

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

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Treasury Futures and Cash				
	Last Decimal	Last 32	Last Yield*	MDuration
ZT	108.7719	108.2470	0.826	1.834
ZF	117.1406	117.0450	1.796	4.029
ZN	120.9375	120.3000	2.679	5.880
2y	99.9281	99.2970	0.907	1.967
5y	99.3500	99.1120	2.014	4.737
10y	96.8438	96.2700	3.127	8.439

Eurodollars (ED)						
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month	
EDAM09	99.0600	0.940	45	0.1227	JUN	
EDAU09	99.0200	0.980	136	0.3720	SEP	White Pack
EDAZ09	98.8250	1.175	227	0.6213	DEC	
EDAH10	98.7000	1.300	318	0.8706	MAR	
EDAM10	98.4550	1.545	409	1.1199	JUN	
EDAU10	98.2100	1.790	500	1.3692	SEP	Red Pack
EDAZ10	97.9150	2.085	591	1.6185	DEC	
EDAH11	97.6650	2.335	682	1.8679	MAR	
EDAM11	97.3900	2.610	773	2.1172	JUN	
EDAU11	97.1450	2.855	871	2.3857	SEP	Green Pack
EDAZ11	96.9100	3.090	962	2.6350	DEC	
EDAH12	96.7700	3.230	1,053	2.8843	MAR	
EDAM12	96.6300	3.370	1,144	3.1336	JUN	
EDAU12	96.5200	3.480	1,235	3.3829	SEP	Blue Pack
EDAZ12	96.4000	3.600	1,326	3.6322	DEC	
EDAH13	96.3550	3.645	1,417	3.8816	MAR	
EDAM13	96.2800	3.720	1,508	4.1309	JUN	
EDAU13	96.1950	3.805	1,599	4.3802	SEP	Gold Pack
EDAZ13	96.1100	3.890	1,690	4.6295	DEC	
EDAH14	96.0650	3.935	1,781	4.8788	MAR	

	Last Yield	Net Yield	Last Price	
White Pack	1.117	1.625	9890.13	
Red Pack	1.975	2.250	9806.13	Pack Prices
Green Pack	3.009	-0.250	9705.38	
Blue Pack		0.000	9649.13	
Gold Pack		0.000	9618.00	

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)

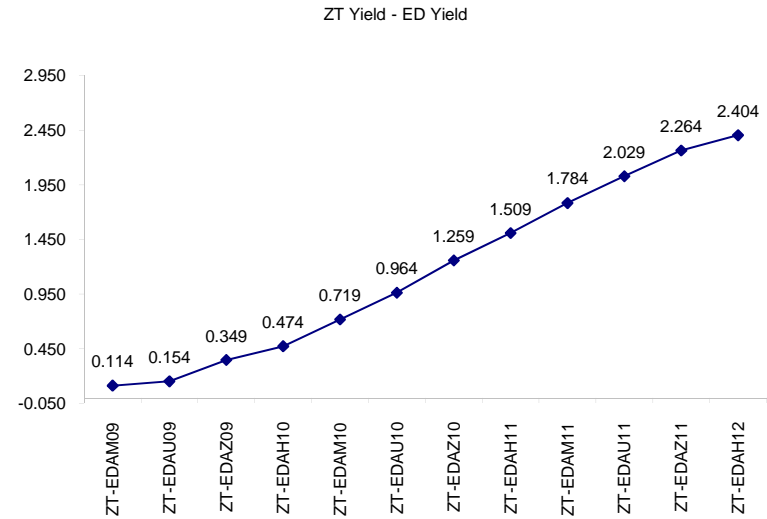
Correlations for the US Cash Treasuries are done on a YIELD basis. Therefore, you'll see negative values. The reason for this is due to the new issues. Every new issue takes too long to 'catch up' because the correlation formula looks back 10days. So, it's much easier to formulate the correlations based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

	ZT			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	9.71	0.114	ZT-EDAM09	83
EDAU09	9.75	0.154	ZT-EDAU09	88
EDAZ09	9.95	0.349	ZT-EDAZ09	92
EDAH10	10.07	0.474	ZT-EDAH10	95
EDAM10	10.32	0.719	ZT-EDAM10	97
EDAU10	10.56	0.964	ZT-EDAU10	93
EDAZ10	10.86	1.259	ZT-EDAZ10	73
EDAH11	11.11	1.509	ZT-EDAH11	23
EDAM11	11.38	1.784	ZT-EDAM11	-19
EDAU11	11.63	2.029	ZT-EDAU11	-38
EDAZ11	11.86	2.264	ZT-EDAZ11	-46
EDAH12	12.00	2.404	ZT-EDAH12	-53

