

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	108.4906	108.1570	0.925	1.894
ZF	116.2500	116.0800	2.030	4.174
ZN	118.1875	118.0600	2.882	5.812
2y	100.3656	100.1170	0.936	1.947
5y	101.6563	101.2100	2.269	4.643
10y	98.1563	98.0500	3.344	8.358

Eurodollars (ED)						
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month	
EDAU09	99.4550	0.545	67	0.1829	SEP	
EDAZ09	99.2400	0.760	158	0.4322	DEC	White Pack
EDAH10	99.0450	0.955	249	0.6815	MAR	
EDAM10	98.7600	1.240	340	0.9309	JUN	
EDAU10	98.4550	1.545	431	1.1802	SEP	
EDAZ10	98.0850	1.915	522	1.4295	DEC	Red Pack
EDAH11	97.7550	2.245	613	1.6788	MAR	
EDAM11	97.4100	2.590	704	1.9281	JUN	
EDAU11	97.1000	2.900	802	2.1966	SEP	
EDAZ11	96.8100	3.190	893	2.4459	DEC	Green Pack
EDAH12	96.6150	3.385	984	2.6952	MAR	
EDAM12	96.4250	3.575	1,075	2.9446	JUN	
EDAU12	96.2700	3.730	1,166	3.1939	SEP	
EDAZ12	96.1250	3.875	1,257	3.4432	DEC	Blue Pack
EDAH13	96.0400	3.960	1,348	3.6925	MAR	
EDAM13	95.9200	4.080	1,439	3.9418	JUN	
EDAU13	95.8650	4.135	1,530	4.1911	SEP	
EDAZ13	95.7450	4.255	1,621	4.4404	DEC	Gold Pack
EDAH14	95.6550	4.345	1,712	4.6898	MAR	
EDAM14	95.6050	4.395	1,803	4.9391	JUN	

	Last Yield	Net Yield	Last Price	
White Pack	0.889	-2.875	9912.50	
Red Pack	2.114	-6.000	9792.63	Pack Prices
Green Pack	3.335	-7.250	9673.75	
Blue Pack	4.005	-6.125	9608.88	
Gold Pack		0.000	9573.13	

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:

Jan-00 Regression
Jan-00 Engineered
Jan-00 Strip with and without Stubs
Jan-00 Convexity Bias
Jan-00 Weighted
Jan-00 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)

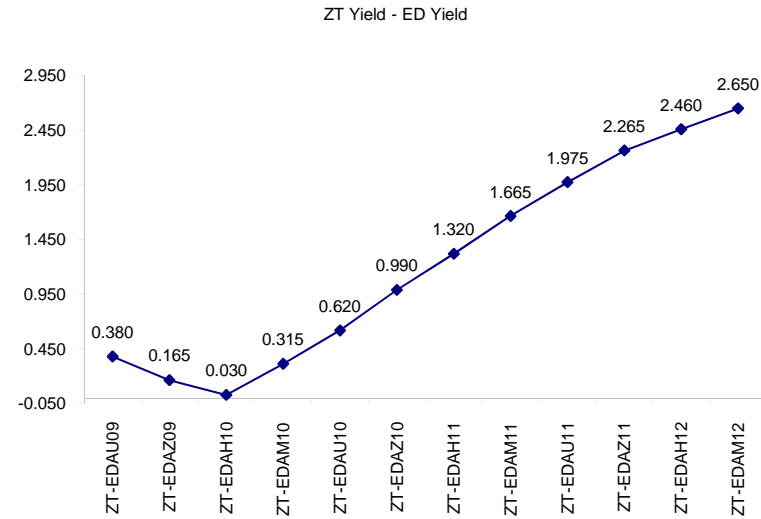
Correlations for the US Cash Treasuries are done on a YIELD basis. Therefore, you'll see negative values. The reason for this is due to the new issues. Every new issue takes too long to 'catch up' because the correlation formula looks back 10days. So, it's much easier to formulate the correlations based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

	ZT			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	9.04	0.380	ZT-EDAU09	98
EDAZ09	9.25	0.165	ZT-EDAZ09	99
EDAH10	9.45	0.030	ZT-EDAH10	98
EDAM10	9.73	0.315	ZT-EDAM10	96
EDAU10	10.04	0.620	ZT-EDAU10	96
EDAZ10	10.41	0.990	ZT-EDAZ10	96
EDAH11	10.74	1.320	ZT-EDAH11	95
EDAM11	11.08	1.665	ZT-EDAM11	95
EDAU11	11.39	1.975	ZT-EDAU11	94
EDAZ11	11.68	2.265	ZT-EDAZ11	94
EDAH12	11.88	2.460	ZT-EDAH12	92
EDAM12	12.07	2.650	ZT-EDAM12	91

