

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 € 32.00	Last Yield*	MDuration
ZT	109.1250	109.0400	0.761	1.93
ZF	119.8281	119.2650	1.200	1.20
ZN	125.7344	125.2350	1.416	6.25
2y	100.2188	100.0700	0.761	1.93
5y	100.1000	100.0320	1.480	4.62
10y	112.3594	112.1150	2.332	8.26

Eurodollars (ED)						
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month	
EDAH09	98.965	1.035	59	0.161	MAR	
EDAM09	99.005	0.995	150	0.410	JUN	White Pack
EDAU09	98.915	1.085	241	0.660	SEP	
EDAZ09	98.730	1.270	332	0.909	DEC	
EDAH10	98.570	1.430	423	1.158	MAR	
EDAM10	98.320	1.680	514	1.408	JUN	Red Pack
EDAU10	98.090	1.910	605	1.657	SEP	
EDAZ10	97.865	2.135	696	1.906	DEC	
EDAH11	97.755	2.245	787	2.155	MAR	
EDAM11	97.665	2.335	878	2.405	JUN	Green Pack
EDAU11	97.565	2.435	976	2.673	SEP	
EDAZ11	97.465	2.535	1067	2.923	DEC	
EDAH12	97.465	2.535	1158	3.172	MAR	
EDAM12	97.415	2.585	1249	3.421	JUN	Blue Pack
EDAU12	97.540	2.460	1340	3.671	SEP	
EDAZ12	97.485	2.515	1431	3.920	DEC	
EDAH13	97.475	2.525	1522	4.169	MAR	
EDAM13	97.430	2.570	1613	4.418	JUN	Gold Pack
EDZU13	97.260	2.740	1704	4.668	SEP	
EDZZ13	97.280	2.720	1795	4.917	DEC	

	Last Yield	Net Yield	Last Price	
White Pack	1.113	2.125	9890.500	
Red Pack	1.819	-7.750	9821.375	Pack Prices
Green Pack	2.435	-14.750	9761.250	
Blue Pack		-7.625	9747.750	
Gold Pack		-3.000	9736.250	

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.

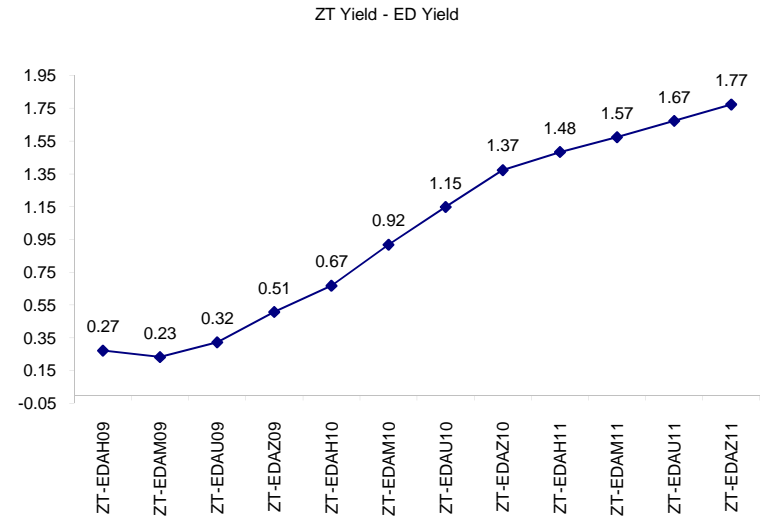
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Correlations (Important)

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.

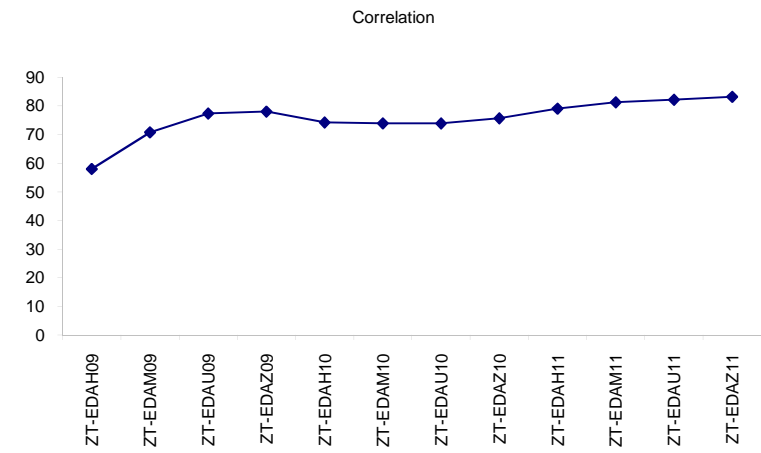
ZT				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	10.160	0.27	ZT-EDAH09	58.014
EDAM09	10.120	0.23	ZT-EDAM09	70.785
EDAU09	10.210	0.32	ZT-EDAU09	77.352
EDAZ09	10.395	0.51	ZT-EDAZ09	77.981
EDAH10	10.555	0.67	ZT-EDAH10	74.218
EDAM10	10.805	0.92	ZT-EDAM10	73.912
EDAU10	11.035	1.15	ZT-EDAU10	73.893
EDAZ10	11.260	1.37	ZT-EDAZ10	75.645
EDAH11	11.370	1.48	ZT-EDAH11	79.034
EDAM11	11.460	1.57	ZT-EDAM11	81.251
EDAU11	11.560	1.67	ZT-EDAU11	82.134
EDAZ11	11.660	1.77	ZT-EDAZ11	83.168