Price = Outright Decimal Price - Euro Contract Price

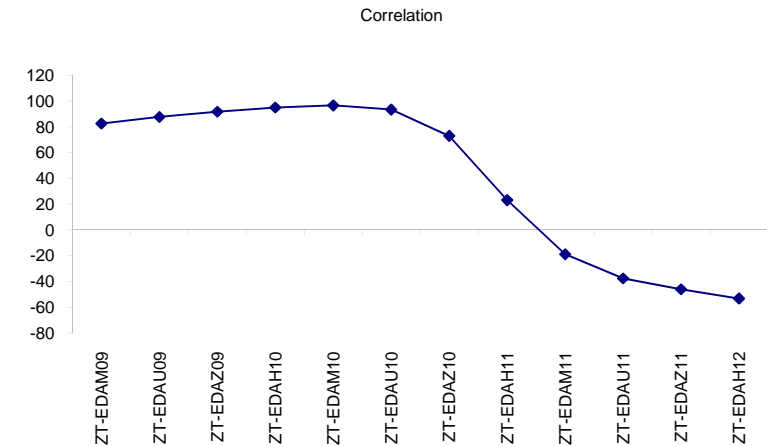
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year			ZT Duration	Spread Duration	
EDAM09	0.1227	1.8339	1.7112	ZT-EDAM09		
EDAU09	0.3720	1.8339	1.4619	ZT-EDAU09		
EDAZ09	0.6213	1.8339	1.2126	ZT-EDAZ09		
EDAH10	0.8706	1.8339	0.9633	ZT-EDAH10		
EDAM10	1.1199	1.8339	0.7140	ZT-EDAM10		
EDAU10	1.3692	1.8339	0.4646	ZT-EDAU10		
EDAZ10	1.6185	1.8339	0.2153	ZT-EDAZ10		
EDAH11	1.8679	1.8339	-0.0340	ZT-EDAH11		
EDAM11	2.1172	1.8339	-0.2833	ZT-EDAM11		
EDAU11	2.3857	1.8339	-0.5518	ZT-EDAU11		
EDAZ11	2.6350	1.8339	-0.8011	ZT-EDAZ11		
EDAH12	2.8843	1.8339	-1.0504	ZT-EDAH12		

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

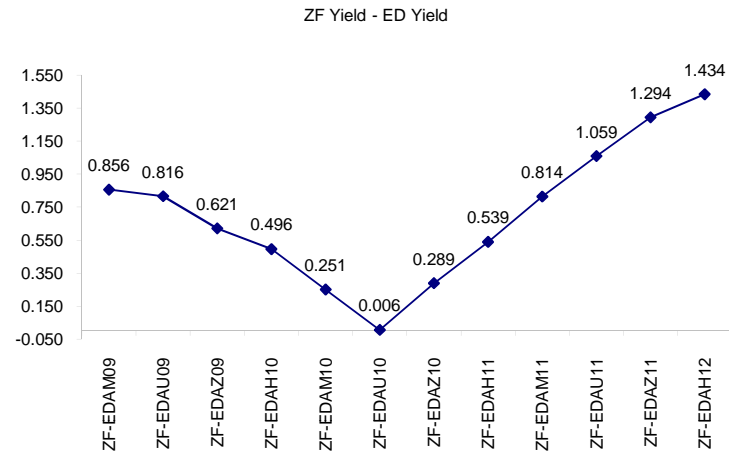


	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	18.08	0.856	ZF-EDAM09	-65
EDAU09	18.12	0.816	ZF-EDAU09	-59
EDAZ09	18.32	0.621	ZF-EDAZ09	-52
EDAH10	18.44	0.496	ZF-EDAH10	-45
EDAM10	18.69	0.251	ZF-EDAM10	-31
EDAU10	18.93	0.006	ZF-EDAU10	-13
EDAZ10	19.23	0.289	ZF-EDAZ10	28
EDAH11	19.48	0.539	ZF-EDAH11	76
EDAM11	19.75	0.814	ZF-EDAM11	95
EDAU11	20.00	1.059	ZF-EDAU11	97
EDAZ11	20.23	1.294	ZF-EDAZ11	96
EDAH12	20.37	1.434	ZF-EDAH12	95

Price = Outright Decimal Price - Euro Contract Price

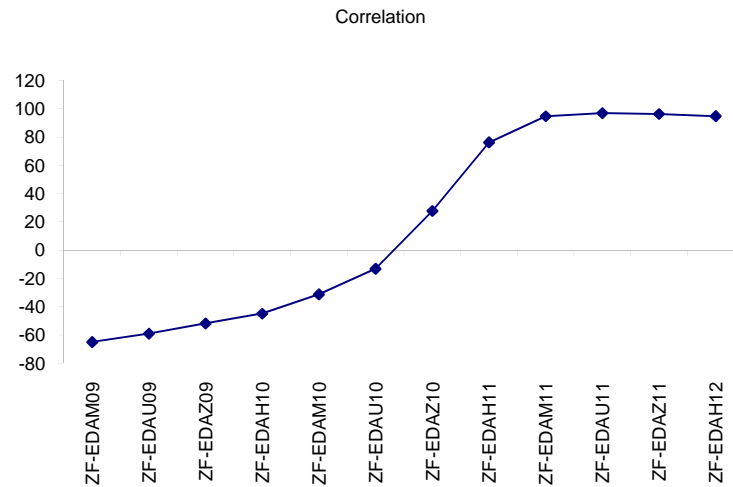
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year		ZF Duration	Spread Duration	
EDAM09	0.1227	4.0289	3.9063	ZF-EDAM09	
EDAU09	0.3720	4.0289	3.6570	ZF-EDAU09	
EDAZ09	0.6213	4.0289	3.4076	ZF-EDAZ09	
EDAH10	0.8706	4.0289	3.1583	ZF-EDAH10	
EDAM10	1.1199	4.0289	2.9090	ZF-EDAM10	
EDAU10	1.3692	4.0289	2.6597	ZF-EDAU10	
EDAZ10	1.6185	4.0289	2.4104	ZF-EDAZ10	
EDAH11	1.8679	4.0289	2.1611	ZF-EDAH11	
EDAM11	2.1172	4.0289	1.9118	ZF-EDAM11	
EDAU11	2.3857	4.0289	1.6433	ZF-EDAU11	
EDAZ11	2.6350	4.0289	1.3939	ZF-EDAZ11	
EDAH12	2.8843	4.0289	1.1446	ZF-EDAH12	