Price = Outright Decimal Price - Euro Contract Price

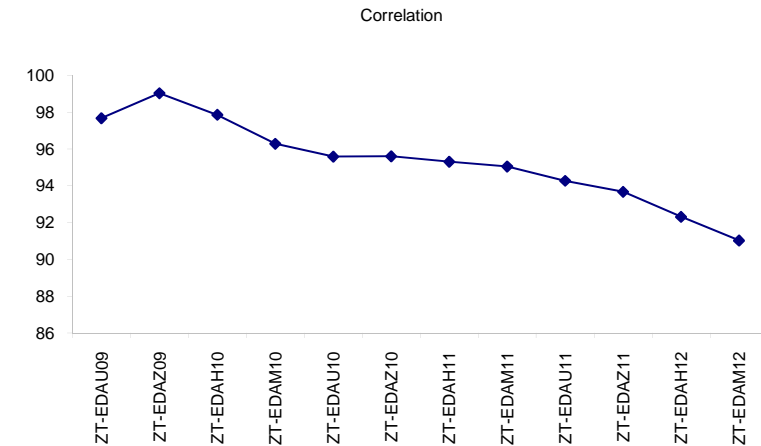
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year			ZT Duration	Spread Duration	
EDAU09	0.1829	1.8936	1.7107	ZT-EDAU09		
EDAZ09	0.4322	1.8936	1.4614	ZT-EDAZ09		
EDAH10	0.6815	1.8936	1.2121	ZT-EDAH10		
EDAM10	0.9309	1.8936	0.9628	ZT-EDAM10		
EDAU10	1.1802	1.8936	0.7135	ZT-EDAU10		
EDAZ10	1.4295	1.8936	0.4641	ZT-EDAZ10		
EDAH11	1.6788	1.8936	0.2148	ZT-EDAH11		
EDAM11	1.9281	1.8936	-0.0345	ZT-EDAM11		
EDAU11	2.1966	1.8936	-0.3030	ZT-EDAU11		
EDAZ11	2.4459	1.8936	-0.5523	ZT-EDAZ11		
EDAH12	2.6952	1.8936	-0.8016	ZT-EDAH12		
EDAM12	2.9446	1.8936	-1.0509	ZT-EDAM12		

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

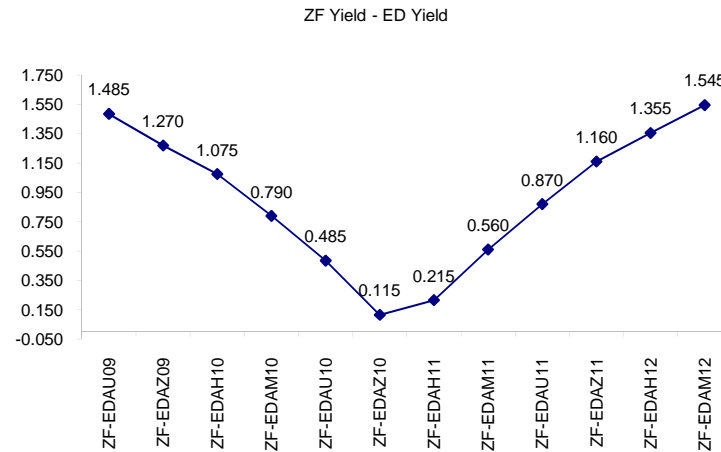


	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	16.80	1.485	ZF-EDAU09	97
EDAZ09	17.01	1.270	ZF-EDAZ09	96
EDAH10	17.21	1.075	ZF-EDAH10	97
EDAM10	17.49	0.790	ZF-EDAM10	97
EDAU10	17.80	0.485	ZF-EDAU10	97
EDAZ10	18.17	0.115	ZF-EDAZ10	98
EDAH11	18.50	0.215	ZF-EDAH11	98
EDAM11	18.84	0.560	ZF-EDAM11	99
EDAU11	19.15	0.870	ZF-EDAU11	99
EDAZ11	19.44	1.160	ZF-EDAZ11	99
EDAH12	19.64	1.355	ZF-EDAH12	99
EDAM12	19.83	1.545	ZF-EDAM12	99