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		
EDAH09	0.161	1.93	1.77	ZT-EDAH09
EDAM09	0.410	1.93	1.52	ZT-EDAM09
EDAU09	0.660	1.93	1.27	ZT-EDAU09
EDAZ09	0.909	1.93	1.02	ZT-EDAZ09
EDAH10	1.158	1.93	0.77	ZT-EDAH10
EDAM10	1.408	1.93	0.52	ZT-EDAM10
EDAU10	1.657	1.93	0.27	ZT-EDAU10
EDAZ10	1.906	1.93	0.02	ZT-EDAZ10
EDAH11	2.155	1.93	(0.23)	ZT-EDAH11
EDAM11	2.405	1.93	(0.48)	ZT-EDAM11
EDAU11	2.673	1.93	(0.75)	ZT-EDAU11
EDAZ11	2.923	1.93	(1.00)	ZT-EDAZ11

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

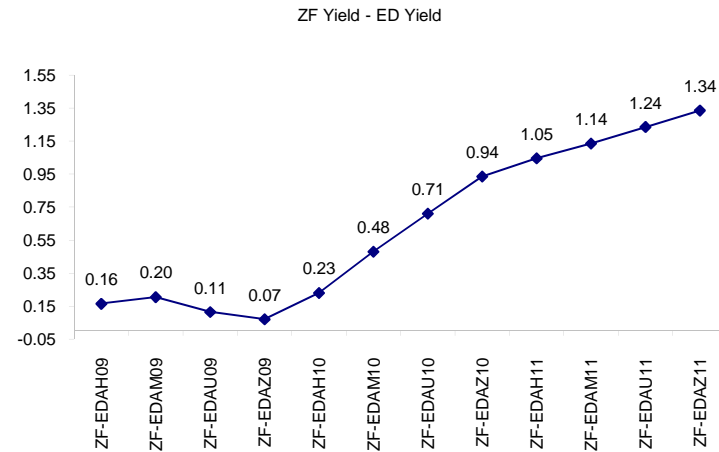


ZF				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	20.863	0.16	ZF-EDAH09	55.622
EDAM09	20.823	0.20	ZF-EDAM09	71.609
EDAU09	20.913	0.11	ZF-EDAU09	81.039
EDAZ09	21.098	0.07	ZF-EDAZ09	84.435
EDAH10	21.258	0.23	ZF-EDAH10	83.898
EDAM10	21.508	0.48	ZF-EDAM10	86.605
EDAU10	21.738	0.71	ZF-EDAU10	88.622
EDAZ10	21.963	0.94	ZF-EDAZ10	91.281
EDAH11	22.073	1.05	ZF-EDAH11	94.049
EDAM11	22.163	1.14	ZF-EDAM11	96.276
EDAU11	22.263	1.24	ZF-EDAU11	97.006
EDAZ11	22.363	1.34	ZF-EDAZ11	97.576

Price = Outright Decimal Price - Euro Contract Price

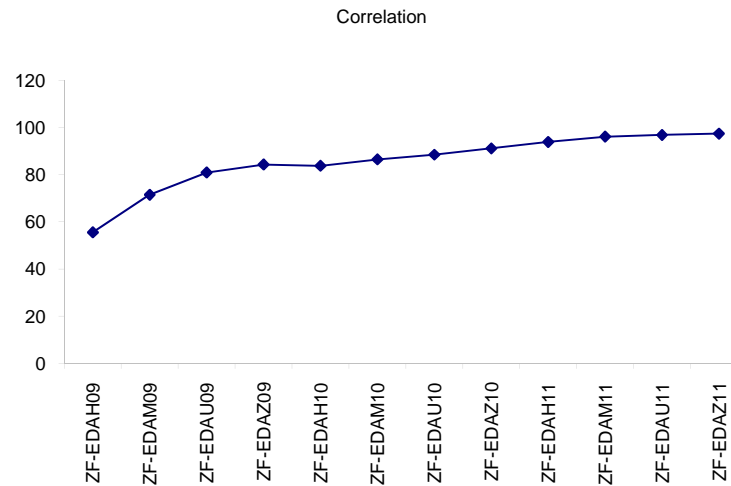
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



ED Duration as Fraction of year				ZF Duration	Spread Duration	
EDAH09	0.161	1.20	1.04	ZF-EDAH09		
EDAM09	0.410	1.20	0.79	ZF-EDAM09		
EDAU09	0.660	1.20	0.54	ZF-EDAU09		
EDAZ09	0.909	1.20	0.29	ZF-EDAZ09		
EDAH10	1.158	1.20	0.04	ZF-EDAH10		
EDAM10	1.408	1.20	(0.21)	ZF-EDAM10		
EDAU10	1.657	1.20	(0.46)	ZF-EDAU10		
EDAZ10	1.906	1.20	(0.71)	ZF-EDAZ10		
EDAH11	2.155	1.20	(0.96)	ZF-EDAH11		
EDAM11	2.405	1.20	(1.21)	ZF-EDAM11		
EDAU11	2.673	1.20	(1.47)	ZF-EDAU11		
EDAZ11	2.923	1.20	(1.72)	ZF-EDAZ11		

