

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 Feb-00	Last Yield*	MDuration
ZT	108.1313	108.0420	1.124	1.827
ZF	114.8500	114.2720	2.363	4.101
ZN	116.4063	116.1300	3.172	5.730
2y	99.6313	99.2020	1.187	1.965
5y	99.9219	99.2950	2.642	4.649
10y	95.9063	95.2900	3.625	8.262

Eurodollars (ED)						
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month	
EDAU09	99.5100	0.490	45	0.1226	SEP	
EDAZ09	99.2650	0.735	136	0.3719	DEC	White Pack
EDAH10	98.9550	1.045	227	0.6212	MAR	Pack
EDAM10	98.5300	1.470	318	0.8706	JUN	
EDAU10	98.1050	1.895	409	1.1199	SEP	
EDAZ10	97.6950	2.305	500	1.3692	DEC	Red Pack
EDAH11	97.3600	2.640	591	1.6185	MAR	Pack
EDAM11	97.0350	2.965	682	1.8678	JUN	
EDAU11	96.7500	3.250	780	2.1363	SEP	
EDAZ11	96.4650	3.535	871	2.3856	DEC	Green Pack
EDAH12	96.2700	3.730	962	2.6349	MAR	Pack
EDAM12	96.0850	3.915	1,053	2.8843	JUN	
EDAU12	95.9350	4.065	1,144	3.1336	SEP	
EDAZ12	95.7700	4.230	1,235	3.3829	DEC	Blue Pack
EDAH13	95.6750	4.325	1,326	3.6322	MAR	Pack
EDAM13	95.5550	4.445	1,417	3.8815	JUN	
EDAU13	95.4500	4.550	1,508	4.1308	SEP	
EDAZ13	95.3250	4.675	1,599	4.3802	DEC	Gold Pack
EDAH14	95.2350	4.765	1,690	4.6295	MAR	Pack
EDAM14	95.1300	4.870	1,781	4.8788	JUN	

	Last Yield	Net Yield	Last Price	
White Pack	0.951	0.162	9906.50	
Red Pack	2.501	0.337	9754.88	Pack Prices
Green Pack	3.691	0.513	9639.25	
Blue Pack	4.372	0.750	9573.38	
Gold Pack		0.350	9526.50	

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.

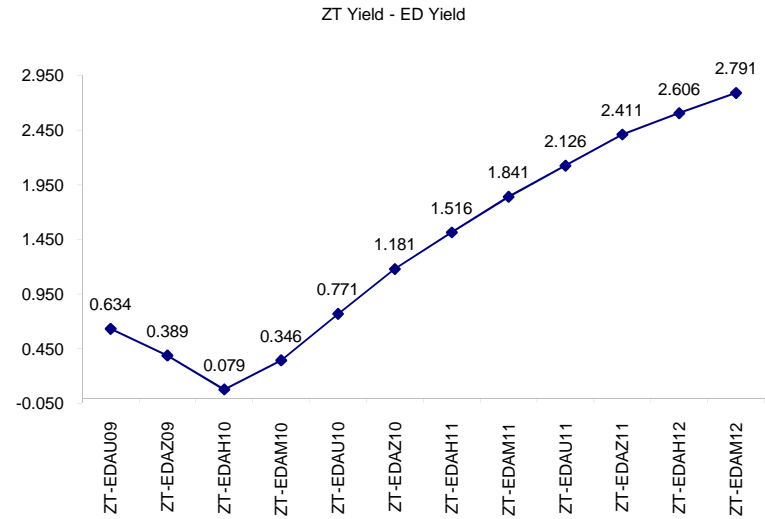
jgoulding@ghco.com

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.

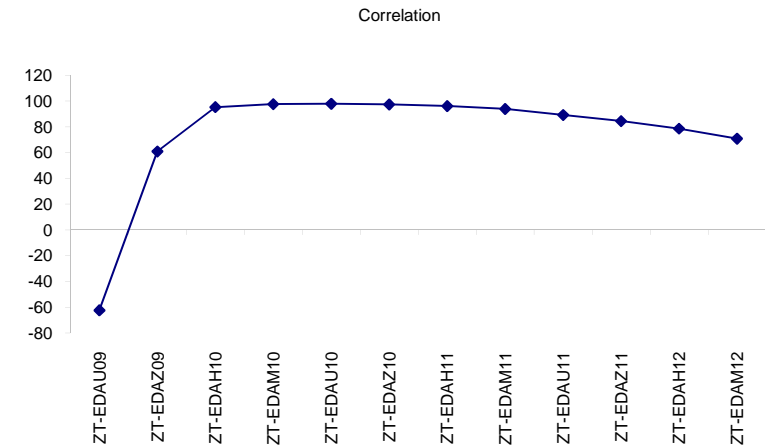
	ZT			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	8.62	0.634	ZT-EDAU09	-62
EDAZ09	8.87	0.389	ZT-EDAZ09	61
EDAH10	9.18	0.079	ZT-EDAH10	95
EDAM10	9.60	0.346	ZT-EDAM10	98
EDAU10	10.03	0.771	ZT-EDAU10	98
EDAZ10	10.44	1.181	ZT-EDAZ10	97
EDAH11	10.77	1.516	ZT-EDAH11	96
EDAM11	11.10	1.841	ZT-EDAM11	94
EDAU11	11.38	2.126	ZT-EDAU11	89
EDAZ11	11.67	2.411	ZT-EDAZ11	84
EDAH12	11.86	2.606	ZT-EDAH12	79
EDAM12	12.05	2.791	ZT-EDAM12	71

