

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	107.7656	107.2450	1.252	1.892
ZF	113.7031	113.2250	2.547	4.207
ZN	114.8438	114.2700	3.325	5.830
2y	99.3906	99.1250	1.195	1.912
5y	97.7188	97.2300	2.746	4.628
10y	95.0156	95.0050	3.730	8.360

Eurodollars (ED)						
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month	
EDAU09	99.2450	0.755	84	0.2295	SEP	
EDAZ09	98.9600	1.040	175	0.4788	DEC	White Pack
EDAH10	98.6650	1.335	266	0.7281	MAR	
EDAM10	98.2800	1.720	357	0.9774	JUN	
EDAU10	97.8850	2.115	448	1.2267	SEP	
EDAZ10	97.4800	2.520	539	1.4760	DEC	Red Pack
EDAH11	97.1400	2.860	630	1.7254	MAR	
EDAM11	96.7750	3.225	721	1.9747	JUN	
EDAU11	96.4600	3.540	819	2.2432	SEP	
EDAZ11	96.1550	3.845	910	2.4925	DEC	Green Pack
EDAH12	95.9550	4.045	1,001	2.7418	MAR	
EDAM12	95.7650	4.235	1,092	2.9911	JUN	
EDAU12	95.6100	4.390	1,183	3.2404	SEP	
EDAZ12	95.4600	4.540	1,274	3.4897	DEC	Blue Pack
EDAH13	95.3650	4.635	1,365	3.7391	MAR	
EDAM13	95.2550	4.745	1,456	3.9884	JUN	
EDAU13	95.0700	4.930	1,547	4.2377	SEP	
EDAZ13	94.9550	5.045	1,638	4.4870	DEC	Gold Pack
EDAH14	94.9000	5.100	1,729	4.7363	MAR	
EDAM14	94.8450	5.155	1,820	4.9856	JUN	

	Last Yield	Net Yield	Last Price	
White Pack	1.233	3.625	9878.75	
Red Pack	2.736	7.375	9732.00	Pack Prices
Green Pack	4.010	6.250	9608.38	
Blue Pack	4.695	6.000	9542.25	
Gold Pack		-0.500	9495.75	

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.

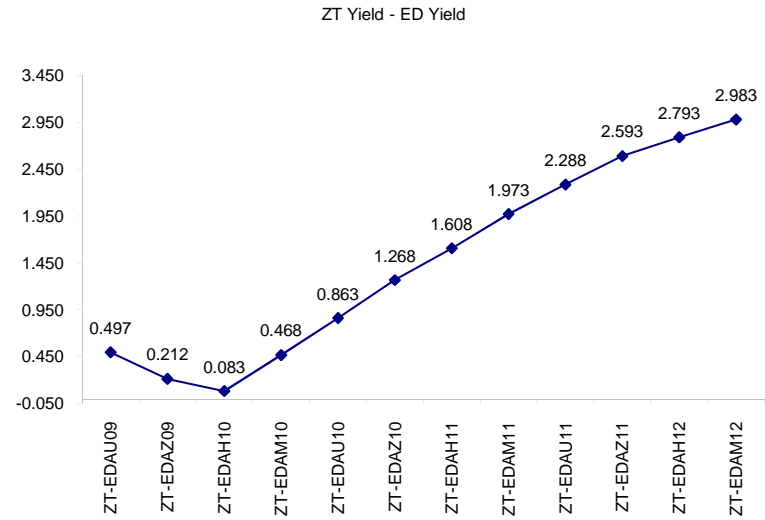
jgoulding@ghco.com

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.

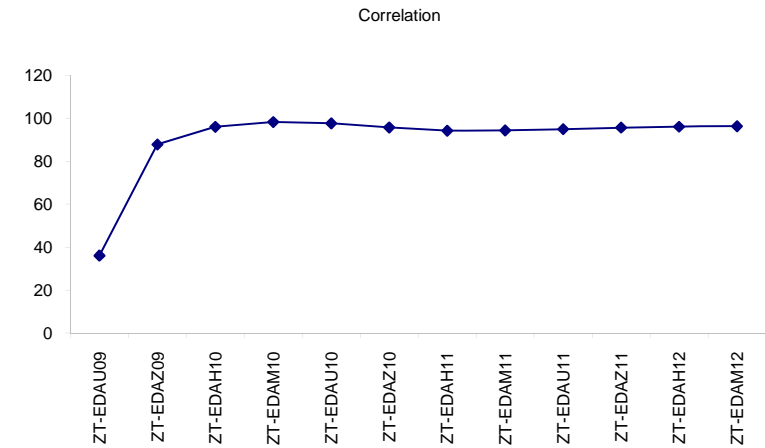
	ZT			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	8.52	0.497	ZT-EDAU09	36
EDAZ09	8.81	0.212	ZT-EDAZ09	88
EDAH10	9.10	0.083	ZT-EDAH10	96
EDAM10	9.49	0.468	ZT-EDAM10	98
EDAU10	9.88	0.863	ZT-EDAU10	98
EDAZ10	10.29	1.268	ZT-EDAZ10	96
EDAH11	10.63	1.608	ZT-EDAH11	94
EDAM11	10.99	1.973	ZT-EDAM11	94
EDAU11	11.31	2.288	ZT-EDAU11	95
EDAZ11	11.61	2.593	ZT-EDAZ11	96
EDAH12	11.81	2.793	ZT-EDAH12	96
EDAM12	12.00	2.983	ZT-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			
	Fraction of year	ZT Duration	Spread Duration	
EDAU09	0.2295	1.8919	1.6625	ZT-EDAU09
EDAZ09	0.4788	1.8919	1.4132	ZT-EDAZ09
EDAH10	0.7281	1.8919	1.1638	ZT-EDAH10
EDAM10	0.9774	1.8919	0.9145	ZT-EDAM10
EDAU10	1.2267	1.8919	0.6652	ZT-EDAU10
EDAZ10	1.4760	1.8919	0.4159	ZT-EDAZ10
EDAH11	1.7254	1.8919	0.1666	ZT-EDAH11
EDAM11	1.9747	1.8919	-0.0827	ZT-EDAM11
EDAU11	2.2432	1.8919	-0.3512	ZT-EDAU11
EDAZ11	2.4925	1.8919	-0.6005	ZT-EDAZ11
EDAH12	2.7418	1.8919	-0.8499	ZT-EDAH12
EDAM12	2.9911	1.8919	-1.0992	ZT-EDAM12