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

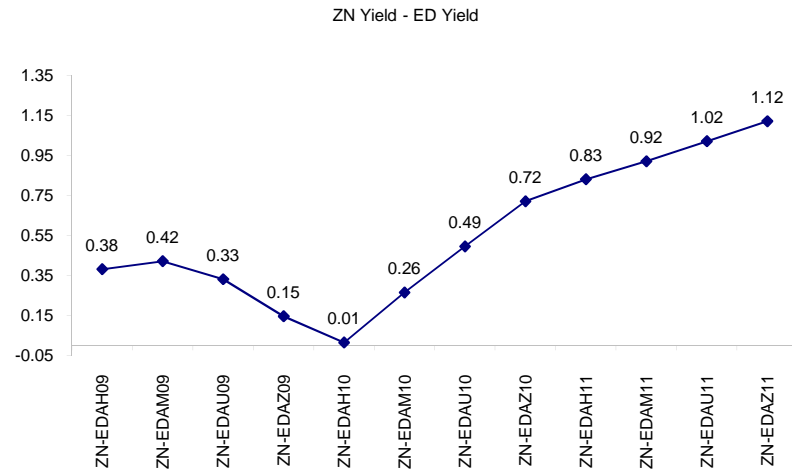


	ZN			Correlation* (percent)
	Spread Price	Spread Yield	Spread Name	
EDAH09	26.769	0.38	ZN-EDAH09	53.669
EDAM09	26.729	0.42	ZN-EDAM09	68.693
EDAU09	26.819	0.33	ZN-EDAU09	77.946
EDAZ09	27.004	0.15	ZN-EDAZ09	81.608
EDAH10	27.164	0.01	ZN-EDAH10	81.822
EDAM10	27.414	0.26	ZN-EDAM10	85.081
EDAU10	27.644	0.49	ZN-EDAU10	88.203
EDAZ10	27.869	0.72	ZN-EDAZ10	91.443
EDAH11	27.979	0.83	ZN-EDAH11	94.364
EDAM11	28.069	0.92	ZN-EDAM11	95.876
EDAU11	28.169	1.02	ZN-EDAU11	96.665
EDAZ11	28.269	1.12	ZN-EDAZ11	97.317

Price = Outright Decimal Price - Euro Contract Price

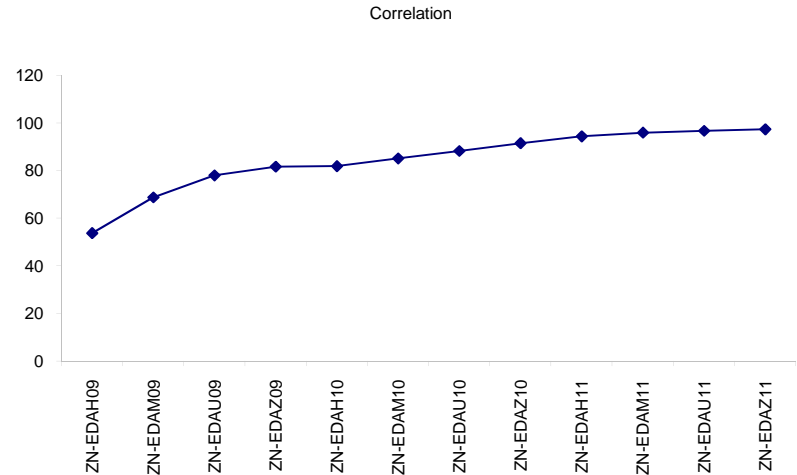
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as			ZN Duration	Spread Duration	
	Fraction of year	Duration	Duration			
EDAH09	0.161	6.25	6.09	6.09	ZN-EDAH09	
EDAM09	0.410	6.25	5.84	5.84	ZN-EDAM09	
EDAU09	0.660	6.25	5.59	5.59	ZN-EDAU09	
EDAZ09	0.909	6.25	5.34	5.34	ZN-EDAZ09	
EDAH10	1.158	6.25	5.09	5.09	ZN-EDAH10	
EDAM10	1.408	6.25	4.84	4.84	ZN-EDAM10	
EDAU10	1.657	6.25	4.59	4.59	ZN-EDAU10	
EDAZ10	1.906	6.25	4.34	4.34	ZN-EDAZ10	
EDAH11	2.155	6.25	4.09	4.09	ZN-EDAH11	
EDAM11	2.405	6.25	3.85	3.85	ZN-EDAM11	
EDAU11	2.673	6.25	3.58	3.58	ZN-EDAU11	
EDAZ11	2.923	6.25	3.33	3.33	ZN-EDAZ11	