Price = Outright Decimal Price - Euro Contract Price
 Yield = ABS (Proxy Yield - Implied Euro Contract yield)
 *Correlation = ED Correlation to Treasury Future over 10 days



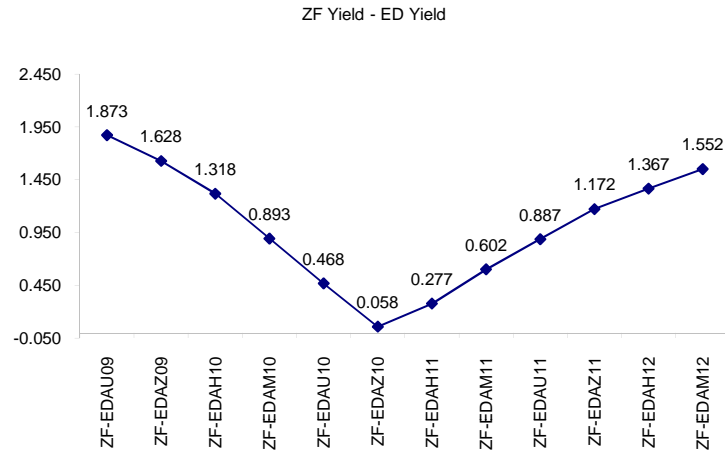
	ED Duration as Fraction of year			
	ZT Duration	Spread Duration		
EDAU09	0.1226	1.7041	ZT-EDAU09	1.8267
EDAZ09	0.3719	1.4548	ZT-EDAZ09	1.8267
EDAH10	0.6212	1.2055	ZT-EDAH10	1.8267
EDAM10	0.8706	0.9562	ZT-EDAM10	1.8267
EDAU10	1.1199	0.7069	ZT-EDAU10	1.8267
EDAZ10	1.3692	0.4576	ZT-EDAZ10	1.8267
EDAH11	1.6185	0.2082	ZT-EDAH11	1.8267
EDAM11	1.8678	-0.0411	ZT-EDAM11	1.8267
EDAU11	2.1363	-0.3096	ZT-EDAU11	1.8267
EDAZ11	2.3856	-0.5589	ZT-EDAZ11	1.8267
EDAH12	2.6349	-0.8082	ZT-EDAH12	1.8267
EDAM12	2.8843	-1.0575	ZT-EDAM12	1.8267

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



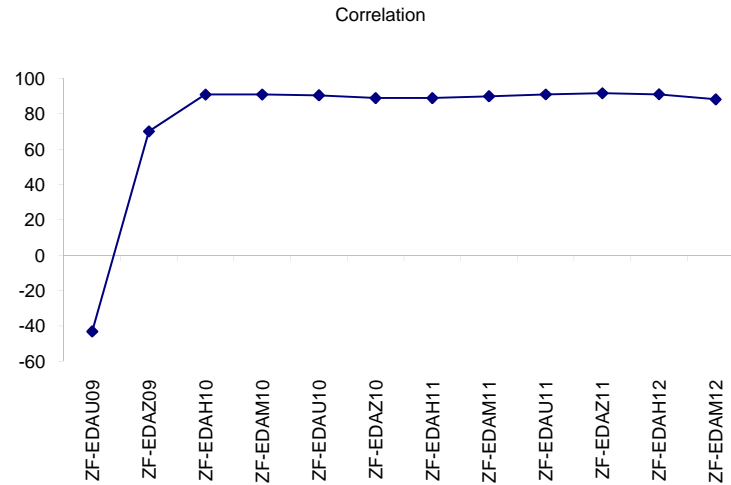
	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	15.34	1.873	ZF-EDAU09	-43
EDAZ09	15.59	1.628	ZF-EDAZ09	70
EDAH10	15.90	1.318	ZF-EDAH10	91
EDAM10	16.32	0.893	ZF-EDAM10	91
EDAU10	16.75	0.468	ZF-EDAU10	91
EDAZ10	17.16	0.058	ZF-EDAZ10	89
EDAH11	17.49	0.277	ZF-EDAH11	89
EDAM11	17.82	0.602	ZF-EDAM11	90
EDAU11	18.10	0.887	ZF-EDAU11	91
EDAZ11	18.39	1.172	ZF-EDAZ11	92
EDAH12	18.58	1.367	ZF-EDAH12	91
EDAM12	18.77	1.552	ZF-EDAM12	88

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		ZF Duration	Spread Duration	
EDAU09	0.1226	4.1008	3.9782	ZF-EDAU09	
EDAZ09	0.3719	4.1008	3.7289	ZF-EDAZ09	
EDAH10	0.6212	4.1008	3.4796	ZF-EDAH10	
EDAM10	0.8706	4.1008	3.2303	ZF-EDAM10	
EDAU10	1.1199	4.1008	2.9810	ZF-EDAU10	
EDAZ10	1.3692	4.1008	2.7316	ZF-EDAZ10	
EDAH11	1.6185	4.1008	2.4823	ZF-EDAH11	
EDAM11	1.8678	4.1008	2.2330	ZF-EDAM11	
EDAU11	2.1363	4.1008	1.9645	ZF-EDAU11	
EDAZ11	2.3856	4.1008	1.7152	ZF-EDAZ11	
EDAH12	2.6349	4.1008	1.4659	ZF-EDAH12	
EDAM12	2.8843	4.1008	1.2166	ZF-EDAM12	