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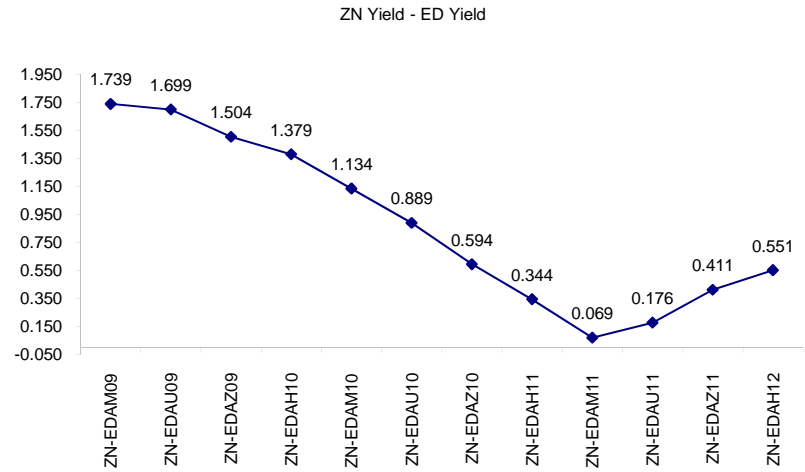


ZN				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	21.88	1.739	ZN-EDAM09	-80
EDAU09	21.92	1.699	ZN-EDAU09	-75
EDAZ09	22.11	1.504	ZN-EDAZ09	-70
EDAH10	22.24	1.379	ZN-EDAH10	-64
EDAM10	22.48	1.134	ZN-EDAM10	-51
EDAU10	22.73	0.889	ZN-EDAU10	-33
EDAZ10	23.02	0.594	ZN-EDAZ10	10
EDAH11	23.27	0.344	ZN-EDAH11	66
EDAM11	23.55	0.069	ZN-EDAM11	91
EDAU11	23.79	0.176	ZN-EDAU11	97
EDAZ11	24.03	0.411	ZN-EDAZ11	98
EDAH12	24.17	0.551	ZN-EDAH12	98

Price = Outright Decimal Price - Euro Contract Price

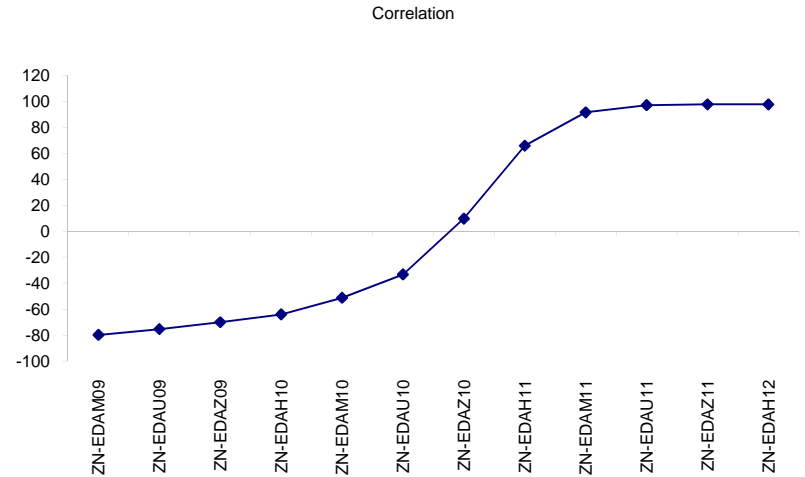
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



ED Duration as Fraction of year			
	Fraction of year	ZN Duration	Spread Duration
EDAM09	0.1227	5.8803	5.7576
EDAU09	0.3720	5.8803	5.5083
EDAZ09	0.6213	5.8803	5.2590
EDAH10	0.8706	5.8803	5.0097
EDAM10	1.1199	5.8803	4.7604
EDAU10	1.3692	5.8803	4.5111
EDAZ10	1.6185	5.8803	4.2618
EDAH11	1.8679	5.8803	4.0124
EDAM11	2.1172	5.8803	3.7631
EDAU11	2.3857	5.8803	3.4946
EDAZ11	2.6350	5.8803	3.2453
EDAH12	2.8843	5.8803	2.9960