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

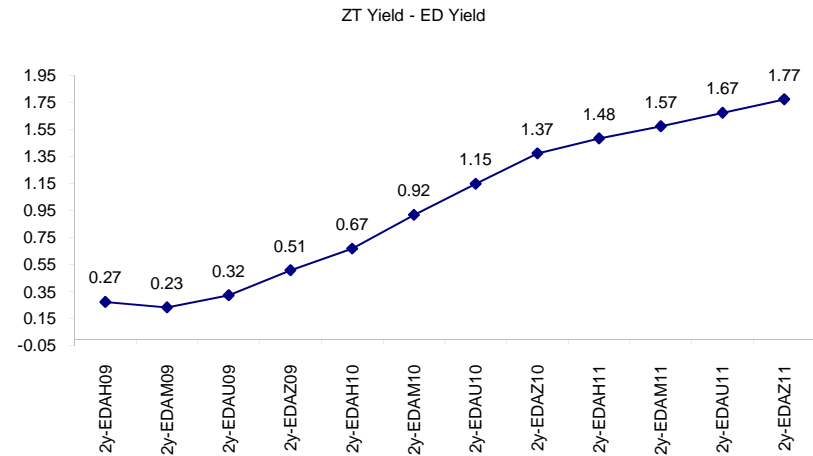


	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	1.254	0.27	2y-EDAH09	-23.391
EDAM09	1.214	0.23	2y-EDAM09	-36.227
EDAU09	1.304	0.32	2y-EDAU09	-45.377
EDAZ09	1.489	0.51	2y-EDAZ09	-47.827
EDAH10	1.649	0.67	2y-EDAH10	-45.739
EDAM10	1.899	0.92	2y-EDAM10	-49.473
EDAU10	2.129	1.15	2y-EDAU10	-54.213
EDAZ10	2.354	1.37	2y-EDAZ10	-59.690
EDAH11	2.464	1.48	2y-EDAH11	-64.762
EDAM11	2.554	1.57	2y-EDAM11	-66.620
EDAU11	2.654	1.67	2y-EDAU11	-66.155
EDAZ11	2.754	1.77	2y-EDAZ11	-66.268

Price = Outright Decimal Price - Euro Contract Price

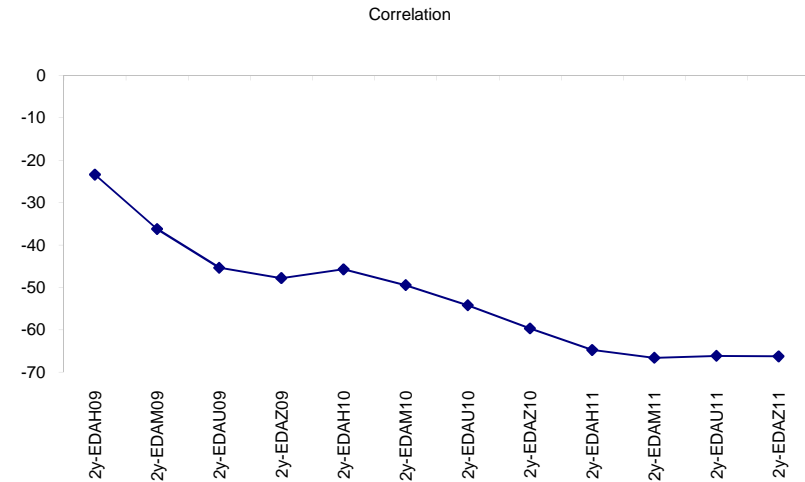
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

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



	ED Duration as Fraction of year			
	Fraction of year	2Y Duration	Spread Duration	
EDAH09	0.161	1.93	1.77	2y-EDAH09
EDAM09	0.410	1.93	1.52	2y-EDAM09
EDAU09	0.660	1.93	1.27	2y-EDAU09
EDAZ09	0.909	1.93	1.02	2y-EDAZ09
EDAH10	1.158	1.93	0.77	2y-EDAH10
EDAM10	1.408	1.93	0.52	2y-EDAM10
EDAU10	1.657	1.93	0.27	2y-EDAU10
EDAZ10	1.906	1.93	0.02	2y-EDAZ10
EDAH11	2.155	1.93	(0.23)	2y-EDAH11
EDAM11	2.405	1.93	(0.48)	2y-EDAM11
EDAU11	2.673	1.93	(0.75)	2y-EDAU11
EDAZ11	2.923	1.93	(1.00)	2y-EDAZ11

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



	5y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	1.135	0.45	5y-EDAH09	-52.988
EDAM09	1.095	0.49	5y-EDAM09	-68.483
EDAU09	1.185	0.40	5y-EDAU09	-77.978
EDAZ09	1.370	0.21	5y-EDAZ09	-81.129
EDAH10	1.530	0.05	5y-EDAH10	-80.288
EDAM10	1.780	0.20	5y-EDAM10	-82.976
EDAU10	2.010	0.43	5y-EDAU10	-85.762
EDAZ10	2.235	0.65	5y-EDAZ10	-88.850
EDAH11	2.345	0.76	5y-EDAH11	-92.191
EDAM11	2.435	0.85	5y-EDAM11	-94.561
EDAU11	2.535	0.95	5y-EDAU11	-95.176
EDAZ11	2.635	1.05	5y-EDAZ11	-95.742

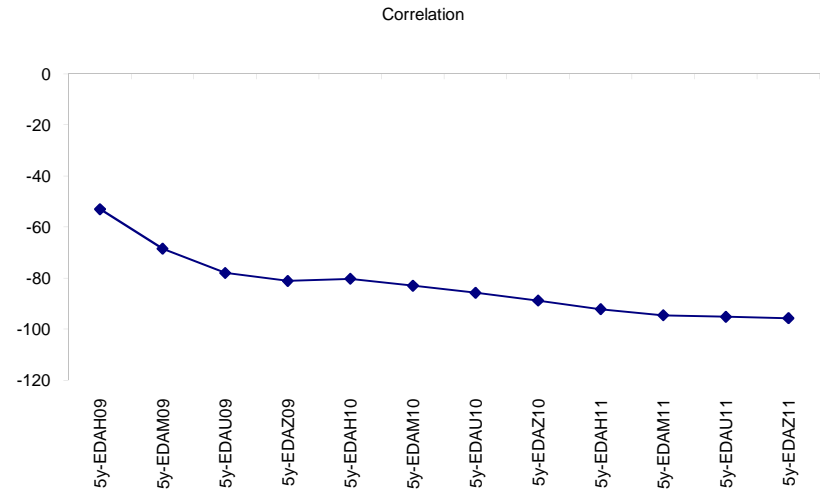
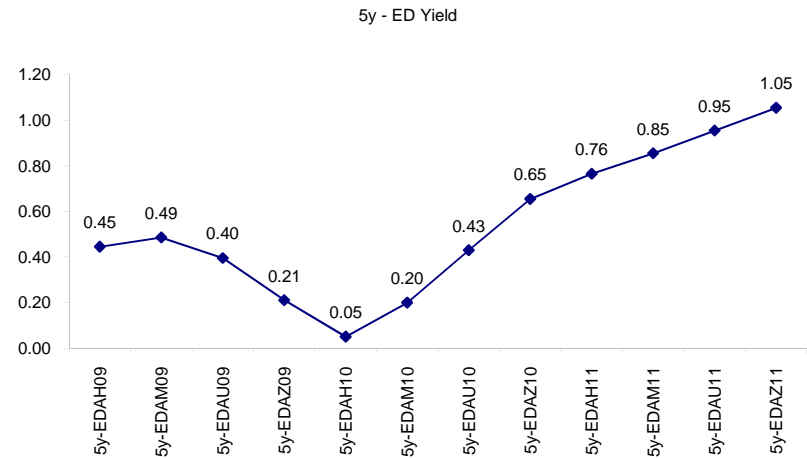
Price = Outright Decimal Price - Euro Contract Price

