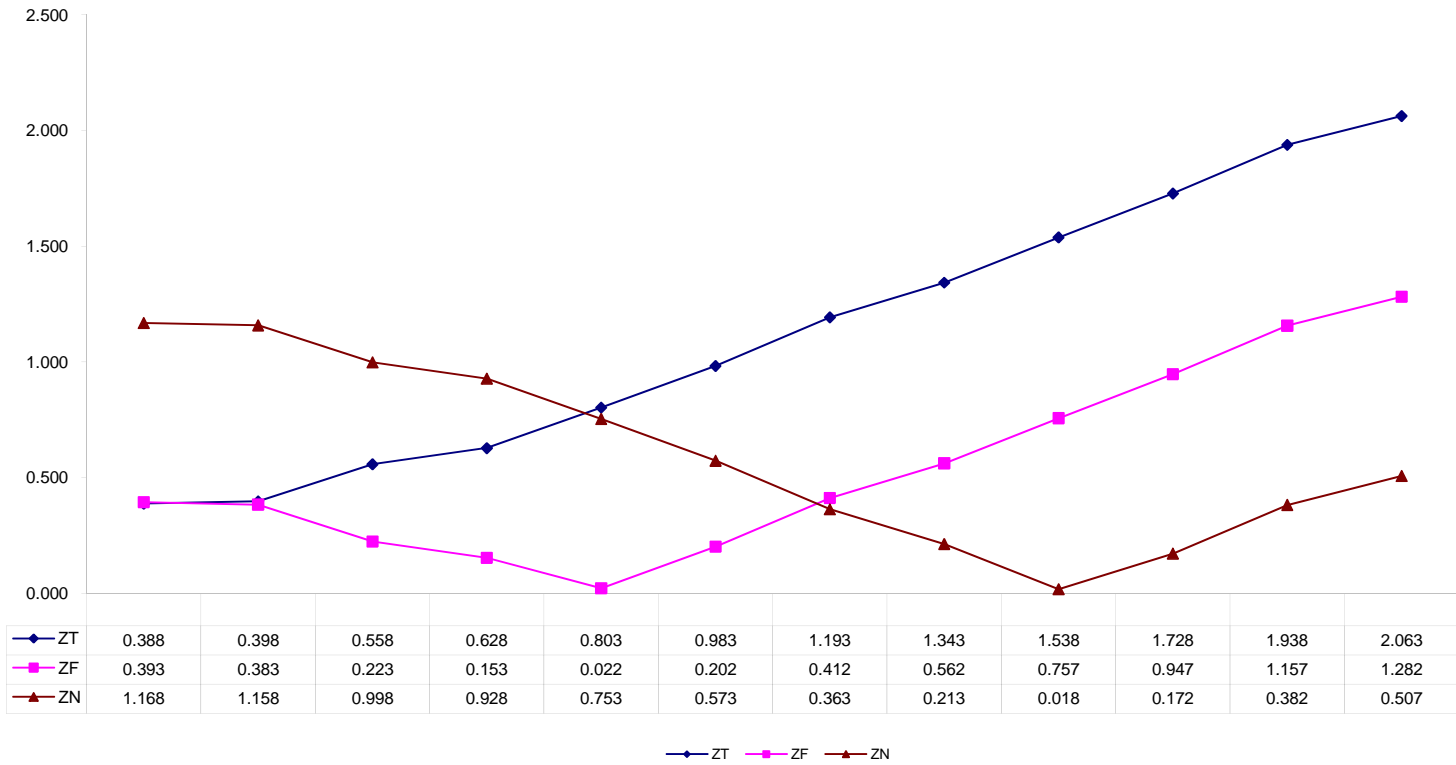
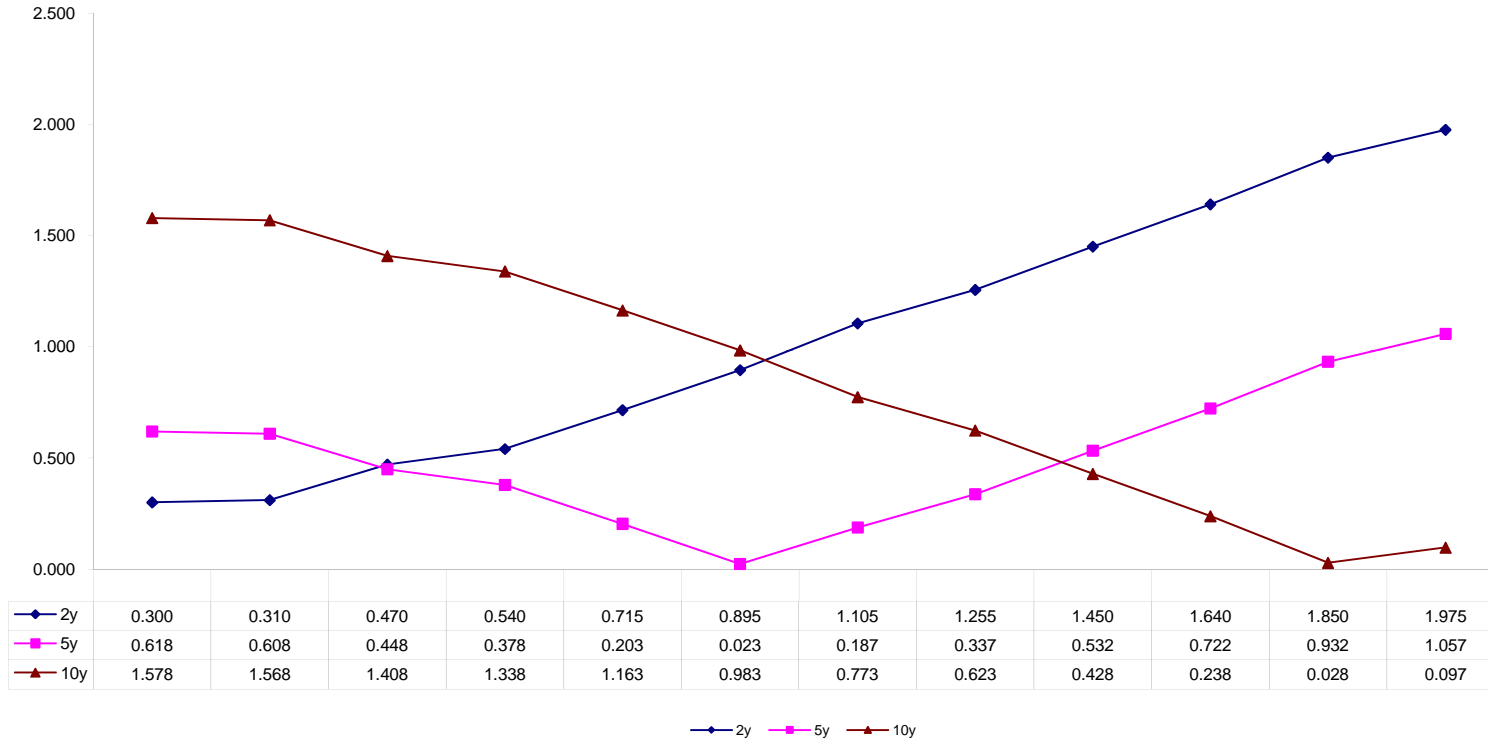
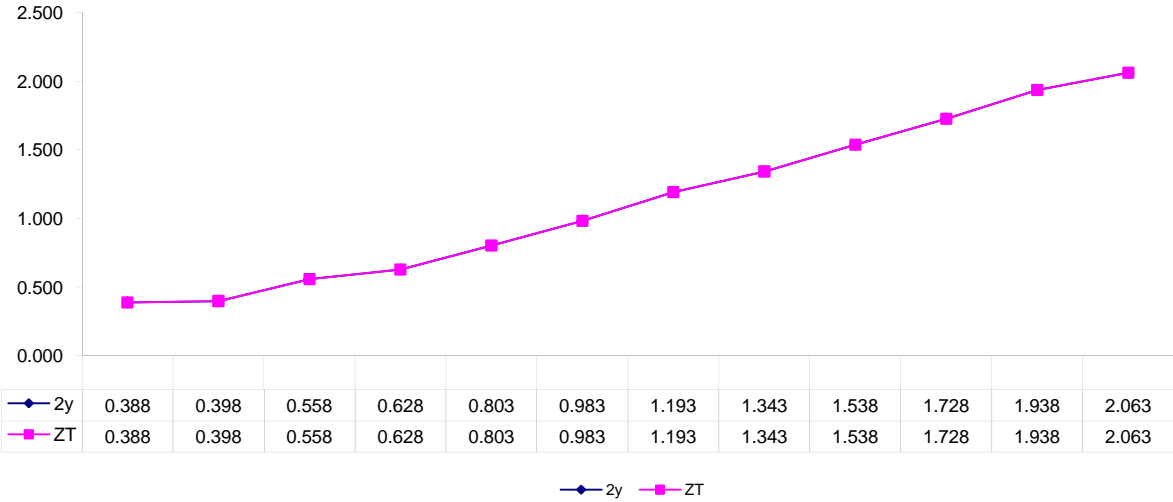