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

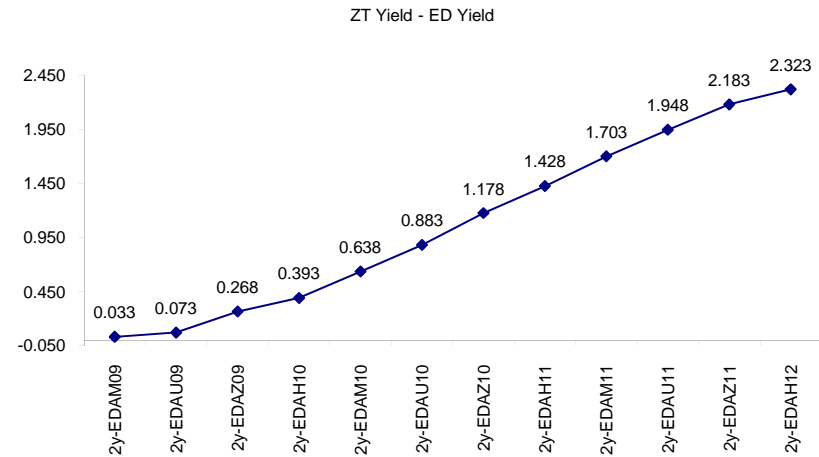


	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	0.87	0.033	2y-EDAM09	-26
EDAU09	0.91	0.073	2y-EDAU09	-34
EDAZ09	1.10	0.268	2y-EDAZ09	-43
EDAH10	1.23	0.393	2y-EDAH10	-48
EDAM10	1.47	0.638	2y-EDAM10	-56
EDAU10	1.72	0.883	2y-EDAU10	-62
EDAZ10	2.01	1.178	2y-EDAZ10	-68
EDAH11	2.26	1.428	2y-EDAH11	-57
EDAM11	2.54	1.703	2y-EDAM11	-37
EDAU11	2.78	1.948	2y-EDAU11	-25
EDAZ11	3.02	2.183	2y-EDAZ11	-18
EDAH12	3.16	2.323	2y-EDAH12	-12

Price = Outright Decimal Price - Euro Contract Price

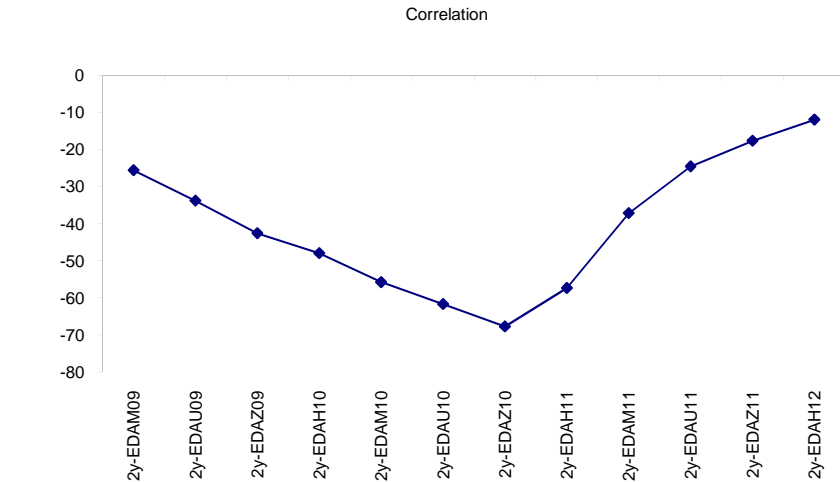
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

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	ED Duration as		Spread Duration	
	Fraction of year	2Y Duration		
EDAM09	0.1227	1.9672	1.8445	2y-EDAM09
EDAU09	0.3720	1.9672	1.5952	2y-EDAU09
EDAZ09	0.6213	1.9672	1.3459	2y-EDAZ09
EDAH10	0.8706	1.9672	1.0966	2y-EDAH10
EDAM10	1.1199	1.9672	0.8473	2y-EDAM10
EDAU10	1.3692	1.9672	0.5979	2y-EDAU10
EDAZ10	1.6185	1.9672	0.3486	2y-EDAZ10
EDAH11	1.8679	1.9672	0.0993	2y-EDAH11
EDAM11	2.1172	1.9672	-0.1500	2y-EDAM11
EDAU11	2.3857	1.9672	-0.4185	2y-EDAU11
EDAZ11	2.6350	1.9672	-0.6678	2y-EDAZ11
EDAH12	2.8843	1.9672	-0.9171	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	0.29	1.074	5y-EDAM09	79
EDAU09	0.33	1.034	5y-EDAU09	74
EDAZ09	0.53	0.839	5y-EDAZ09	68
EDAH10	0.65	0.714	5y-EDAH10	63
EDAM10	0.90	0.469	5y-EDAM10	52
EDAU10	1.14	0.224	5y-EDAU10	35
EDAZ10	1.44	0.071	5y-EDAZ10	-6
EDAH11	1.69	0.321	5y-EDAH11	-61
EDAM11	1.96	0.596	5y-EDAM11	-88
EDAU11	2.21	0.841	5y-EDAU11	-94
EDAZ11	2.44	1.076	5y-EDAZ11	-96
EDAH12	2.58	1.216	5y-EDAH12	-96

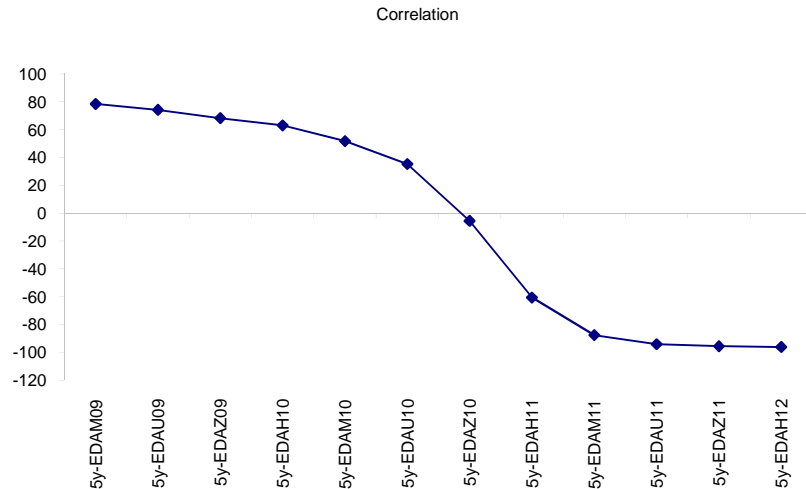
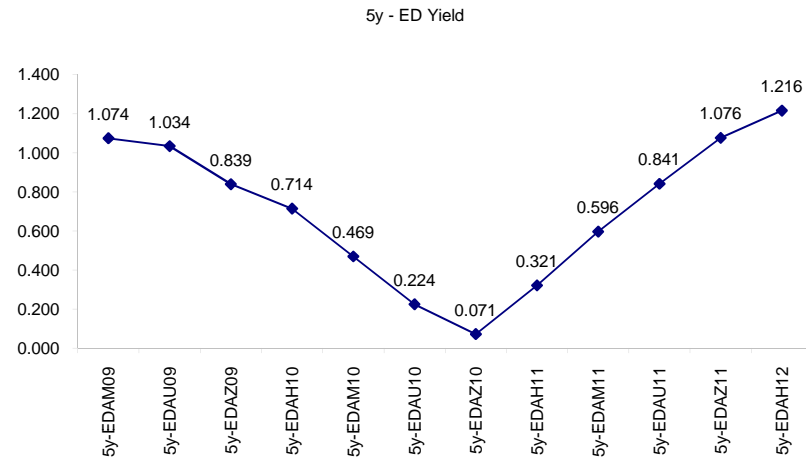
Price = Outright Decimal Price - Euro Contract Price