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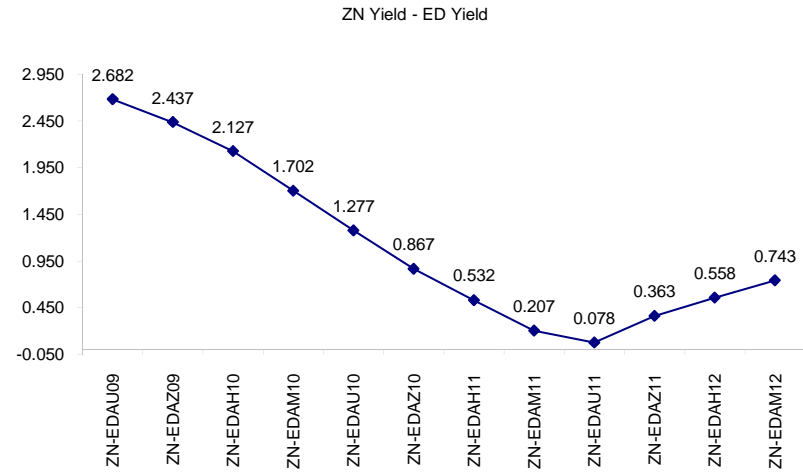


	ZN			Correlation* (percent)
	Spread Price	Spread Yield	Spread Name	
EDAU09	16.90	2.682	ZN-EDAU09	-25
EDAZ09	17.14	2.437	ZN-EDAZ09	73
EDAH10	17.45	2.127	ZN-EDAH10	81
EDAM10	17.88	1.702	ZN-EDAM10	79
EDAU10	18.30	1.277	ZN-EDAU10	78
EDAZ10	18.71	0.867	ZN-EDAZ10	76
EDAH11	19.05	0.532	ZN-EDAH11	78
EDAM11	19.37	0.207	ZN-EDAM11	81
EDAU11	19.66	0.078	ZN-EDAU11	87
EDAZ11	19.94	0.363	ZN-EDAZ11	91
EDAH12	20.14	0.558	ZN-EDAH12	94
EDAM12	20.32	0.743	ZN-EDAM12	95

Price = Outright Decimal Price - Euro Contract Price

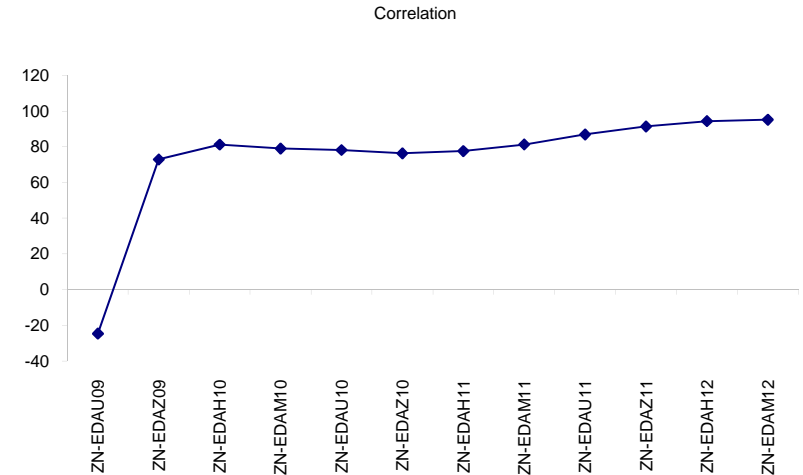
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as			ZN Spread Duration
	Fraction of year	ZN Duration	Spread Duration	
EDAU09	0.1226	5.7298	5.6072	ZN-EDAU09
EDAZ09	0.3719	5.7298	5.3579	ZN-EDAZ09
EDAH10	0.6212	5.7298	5.1086	ZN-EDAH10
EDAM10	0.8706	5.7298	4.8593	ZN-EDAM10
EDAU10	1.1199	5.7298	4.6099	ZN-EDAU10
EDAZ10	1.3692	5.7298	4.3606	ZN-EDAZ10
EDAH11	1.6185	5.7298	4.1113	ZN-EDAH11
EDAM11	1.8678	5.7298	3.8620	ZN-EDAM11
EDAU11	2.1363	5.7298	3.5935	ZN-EDAU11
EDAZ11	2.3856	5.7298	3.3442	ZN-EDAZ11
EDAH12	2.6349	5.7298	3.0949	ZN-EDAH12
EDAM12	2.8843	5.7298	2.8456	ZN-EDAM12

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



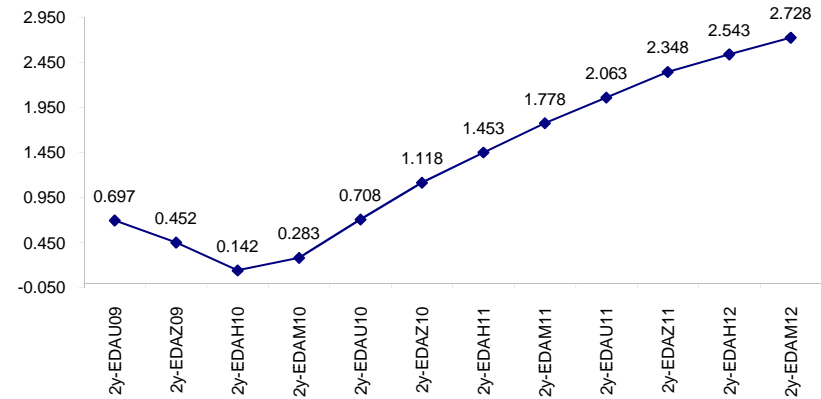
	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	0.12	0.697	2y-EDAU09	75
EDAZ09	0.37	0.452	2y-EDAZ09	-46
EDAH10	0.68	0.142	2y-EDAH10	-90
EDAM10	1.10	0.283	2y-EDAM10	-94
EDAU10	1.53	0.708	2y-EDAU10	-95
EDAZ10	1.94	1.118	2y-EDAZ10	-95
EDAH11	2.27	1.453	2y-EDAH11	-92
EDAM11	2.60	1.778	2y-EDAM11	-88
EDAU11	2.88	2.063	2y-EDAU11	-81
EDAZ11	3.17	2.348	2y-EDAZ11	-75
EDAH12	3.36	2.543	2y-EDAH12	-68
EDAM12	3.55	2.728	2y-EDAM12	-59