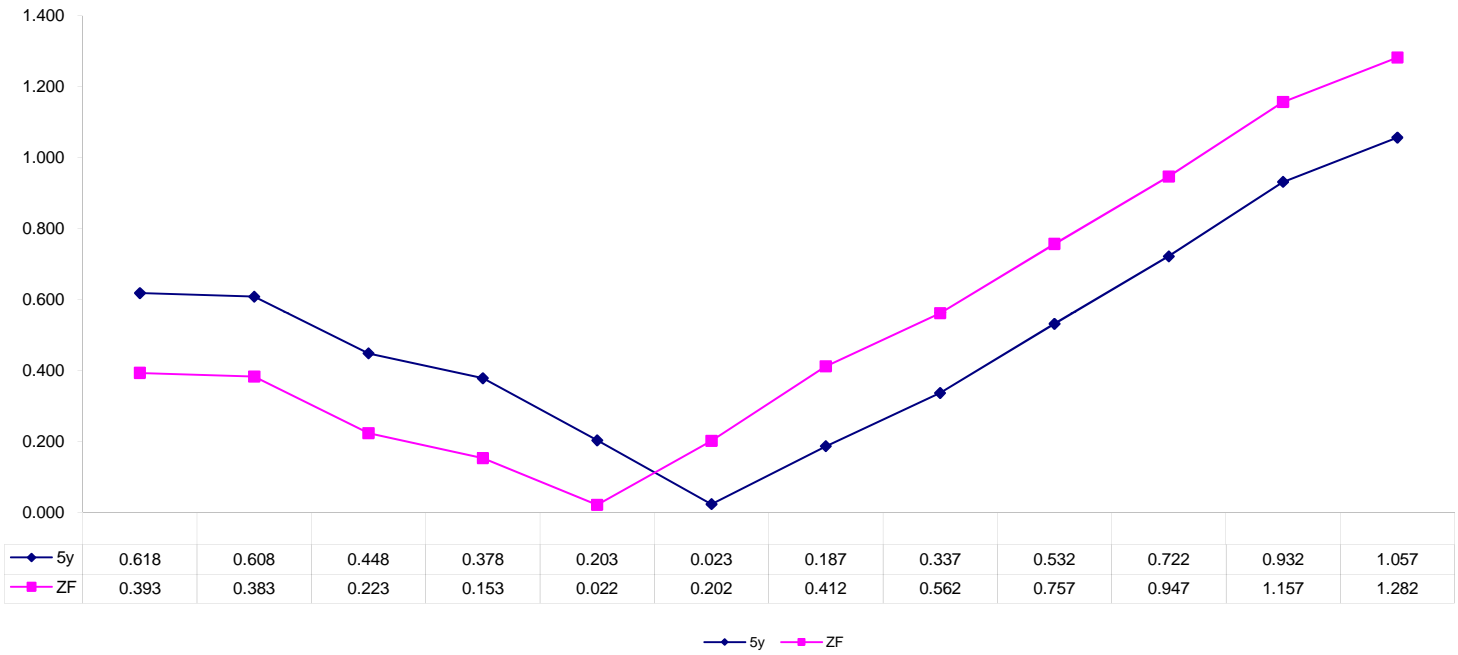


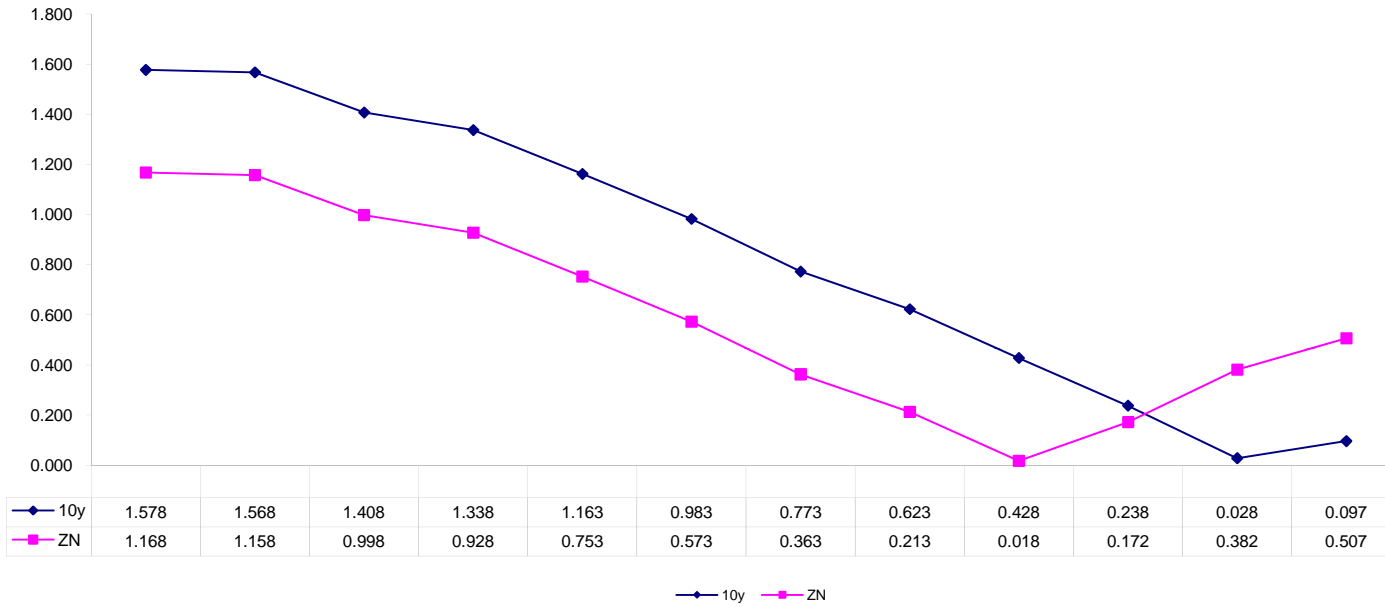
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



2y Basis TED Curve







	Last Yield	Net Last Yield	Last Price
White Pack	1.379	-0.875	9864.5000
Red Pack	1.979	-3.875	9805.7500
Green Pack	2.734	-3.125	9732.1250
Blue Pack	3.268	-4.000	9680.2500
Gold Pack		-1.125	9653.5000