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

*Correlation = ED Correlation to Treasury Future over 10 days

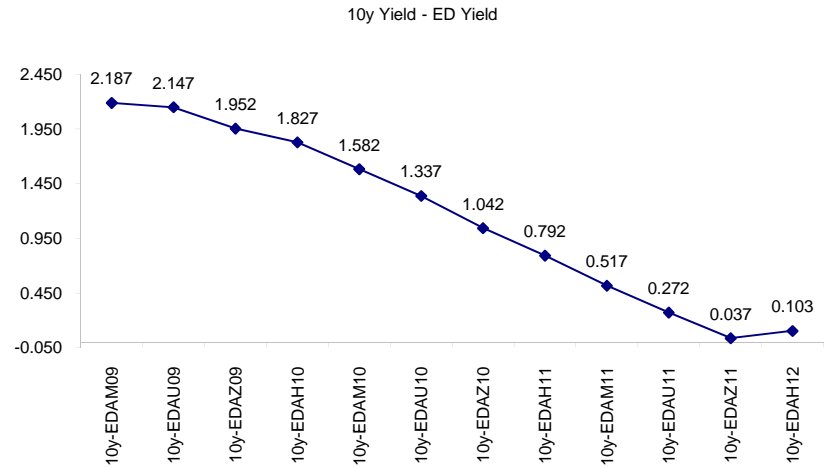
ED Duration as			
	Fraction of year	5Y Duration	Spread Duration
EDAM09	0.1227	4.7367	4.6141
EDAU09	0.3720	4.7367	4.3647
EDAZ09	0.6213	4.7367	4.1154
EDAH10	0.8706	4.7367	3.8661
EDAM10	1.1199	4.7367	3.6168
EDAU10	1.3692	4.7367	3.3675
EDAZ10	1.6185	4.7367	3.1182
EDAH11	1.8679	4.7367	2.8688
EDAM11	2.1172	4.7367	2.6195
EDAU11	2.3857	4.7367	2.3510
EDAZ11	2.6350	4.7367	2.1017
EDAH12	2.8843	4.7367	1.8524

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



10y				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM09	0.29	2.187	10y-EDAM09	83
EDAU09	0.33	2.147	10y-EDAU09	80
EDAZ09	0.53	1.952	10y-EDAZ09	76
EDAH10	0.65	1.827	10y-EDAH10	72
EDAM10	0.90	1.582	10y-EDAM10	62
EDAU10	1.14	1.337	10y-EDAU10	47
EDAZ10	1.44	1.042	10y-EDAZ10	6
EDAH11	1.69	0.792	10y-EDAH11	-52
EDAM11	1.96	0.517	10y-EDAM11	-83
EDAU11	2.21	0.272	10y-EDAU11	-93
EDAZ11	2.44	0.037	10y-EDAZ11	-96
EDAH12	2.58	0.103	10y-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				10Y Duration	Spread Duration	
EDAM09	0.1227	8.4388	8.3161	10y-EDAM09		
EDAU09	0.3720	8.4388	8.0668	10y-EDAU09		
EDAZ09	0.6213	8.4388	7.8175	10y-EDAZ09		
EDAH10	0.8706	8.4388	7.5682	10y-EDAH10		
EDAM10	1.1199	8.4388	7.3189	10y-EDAM10		
EDAU10	1.3692	8.4388	7.0696	10y-EDAU10		
EDAZ10	1.6185	8.4388	6.8203	10y-EDAZ10		
EDAH11	1.8679	8.4388	6.5709	10y-EDAH11		
EDAM11	2.1172	8.4388	6.3216	10y-EDAM11		
EDAU11	2.3857	8.4388	6.0531	10y-EDAU11		
EDAZ11	2.6350	8.4388	5.8038	10y-EDAZ11		
EDAH12	2.8843	8.4388	5.5545	10y-EDAH12		