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		
EDAH09	0.161	4.62	4.46	5y-EDAH09
EDAM09	0.410	4.62	4.21	5y-EDAM09
EDAU09	0.660	4.62	3.96	5y-EDAU09
EDAZ09	0.909	4.62	3.71	5y-EDAZ09
EDAH10	1.158	4.62	3.46	5y-EDAH10
EDAM10	1.408	4.62	3.21	5y-EDAM10
EDAU10	1.657	4.62	2.96	5y-EDAU10
EDAZ10	1.906	4.62	2.71	5y-EDAZ10
EDAH11	2.155	4.62	2.46	5y-EDAH11
EDAM11	2.405	4.62	2.21	5y-EDAM11
EDAU11	2.673	4.62	1.94	5y-EDAU11
EDAZ11	2.923	4.62	1.69	5y-EDAZ11

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

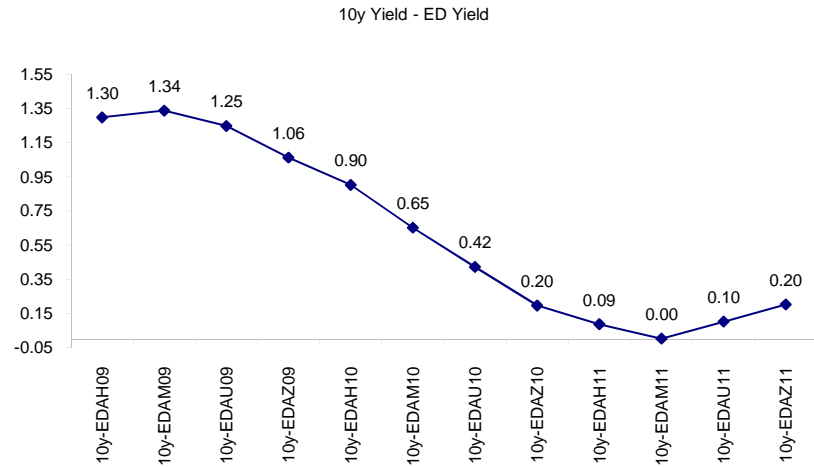


	10y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	1.135	1.30	10y-EDAH09	-39.113
EDAM09	1.095	1.34	10y-EDAM09	-55.494
EDAU09	1.185	1.25	10y-EDAU09	-66.199
EDAZ09	1.370	1.06	10y-EDAZ09	-69.812
EDAH10	1.530	0.90	10y-EDAH10	-68.957
EDAM10	1.780	0.65	10y-EDAM10	-73.072
EDAU10	2.010	0.42	10y-EDAU10	-78.271
EDAZ10	2.235	0.20	10y-EDAZ10	-83.582
EDAH11	2.345	0.09	10y-EDAH11	-88.302
EDAM11	2.435	0.00	10y-EDAM11	-91.031
EDAU11	2.535	0.10	10y-EDAU11	-91.140
EDAZ11	2.635	0.20	10y-EDAZ11	-91.420

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		
EDAH09	0.161	8.26	8.10	10y-EDAH09
EDAM09	0.410	8.26	7.85	10y-EDAM09
EDAU09	0.660	8.26	7.60	10y-EDAU09
EDAZ09	0.909	8.26	7.35	10y-EDAZ09
EDAH10	1.158	8.26	7.10	10y-EDAH10
EDAM10	1.408	8.26	6.86	10y-EDAM10
EDAU10	1.657	8.26	6.61	10y-EDAU10
EDAZ10	1.906	8.26	6.36	10y-EDAZ10
EDAH11	2.155	8.26	6.11	10y-EDAH11
EDAM11	2.405	8.26	5.86	10y-EDAM11
EDAU11	2.673	8.26	5.59	10y-EDAU11
EDAZ11	2.923	8.26	5.34	10y-EDAZ11