Price = Outright Decimal Price - Euro Contract Price

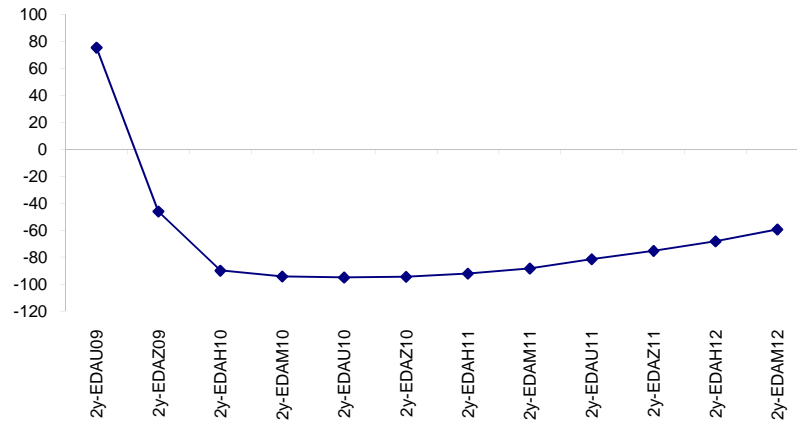
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*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	0.1226	1.9653	1.8427	2y-EDAU09
EDAZ09	0.3719	1.9653	1.5933	2y-EDAZ09
EDAH10	0.6212	1.9653	1.3440	2y-EDAH10
EDAM10	0.8706	1.9653	1.0947	2y-EDAM10
EDAU10	1.1199	1.9653	0.8454	2y-EDAU10
EDAZ10	1.3692	1.9653	0.5961	2y-EDAZ10
EDAH11	1.6185	1.9653	0.3468	2y-EDAH11
EDAM11	1.8678	1.9653	0.0974	2y-EDAM11
EDAU11	2.1363	1.9653	-0.1710	2y-EDAU11
EDAZ11	2.3856	1.9653	-0.4204	2y-EDAZ11
EDAH12	2.6349	1.9653	-0.6697	2y-EDAH12
EDAM12	2.8843	1.9653	-0.9190	2y-EDAM12

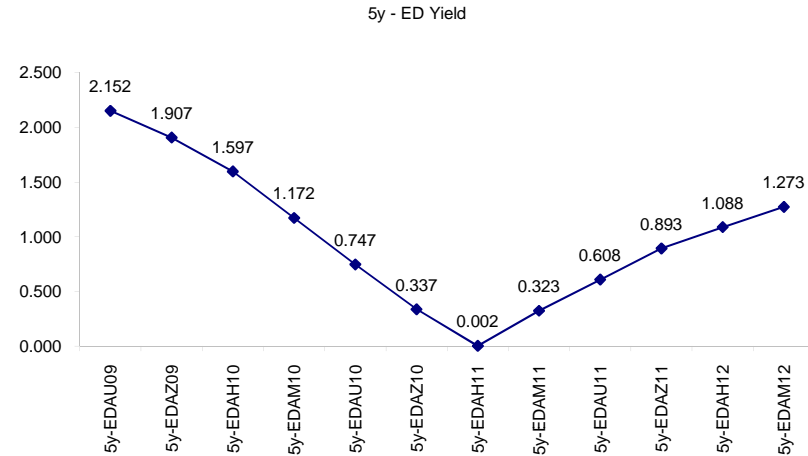
The farther away from 0 the spread duration is the riskier the trade.

5y				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	0.41	2.152	5y-EDAU09	60
EDAZ09	0.66	1.907	5y-EDAZ09	-57
EDAH10	0.97	1.597	5y-EDAH10	-91
EDAM10	1.39	1.172	5y-EDAM10	-93
EDAU10	1.82	0.747	5y-EDAU10	-93
EDAZ10	2.23	0.337	5y-EDAZ10	-92
EDAH11	2.56	0.002	5y-EDAH11	-91
EDAM11	2.89	0.323	5y-EDAM11	-90
EDAU11	3.17	0.608	5y-EDAU11	-89
EDAZ11	3.46	0.893	5y-EDAZ11	-89
EDAH12	3.65	1.088	5y-EDAH12	-87
EDAM12	3.84	1.273	5y-EDAM12	-82