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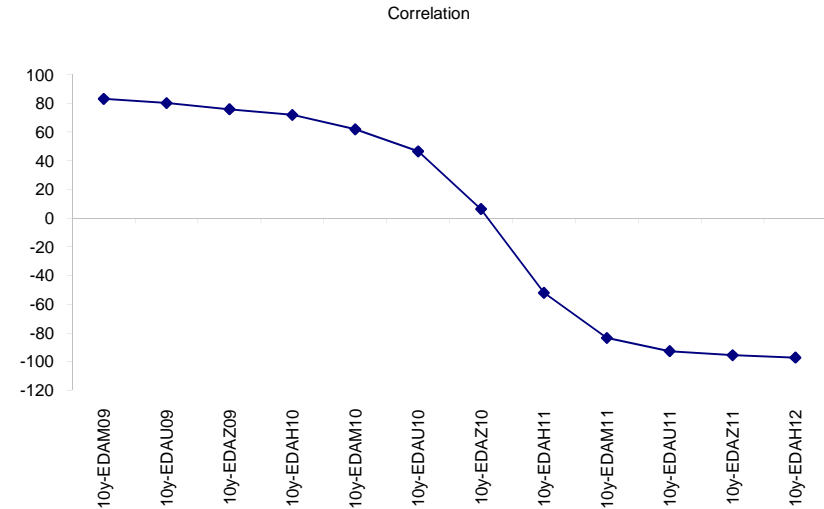


Chart values show the differences between ED contract and Treasury Futures contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.