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

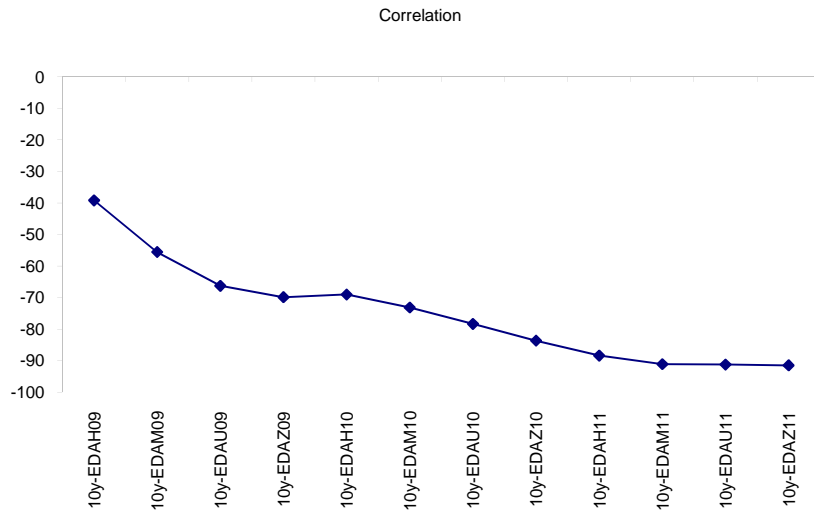


Chart values show the differences between ED contract and Treasury Futures contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.