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

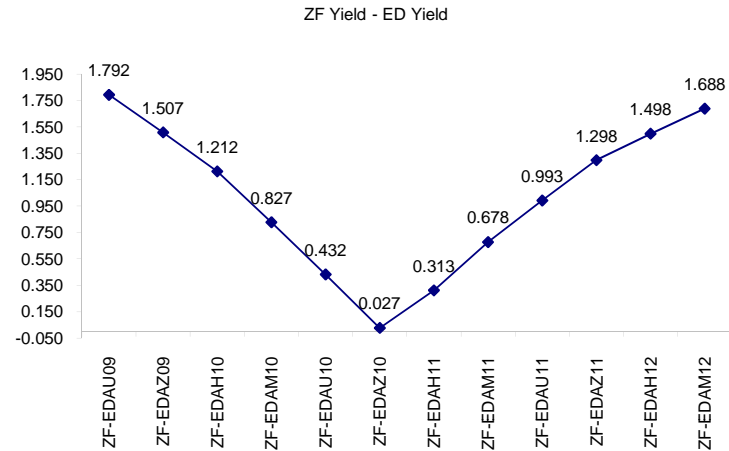


	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	14.46	1.792	ZF-EDAU09	65
EDAZ09	14.74	1.507	ZF-EDAZ09	92
EDAH10	15.04	1.212	ZF-EDAH10	94
EDAM10	15.42	0.827	ZF-EDAM10	96
EDAU10	15.82	0.432	ZF-EDAU10	97
EDAZ10	16.22	0.027	ZF-EDAZ10	97
EDAH11	16.56	0.313	ZF-EDAH11	97
EDAM11	16.93	0.678	ZF-EDAM11	97
EDAU11	17.24	0.993	ZF-EDAU11	97
EDAZ11	17.55	1.298	ZF-EDAZ11	97
EDAH12	17.75	1.498	ZF-EDAH12	98
EDAM12	17.94	1.688	ZF-EDAM12	97

Price = Outright Decimal Price - Euro Contract Price

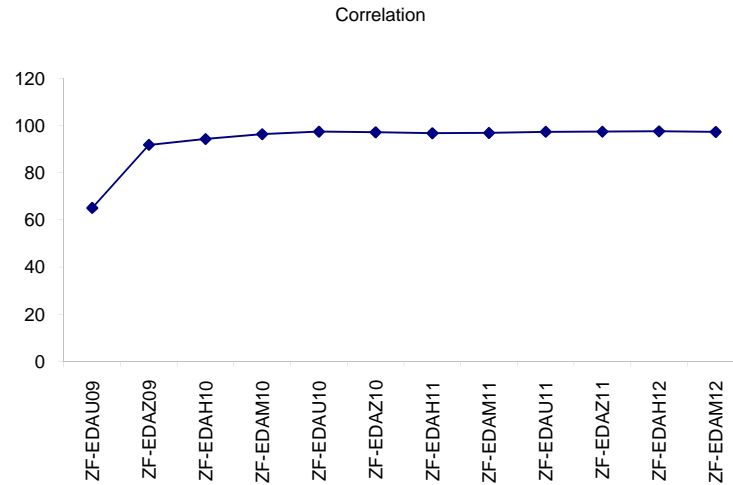
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year		ZF Duration	Spread Duration	
EDAU09	0.2295	4.2069	3.9774	ZF-EDAU09	
EDAZ09	0.4788	4.2069	3.7281	ZF-EDAZ09	
EDAH10	0.7281	4.2069	3.4788	ZF-EDAH10	
EDAM10	0.9774	4.2069	3.2295	ZF-EDAM10	
EDAU10	1.2267	4.2069	2.9801	ZF-EDAU10	
EDAZ10	1.4760	4.2069	2.7308	ZF-EDAZ10	
EDAH11	1.7254	4.2069	2.4815	ZF-EDAH11	
EDAM11	1.9747	4.2069	2.2322	ZF-EDAM11	
EDAU11	2.2432	4.2069	1.9637	ZF-EDAU11	
EDAZ11	2.4925	4.2069	1.7144	ZF-EDAZ11	
EDAH12	2.7418	4.2069	1.4651	ZF-EDAH12	
EDAM12	2.9911	4.2069	1.2158	ZF-EDAM12	