Price = Outright Decimal Price - Euro Contract Price

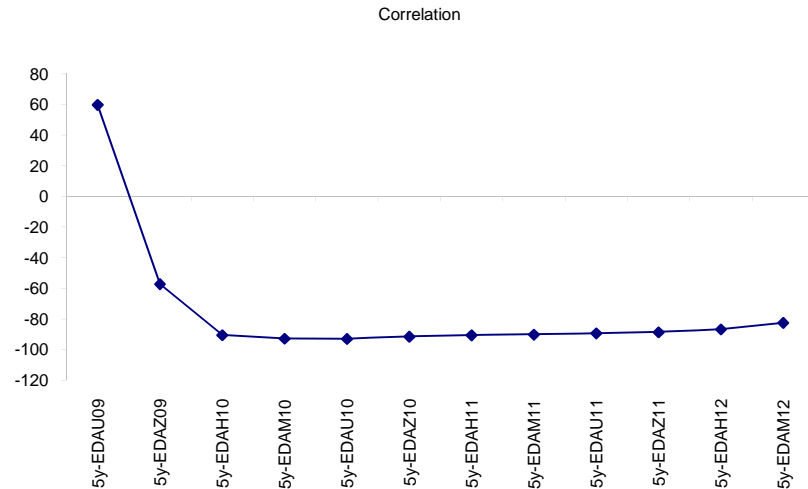
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



ED Duration as Fraction of year				5Y Duration	Spread Duration	
EDAU09	0.1226	4.6487	4.5260	5y-EDAU09		
EDAZ09	0.3719	4.6487	4.2767	5y-EDAZ09		
EDAH10	0.6212	4.6487	4.0274	5y-EDAH10		
EDAM10	0.8706	4.6487	3.7781	5y-EDAM10		
EDAU10	1.1199	4.6487	3.5288	5y-EDAU10		
EDAZ10	1.3692	4.6487	3.2795	5y-EDAZ10		
EDAH11	1.6185	4.6487	3.0302	5y-EDAH11		
EDAM11	1.8678	4.6487	2.7808	5y-EDAM11		
EDAU11	2.1363	4.6487	2.5123	5y-EDAU11		
EDAZ11	2.3856	4.6487	2.2630	5y-EDAZ11		
EDAH12	2.6349	4.6487	2.0137	5y-EDAH12		
EDAM12	2.8843	4.6487	1.7644	5y-EDAM12		

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

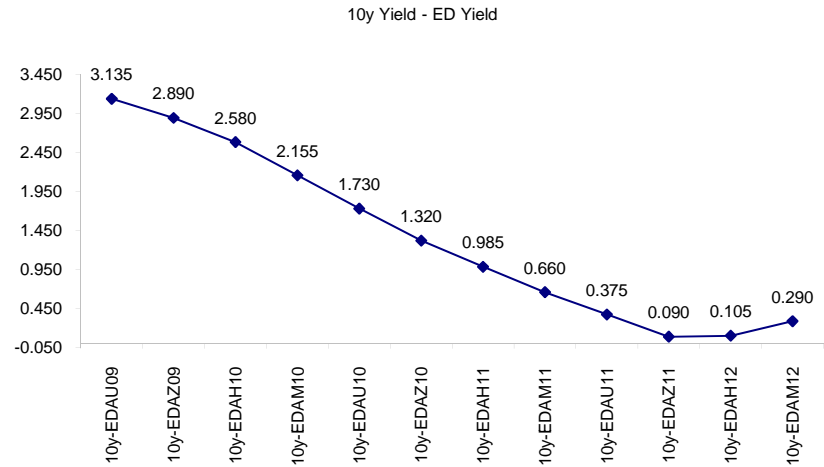


	10y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	0.41	3.135	10y-EDAU09	15
EDAZ09	0.66	2.890	10y-EDAZ09	-54
EDAH10	0.97	2.580	10y-EDAH10	-58
EDAM10	1.39	2.155	10y-EDAM10	-56
EDAU10	1.82	1.730	10y-EDAU10	-55
EDAZ10	2.23	1.320	10y-EDAZ10	-53
EDAH11	2.56	0.985	10y-EDAH11	-54
EDAM11	2.89	0.660	10y-EDAM11	-60
EDAU11	3.17	0.375	10y-EDAU11	-69
EDAZ11	3.46	0.090	10y-EDAZ11	-78
EDAH12	3.65	0.105	10y-EDAH12	-85
EDAM12	3.84	0.290	10y-EDAM12	-89

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	0.1226	8.2624	8.1398	10y-EDAU09
EDAZ09	0.3719	8.2624	7.8905	10y-EDAZ09
EDAH10	0.6212	8.2624	7.6412	10y-EDAH10
EDAM10	0.8706	8.2624	7.3919	10y-EDAM10
EDAU10	1.1199	8.2624	7.1426	10y-EDAU10
EDAZ10	1.3692	8.2624	6.8933	10y-EDAZ10
EDAH11	1.6185	8.2624	6.6439	10y-EDAH11
EDAM11	1.8678	8.2624	6.3946	10y-EDAM11
EDAU11	2.1363	8.2624	6.1261	10y-EDAU11
EDAZ11	2.3856	8.2624	5.8768	10y-EDAZ11
EDAH12	2.6349	8.2624	5.6275	10y-EDAH12
EDAM12	2.8843	8.2624	5.3782	10y-EDAM12