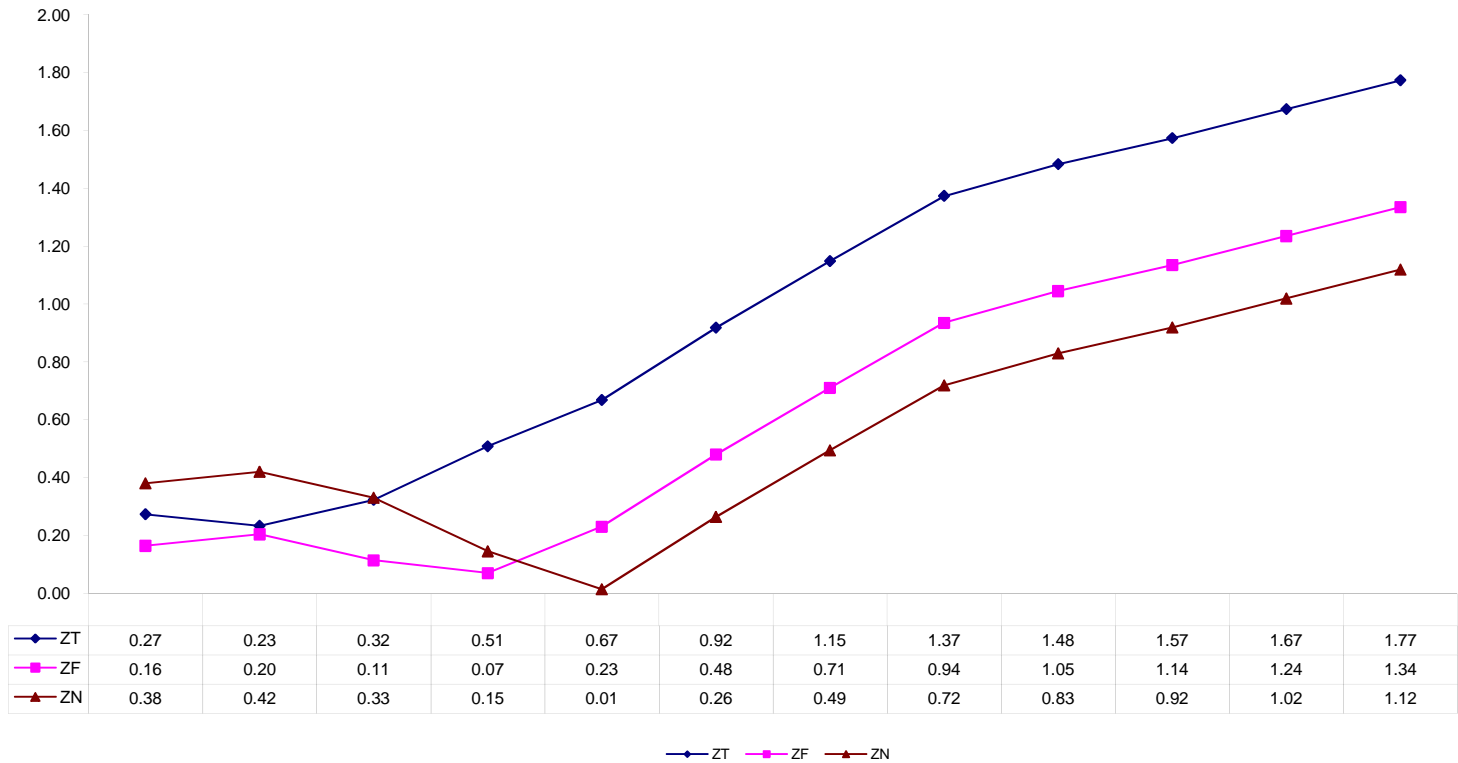
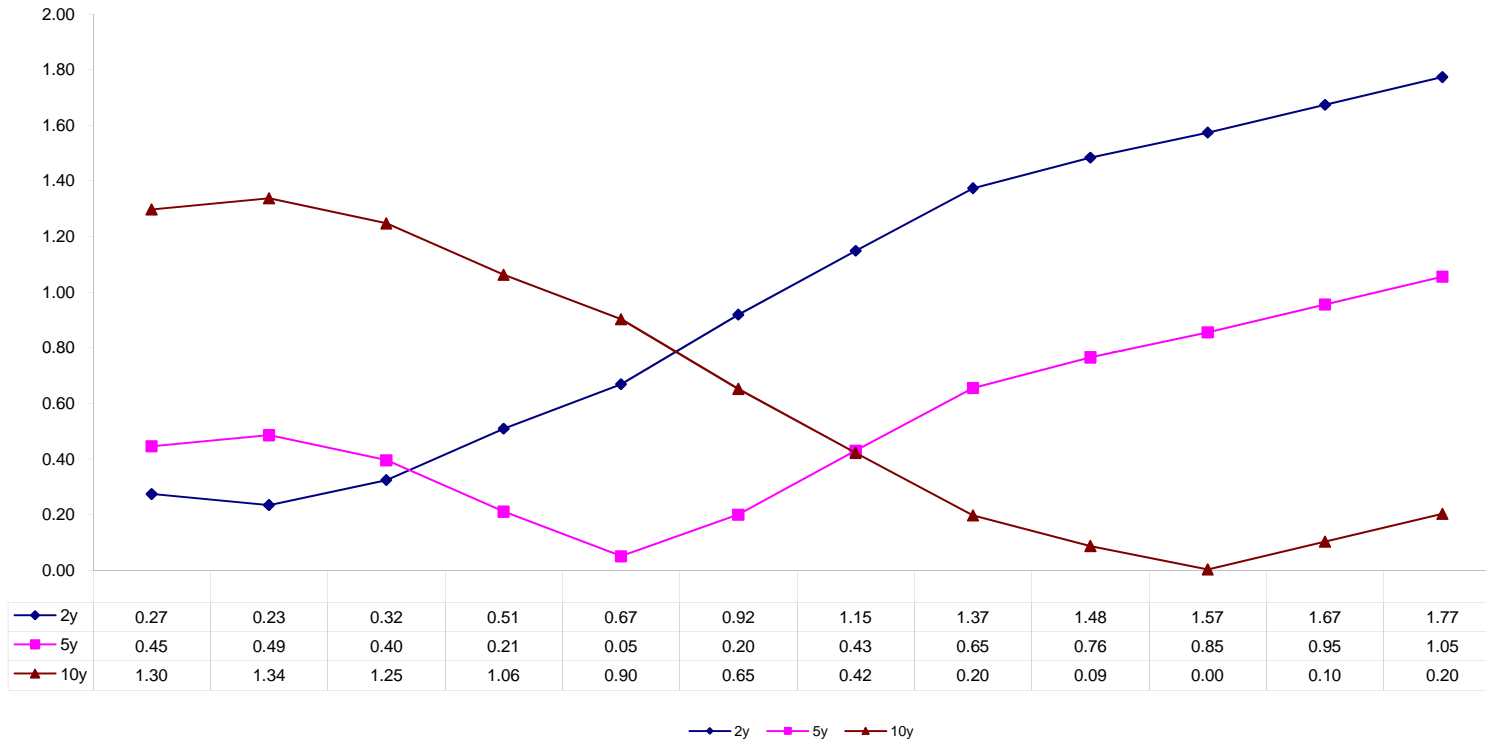
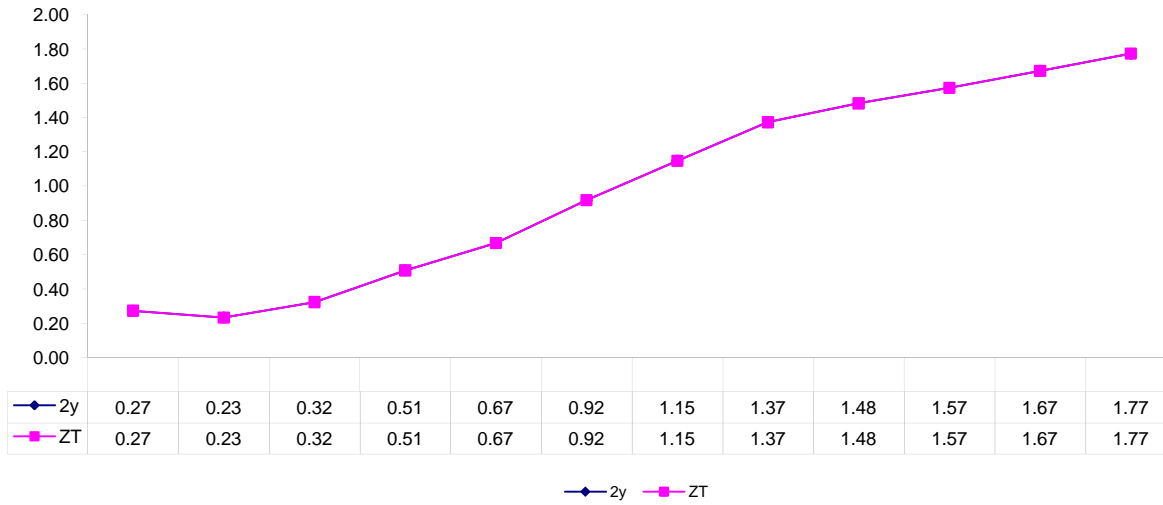
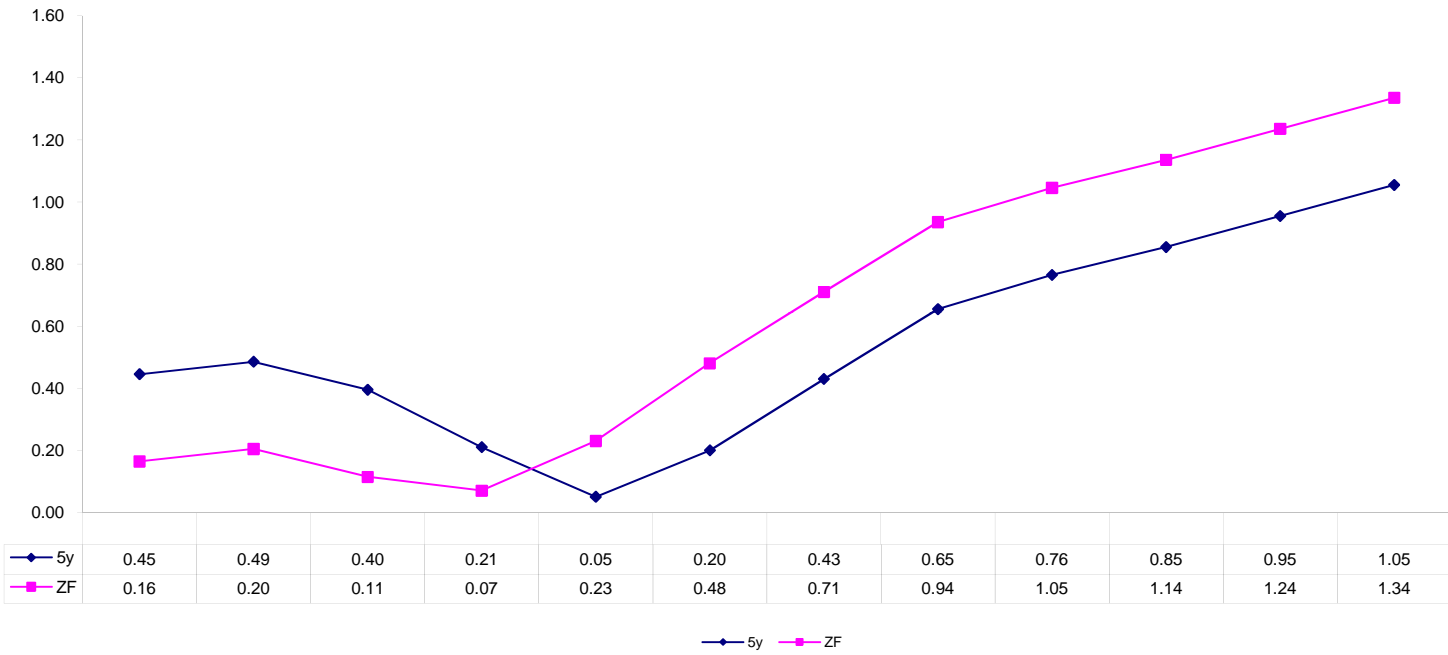