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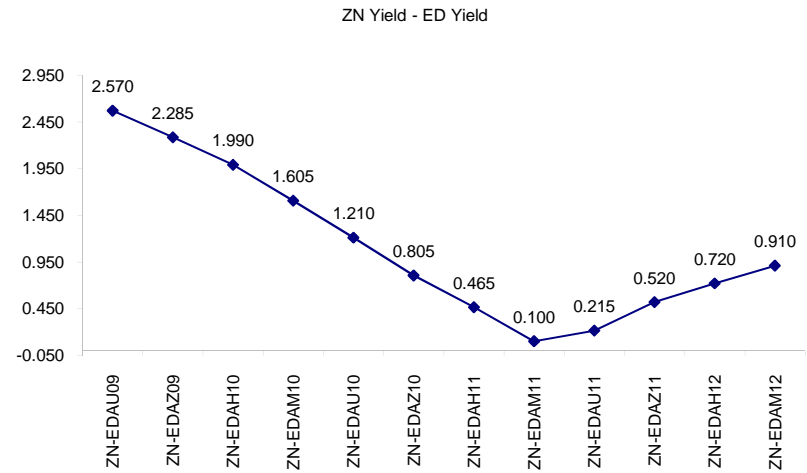


	ZN			Correlation* (percent)
	Spread Price	Spread Yield	Spread Name	
EDAU09	15.60	2.570	ZN-EDAU09	67
EDAZ09	15.88	2.285	ZN-EDAZ09	92
EDAH10	16.18	1.990	ZN-EDAH10	94
EDAM10	16.56	1.605	ZN-EDAM10	96
EDAU10	16.96	1.210	ZN-EDAU10	96
EDAZ10	17.36	0.805	ZN-EDAZ10	96
EDAH11	17.70	0.465	ZN-EDAH11	96
EDAM11	18.07	0.100	ZN-EDAM11	96
EDAU11	18.38	0.215	ZN-EDAU11	96
EDAZ11	18.69	0.520	ZN-EDAZ11	97
EDAH12	18.89	0.720	ZN-EDAH12	97
EDAM12	19.08	0.910	ZN-EDAM12	97

Price = Outright Decimal Price - Euro Contract Price

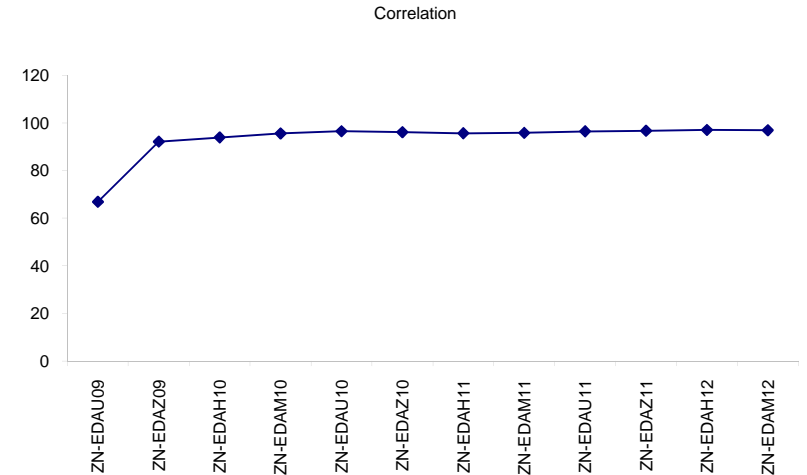
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as			ZN Spread Duration
	Fraction of year	ZN Duration	Spread Duration	
EDAU09	0.2295	5.8299	5.6004	ZN-EDAU09
EDAZ09	0.4788	5.8299	5.3511	ZN-EDAZ09
EDAH10	0.7281	5.8299	5.1018	ZN-EDAH10
EDAM10	0.9774	5.8299	4.8525	ZN-EDAM10
EDAU10	1.2267	5.8299	4.6032	ZN-EDAU10
EDAZ10	1.4760	5.8299	4.3539	ZN-EDAZ10
EDAH11	1.7254	5.8299	4.1045	ZN-EDAH11
EDAM11	1.9747	5.8299	3.8552	ZN-EDAM11
EDAU11	2.2432	5.8299	3.5867	ZN-EDAU11
EDAZ11	2.4925	5.8299	3.3374	ZN-EDAZ11
EDAH12	2.7418	5.8299	3.0881	ZN-EDAH12
EDAM12	2.9911	5.8299	2.8388	ZN-EDAM12

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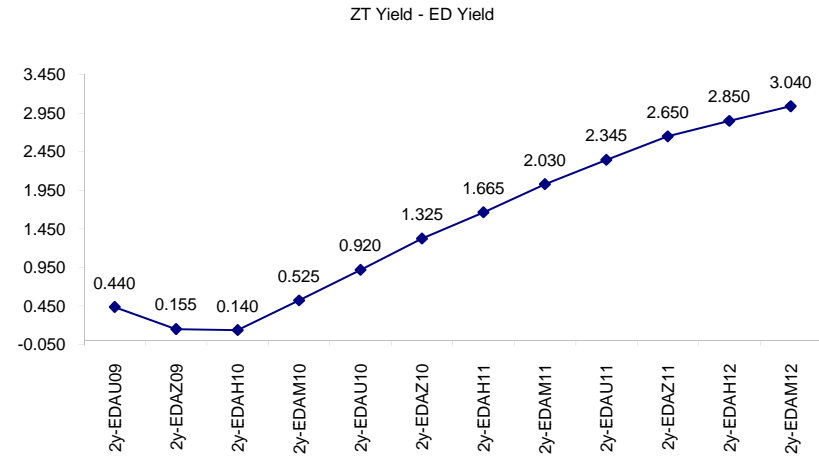