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

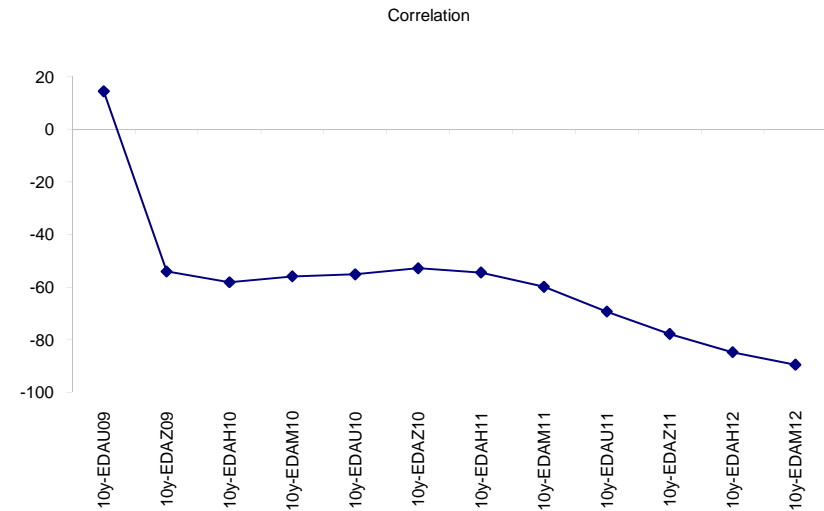


Chart values show the differences between ED contract and Treasury Futures contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.