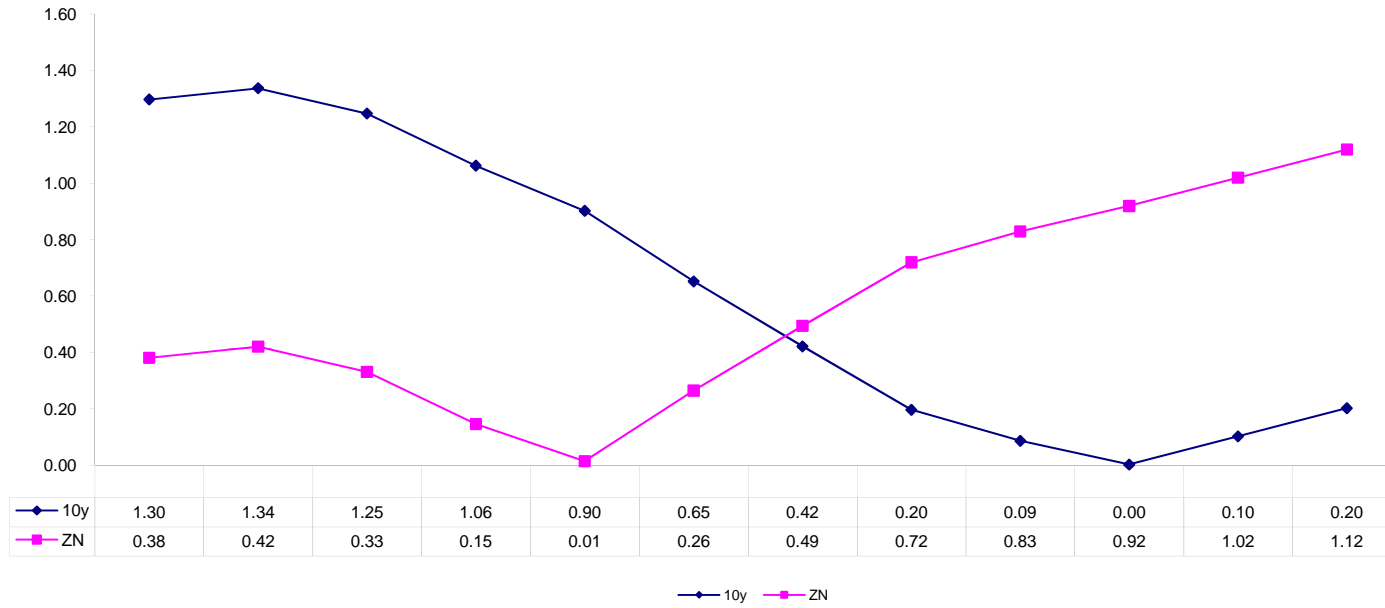
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



2y Basis TED Curve







	Last Yield	Net Last Yield	Last Price
White Pack	1.113	2.125	9890.500
Red Pack	1.819	-7.750	9821.375
Green Pack	2.435	-14.750	9761.250
Blue Pack		-7.625	9747.750
Gold Pack		-3.000	9736.250