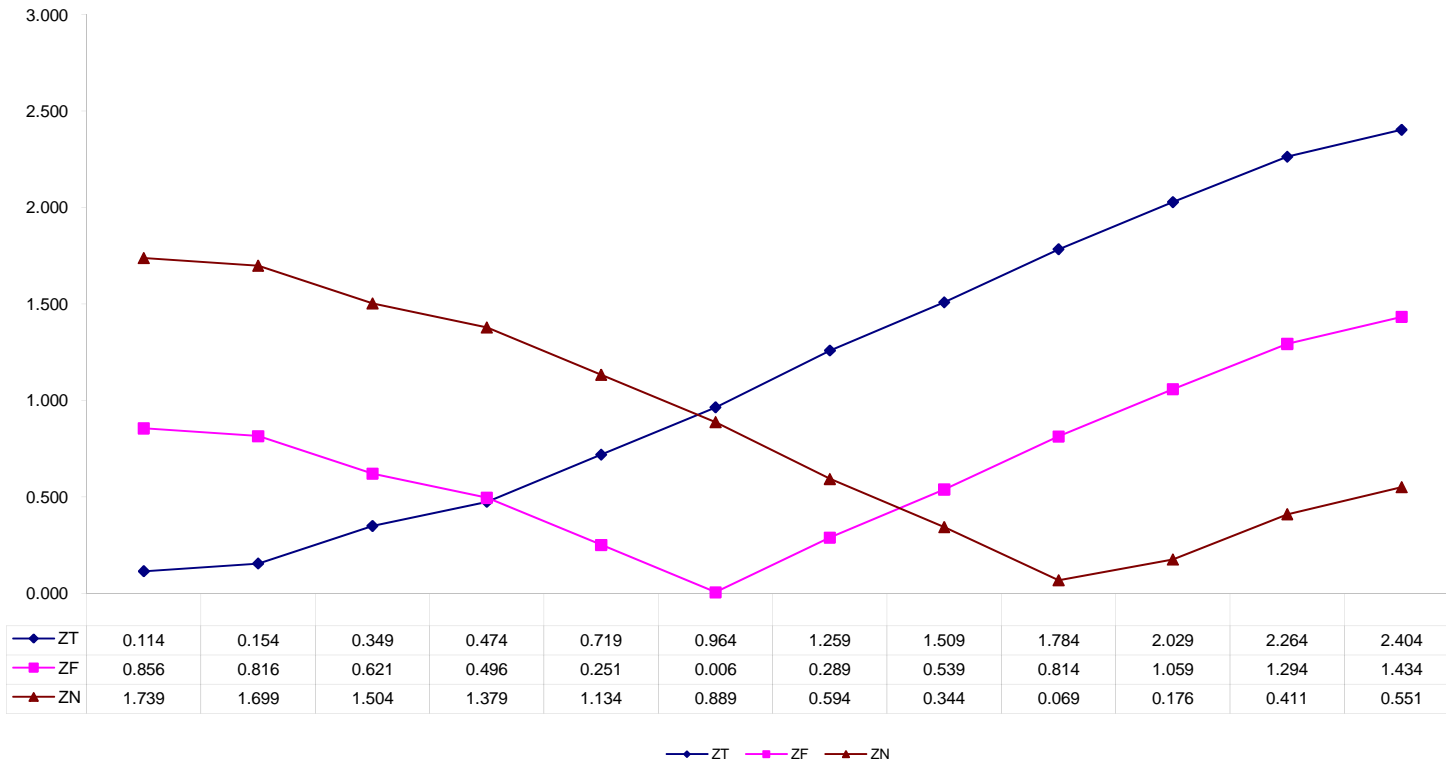
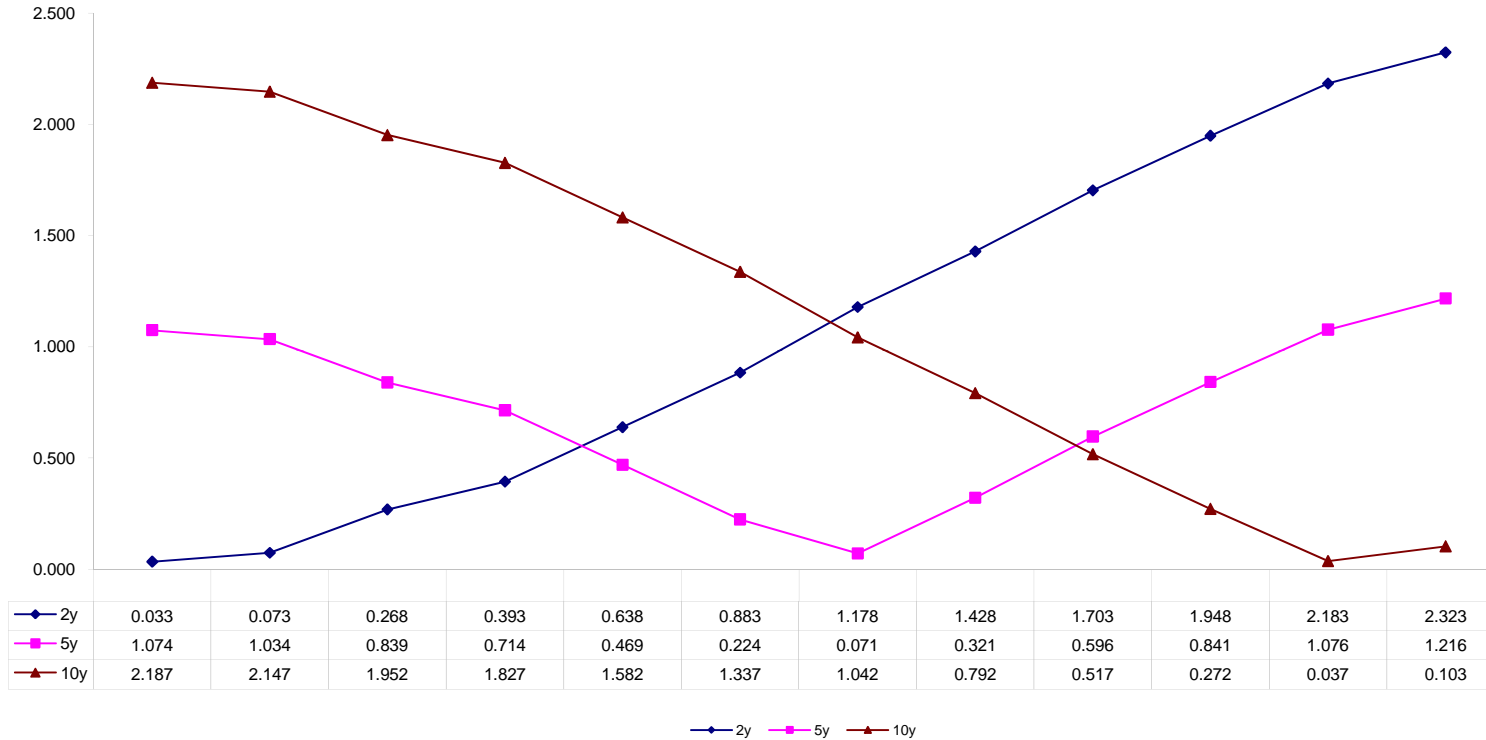
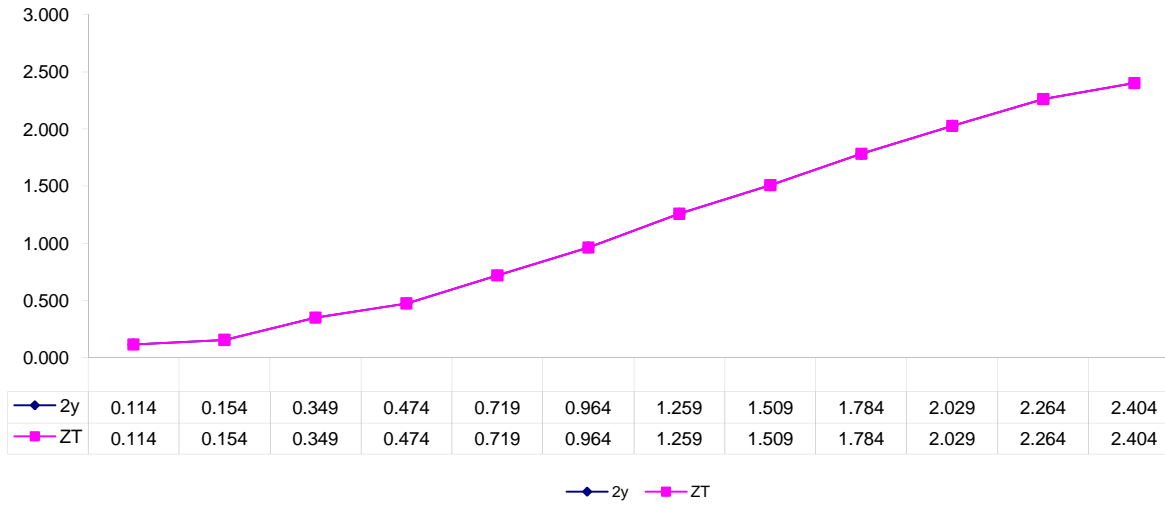
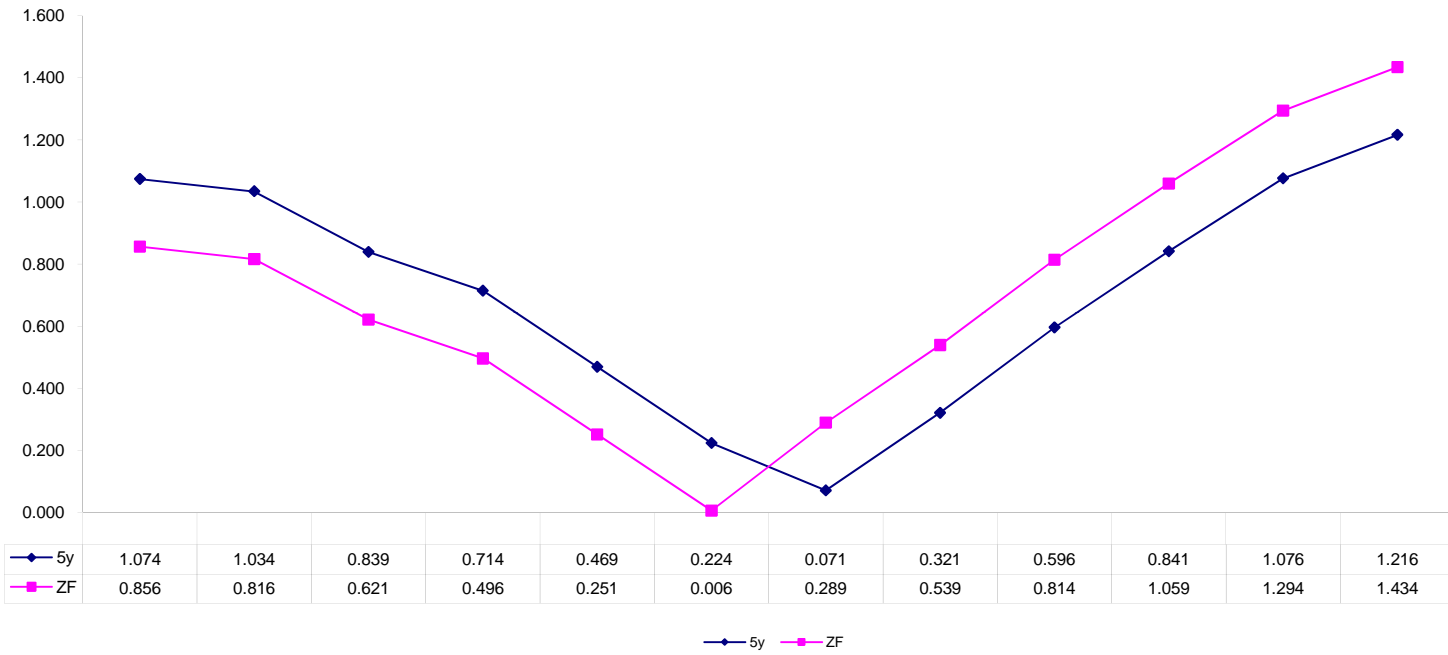