	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	0.15	0.440	2y-EDAU09	-37
EDAZ09	0.43	0.155	2y-EDAZ09	-90
EDAH10	0.73	0.140	2y-EDAH10	-97
EDAM10	1.11	0.525	2y-EDAM10	-98
EDAU10	1.51	0.920	2y-EDAU10	-96
EDAZ10	1.91	1.325	2y-EDAZ10	-94
EDAH11	2.25	1.665	2y-EDAH11	-92
EDAM11	2.62	2.030	2y-EDAM11	-93
EDAU11	2.93	2.345	2y-EDAU11	-93
EDAZ11	3.24	2.650	2y-EDAZ11	-95
EDAH12	3.44	2.850	2y-EDAH12	-95
EDAM12	3.63	3.040	2y-EDAM12	-96

Price = Outright Decimal Price - Euro Contract Price

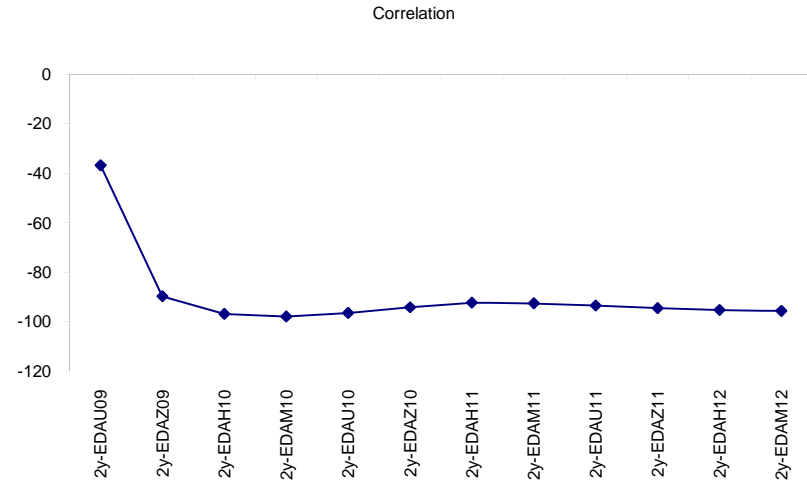
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

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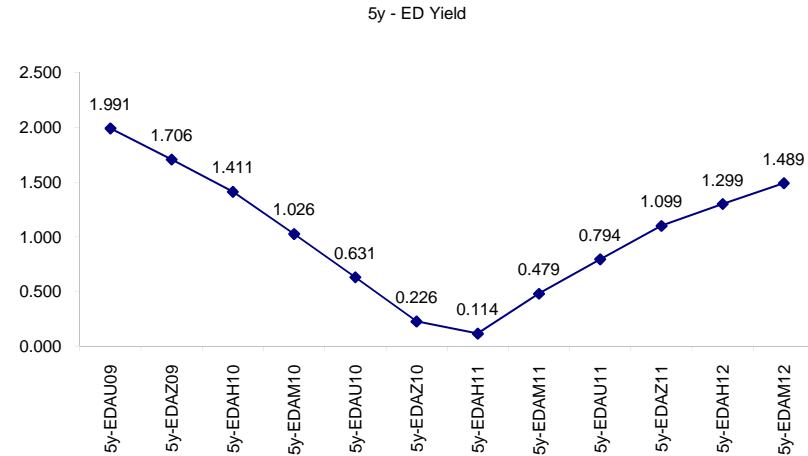
	ED Duration as		Spread Duration	
	Fraction of year	2Y Duration		
EDAU09	0.2295	1.9121	1.6826	2y-EDAU09
EDAZ09	0.4788	1.9121	1.4333	2y-EDAZ09
EDAH10	0.7281	1.9121	1.1840	2y-EDAH10
EDAM10	0.9774	1.9121	0.9347	2y-EDAM10
EDAU10	1.2267	1.9121	0.6854	2y-EDAU10
EDAZ10	1.4760	1.9121	0.4361	2y-EDAZ10
EDAH11	1.7254	1.9121	0.1867	2y-EDAH11
EDAM11	1.9747	1.9121	-0.0626	2y-EDAM11
EDAU11	2.2432	1.9121	-0.3311	2y-EDAU11
EDAZ11	2.4925	1.9121	-0.5804	2y-EDAZ11
EDAH12	2.7418	1.9121	-0.8297	2y-EDAH12
EDAM12	2.9911	1.9121	-1.0790	2y-EDAM12

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



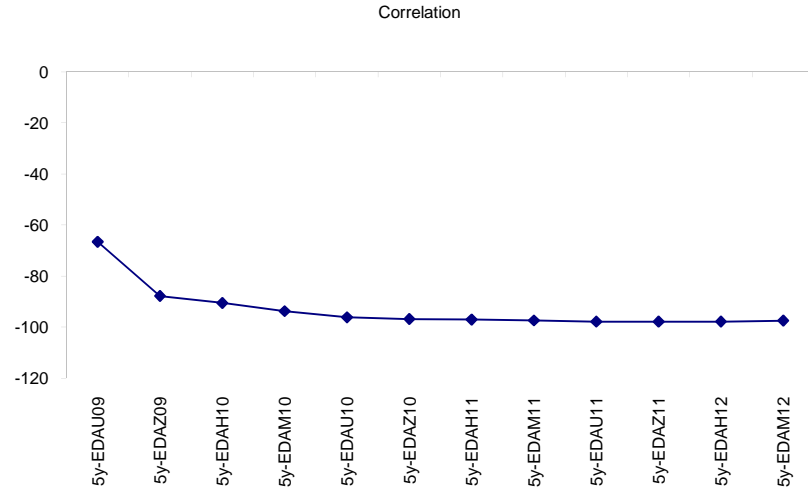
5y				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	-1.53	1.991	5y-EDAU09	-67
EDAZ09	-1.24	1.706	5y-EDAZ09	-88
EDAH10	-0.95	1.411	5y-EDAH10	-91
EDAM10	-0.56	1.026	5y-EDAM10	-94
EDAU10	-0.17	0.631	5y-EDAU10	-96
EDAZ10	0.24	0.226	5y-EDAZ10	-97
EDAH11	0.58	0.114	5y-EDAH11	-97
EDAM11	0.94	0.479	5y-EDAM11	-97
EDAU11	1.26	0.794	5y-EDAU11	-98
EDAZ11	1.56	1.099	5y-EDAZ11	-98
EDAH12	1.76	1.299	5y-EDAH12	-98
EDAM12	1.95	1.489	5y-EDAM12	-97