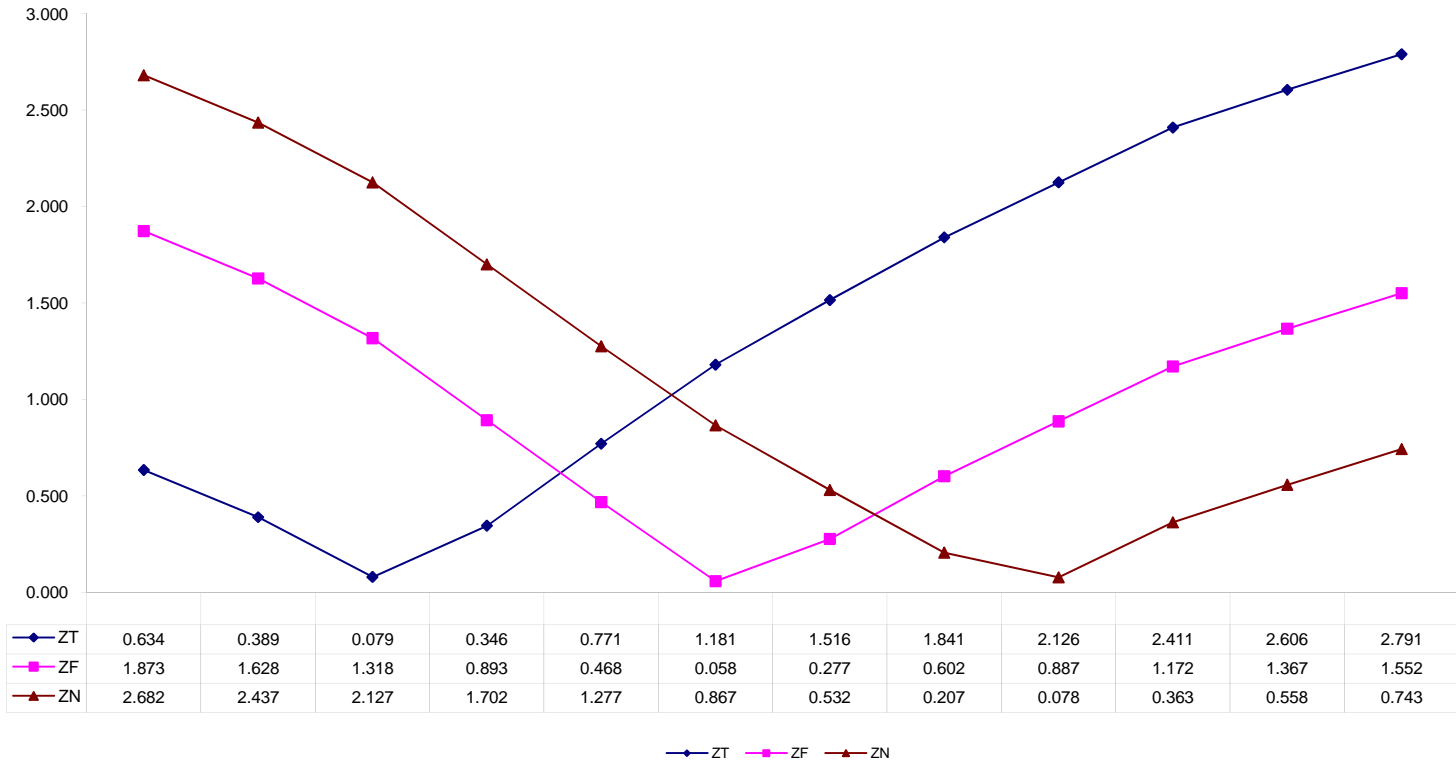
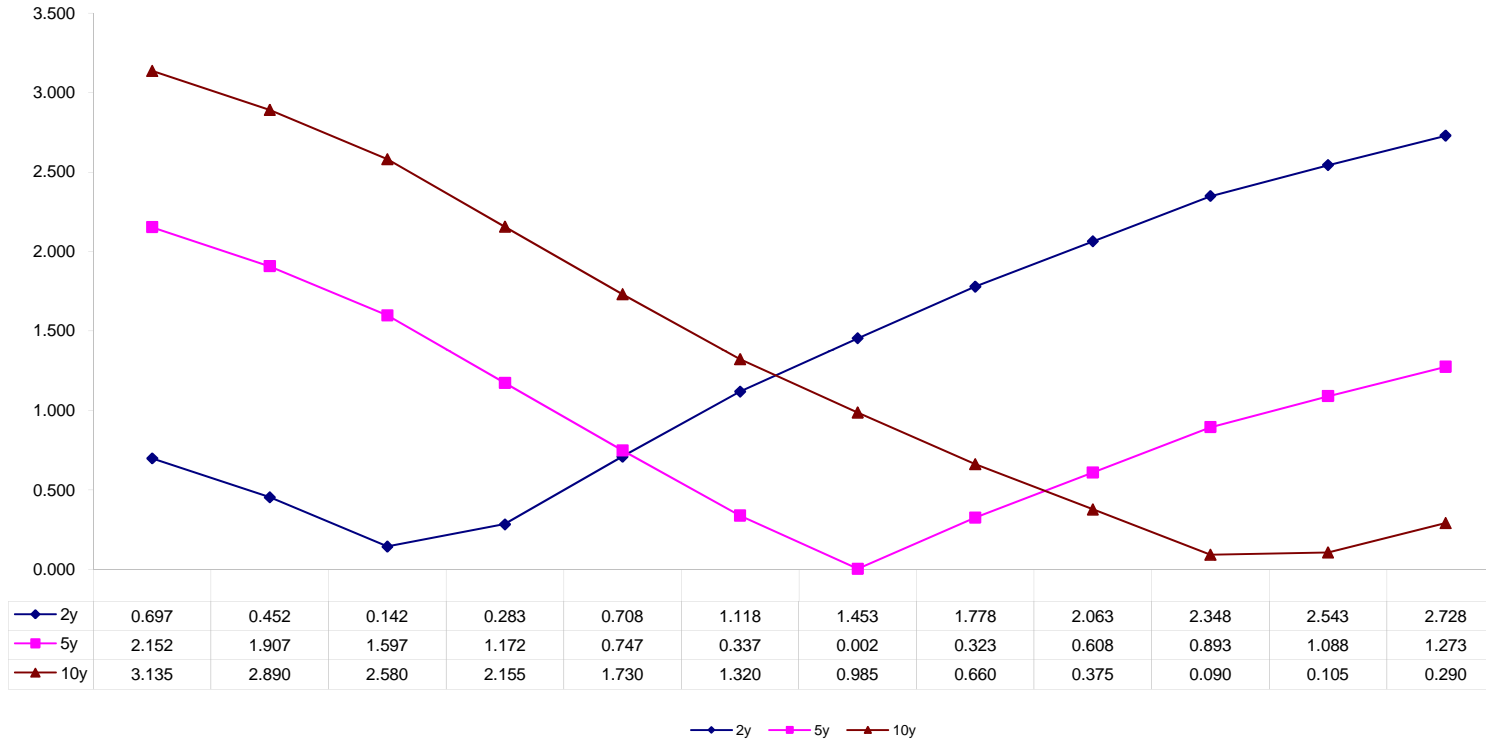
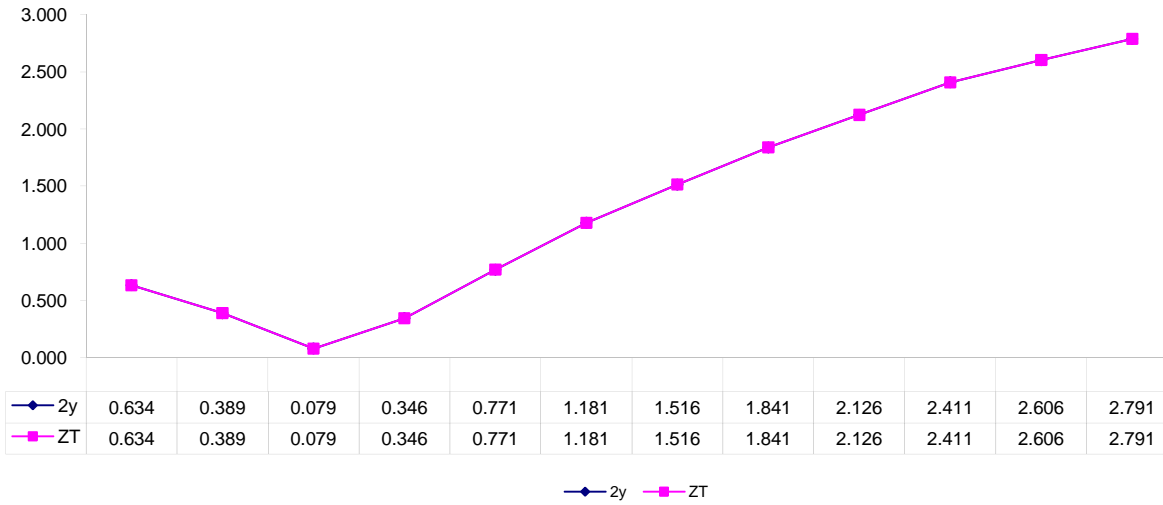
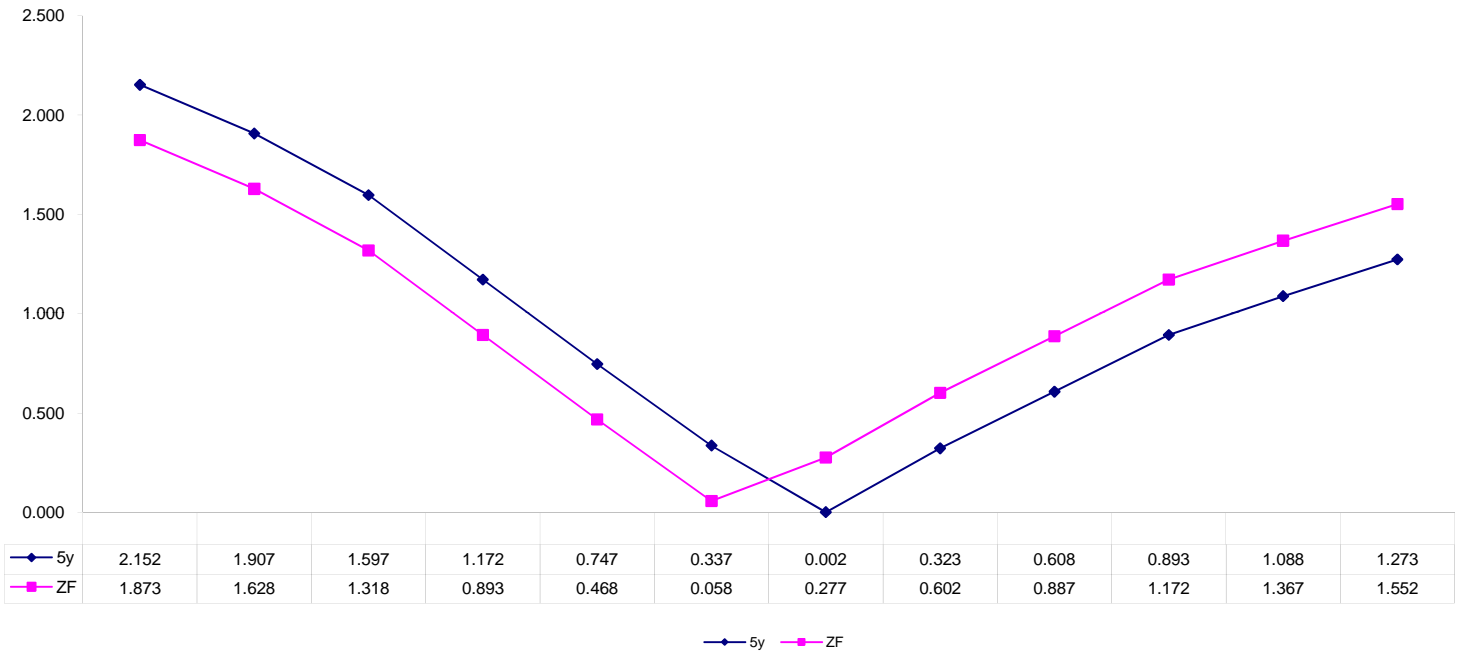