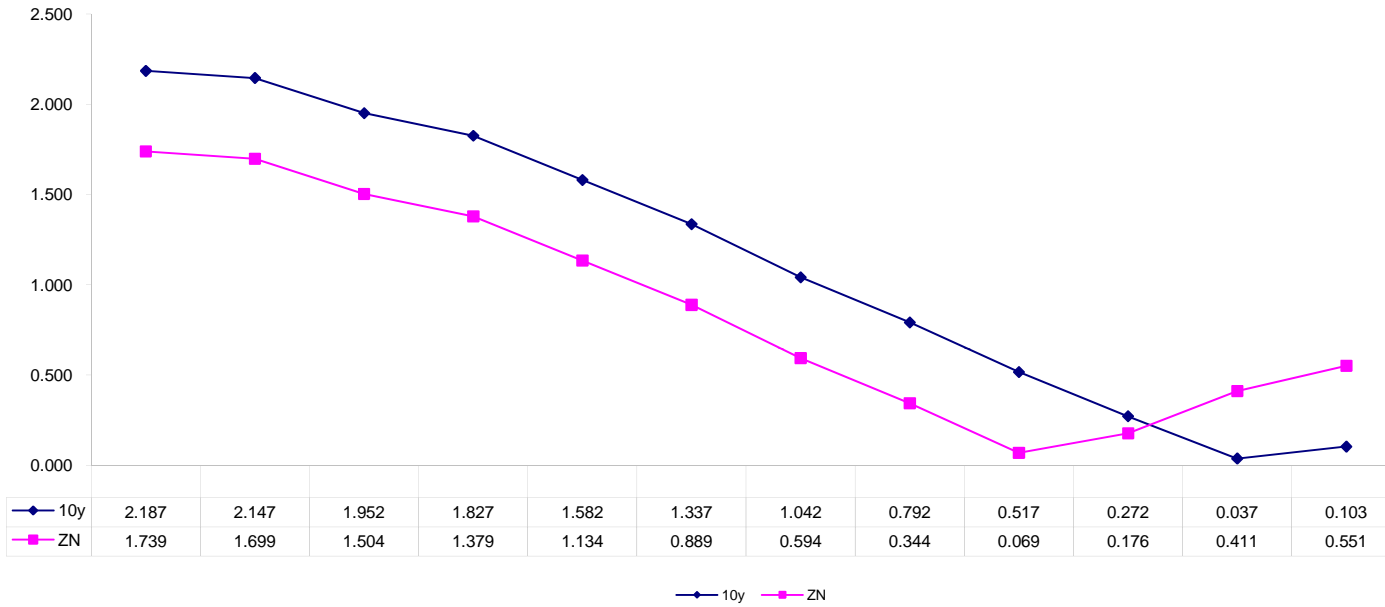
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



2y Basis TED Curve







	Last Yield	Net Last Yield	Last Price
White Pack	1.117	1.625	9890.1250
Red Pack	1.975	2.250	9806.1250
Green Pack	3.009	-0.250	9705.3750
Blue Pack		0.000	9649.1250
Gold Pack		0.000	9618.0000