Price = Outright Decimal Price - Euro Contract Price
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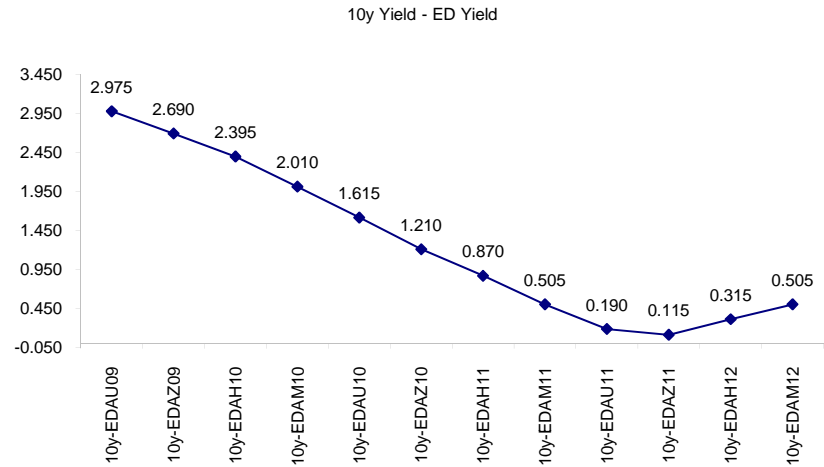
ED Duration as Fraction of year				5Y Duration	Spread Duration	
EDAU09	0.2295	4.6275	4.3981	5y-EDAU09		
EDAZ09	0.4788	4.6275	4.1488	5y-EDAZ09		
EDAH10	0.7281	4.6275	3.8995	5y-EDAH10		
EDAM10	0.9774	4.6275	3.6501	5y-EDAM10		
EDAU10	1.2267	4.6275	3.4008	5y-EDAU10		
EDAZ10	1.4760	4.6275	3.1515	5y-EDAZ10		
EDAH11	1.7254	4.6275	2.9022	5y-EDAH11		
EDAM11	1.9747	4.6275	2.6529	5y-EDAM11		
EDAU11	2.2432	4.6275	2.3844	5y-EDAU11		
EDAZ11	2.4925	4.6275	2.1351	5y-EDAZ11		
EDAH12	2.7418	4.6275	1.8858	5y-EDAH12		
EDAM12	2.9911	4.6275	1.6364	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	-1.53	2.975	10y-EDAU09	-61
EDAZ09	-1.24	2.690	10y-EDAZ09	-88
EDAH10	-0.95	2.395	10y-EDAH10	-91
EDAM10	-0.56	2.010	10y-EDAM10	-94
EDAU10	-0.17	1.615	10y-EDAU10	-96
EDAZ10	0.24	1.210	10y-EDAZ10	-96
EDAH11	0.58	0.870	10y-EDAH11	-96
EDAM11	0.94	0.505	10y-EDAM11	-96
EDAU11	1.26	0.190	10y-EDAU11	-96
EDAZ11	1.56	0.115	10y-EDAZ11	-97
EDAH12	1.76	0.315	10y-EDAH12	-97
EDAM12	1.95	0.505	10y-EDAM12	-96

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	
EDAU09	0.2295	8.3602	8.1307	10y-EDAU09		
EDAZ09	0.4788	8.3602	7.8814	10y-EDAZ09		
EDAH10	0.7281	8.3602	7.6321	10y-EDAH10		
EDAM10	0.9774	8.3602	7.3828	10y-EDAM10		
EDAU10	1.2267	8.3602	7.1334	10y-EDAU10		
EDAZ10	1.4760	8.3602	6.8841	10y-EDAZ10		
EDAH11	1.7254	8.3602	6.6348	10y-EDAH11		
EDAM11	1.9747	8.3602	6.3855	10y-EDAM11		
EDAU11	2.2432	8.3602	6.1170	10y-EDAU11		
EDAZ11	2.4925	8.3602	5.8677	10y-EDAZ11		
EDAH12	2.7418	8.3602	5.6184	10y-EDAH12		
EDAM12	2.9911	8.3602	5.3691	10y-EDAM12		