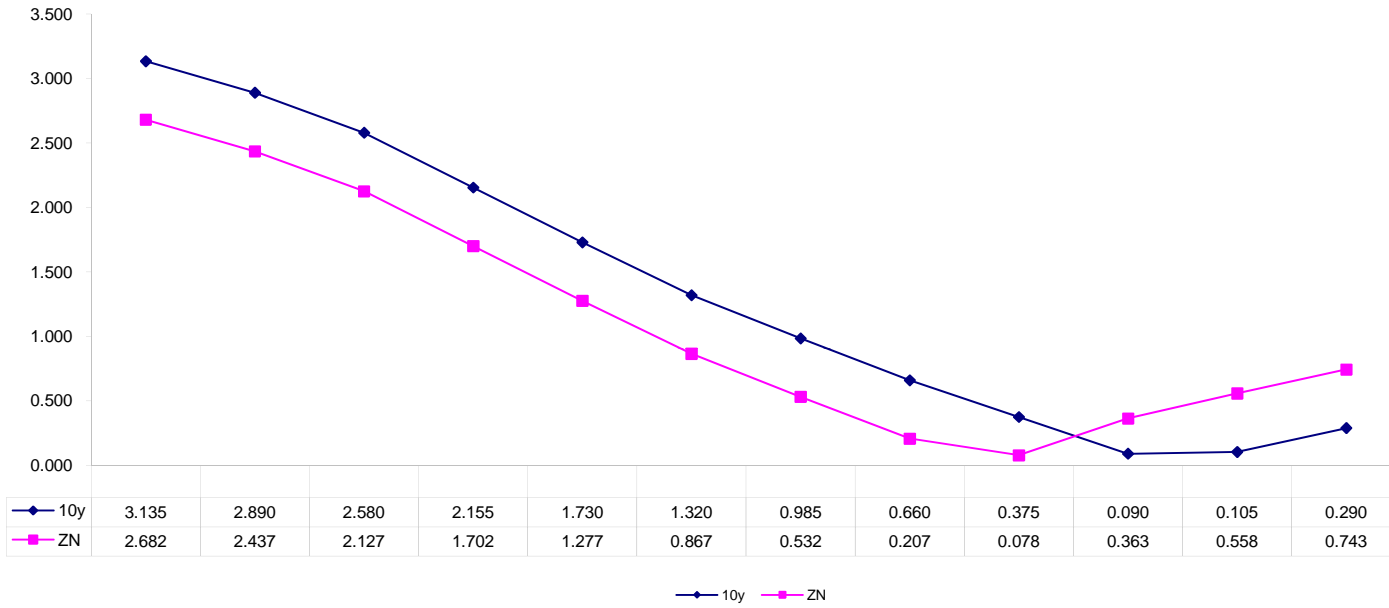
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



2y Basis TED Curve







	Last Yield	Net Last Yield	Last Price
White Pack	0.951	0.162	9906.5000
Red Pack	2.501	0.337	9754.8750
Green Pack	3.691	0.513	9639.2500
Blue Pack	4.372	0.750	9573.3750
Gold Pack		0.350	9526.5000