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

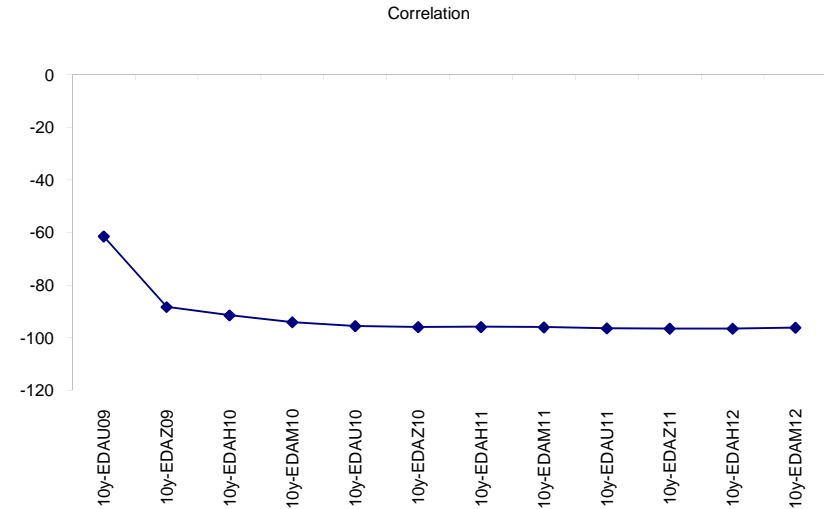


Chart values show the differences between ED contract and Treasury Futures contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.

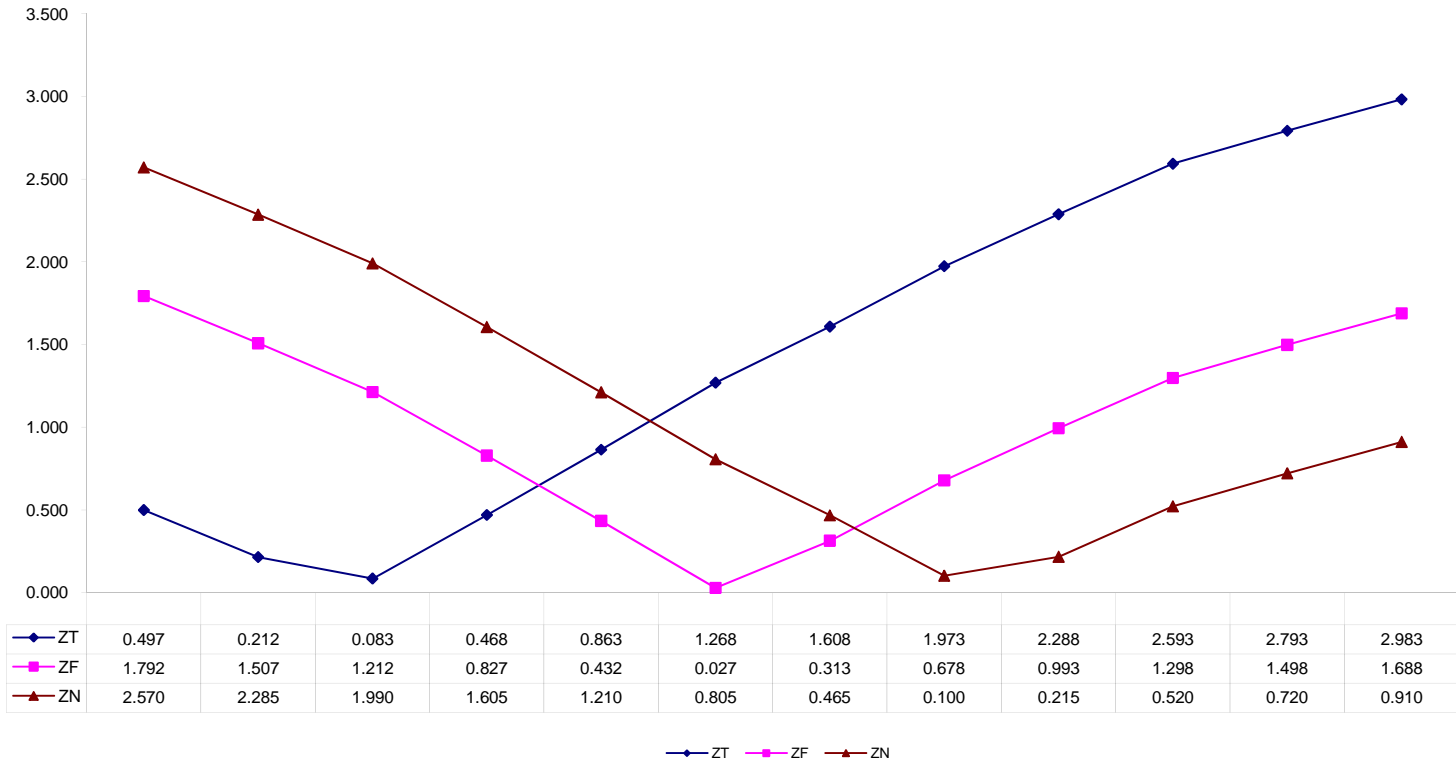
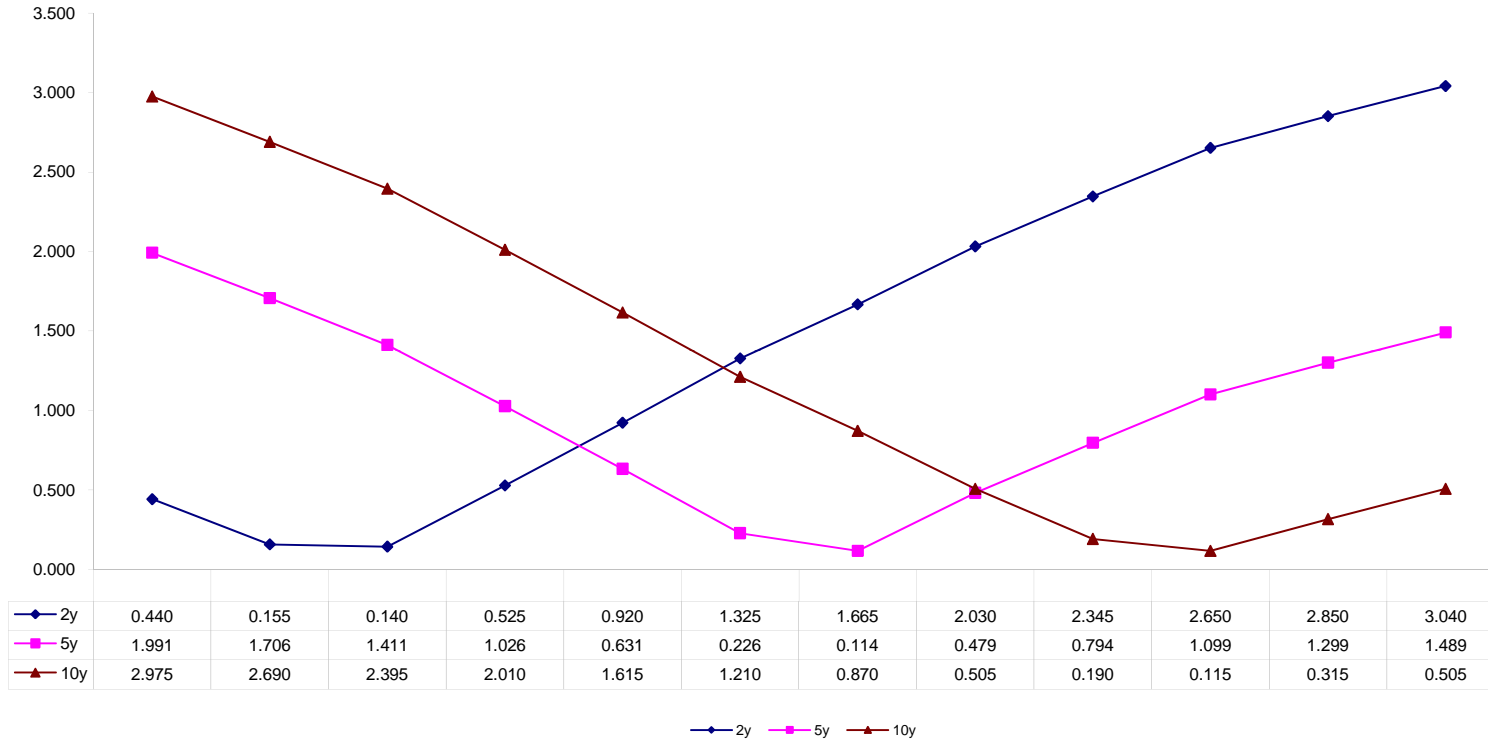
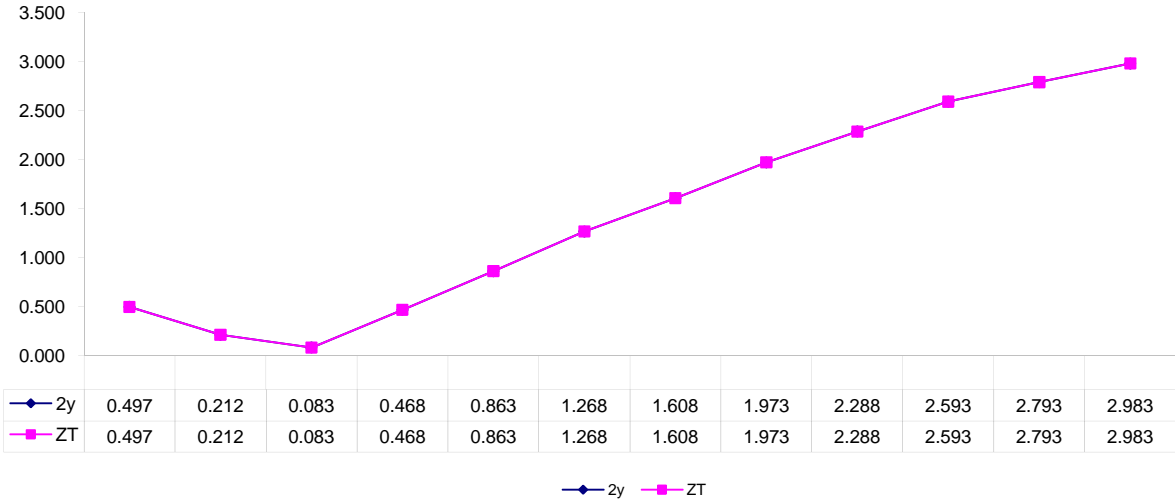
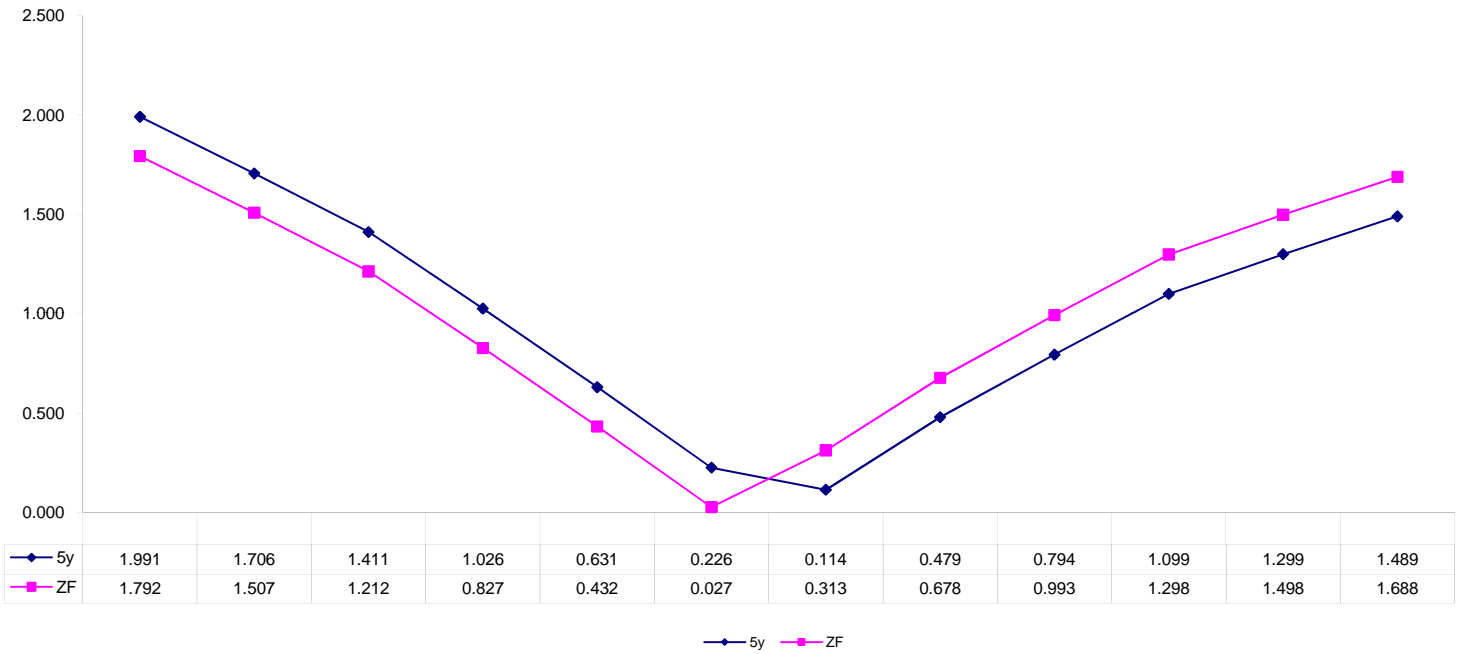


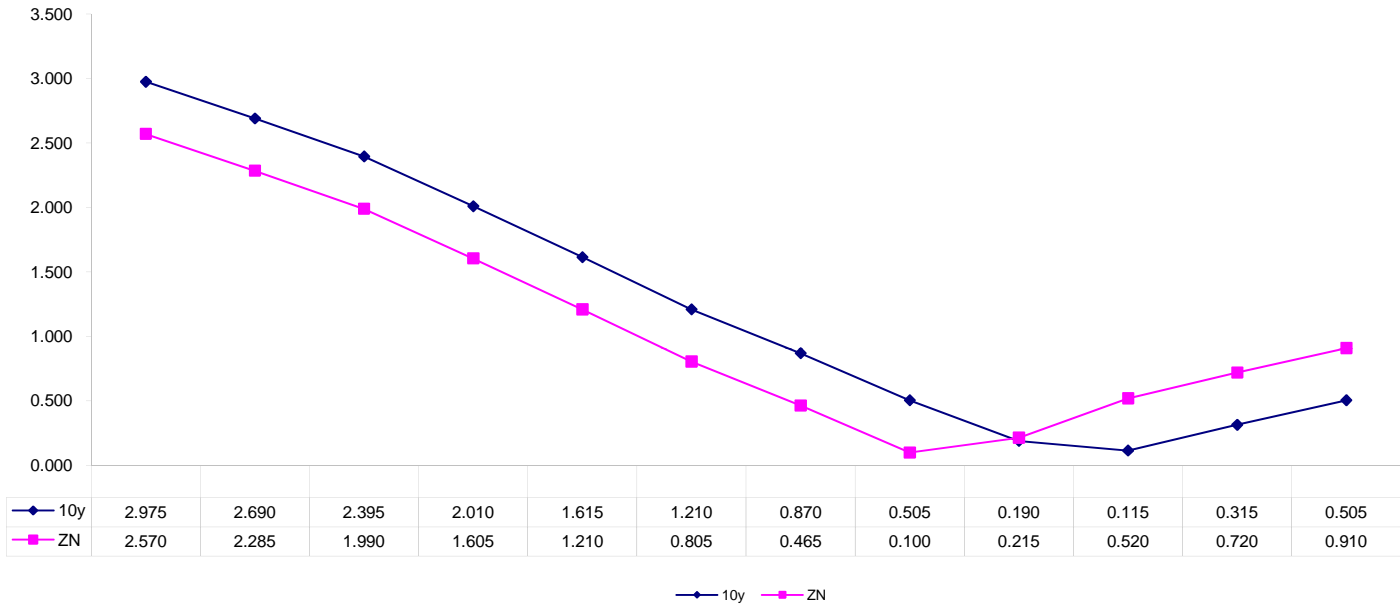
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



2y Basis TED Curve







	Last Yield	Net Last Yield	Last Price
White Pack	1.233	3.625	9878.7500
Red Pack	2.736	7.375	9732.0000
Green Pack	4.010	6.250	9608.3750
Blue Pack	4.695	6.000	9542.2500
Gold Pack		-0.500	9495.7500