Price = Outright Decimal Price - Euro Contract Price

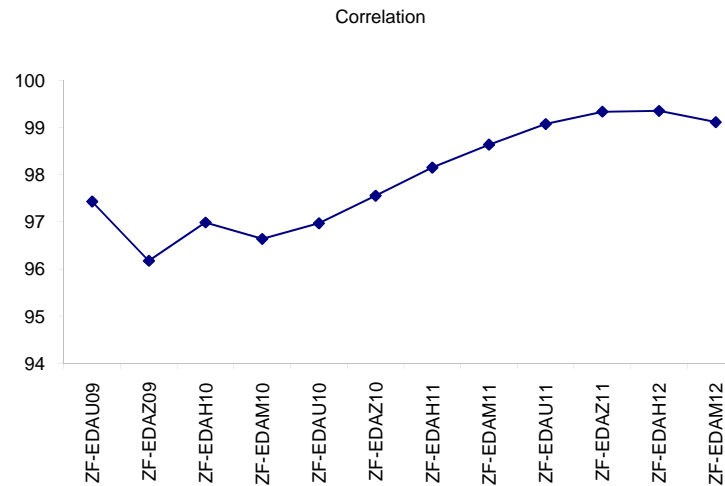
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year		ZF Duration	Spread Duration	
EDAU09	0.1829	4.1741	3.9911	ZF-EDAU09	
EDAZ09	0.4322	4.1741	3.7418	ZF-EDAZ09	
EDAH10	0.6815	4.1741	3.4925	ZF-EDAH10	
EDAM10	0.9309	4.1741	3.2432	ZF-EDAM10	
EDAU10	1.1802	4.1741	2.9939	ZF-EDAU10	
EDAZ10	1.4295	4.1741	2.7446	ZF-EDAZ10	
EDAH11	1.6788	4.1741	2.4952	ZF-EDAH11	
EDAM11	1.9281	4.1741	2.2459	ZF-EDAM11	
EDAU11	2.1966	4.1741	1.9774	ZF-EDAU11	
EDAZ11	2.4459	4.1741	1.7281	ZF-EDAZ11	
EDAH12	2.6952	4.1741	1.4788	ZF-EDAH12	
EDAM12	2.9446	4.1741	1.2295	ZF-EDAM12	

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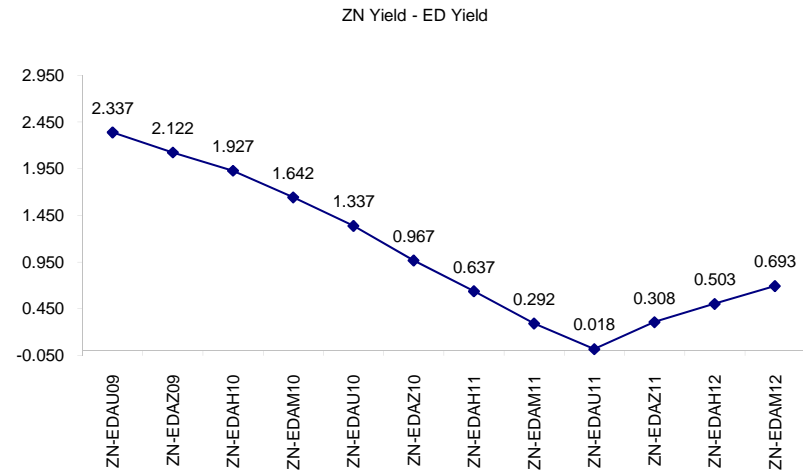


	ZN			Correlation* (percent)
	Spread Price	Spread Yield	Spread Name	
EDAU09	18.73	2.337	ZN-EDAU09	89
EDAZ09	18.95	2.122	ZN-EDAZ09	86
EDAH10	19.14	1.927	ZN-EDAH10	88
EDAM10	19.43	1.642	ZN-EDAM10	89
EDAU10	19.73	1.337	ZN-EDAU10	90
EDAZ10	20.10	0.967	ZN-EDAZ10	91
EDAH11	20.43	0.637	ZN-EDAH11	92
EDAM11	20.78	0.292	ZN-EDAM11	93
EDAU11	21.09	0.018	ZN-EDAU11	95
EDAZ11	21.38	0.308	ZN-EDAZ11	96
EDAH12	21.57	0.503	ZN-EDAH12	98
EDAM12	21.76	0.693	ZN-EDAM12	98

Price = Outright Decimal Price - Euro Contract Price

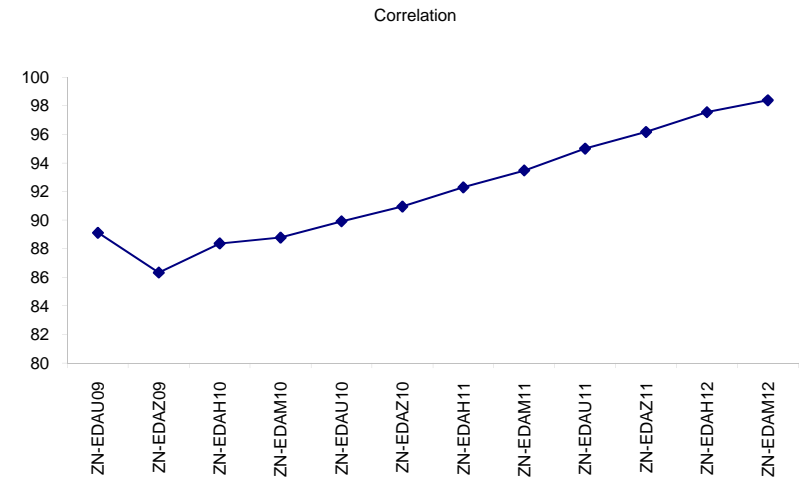
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as			ZN Spread Duration
	Fraction of year	ZN Duration	Spread Duration	
EDAU09	0.1829	5.8120	5.6291	ZN-EDAU09
EDAZ09	0.4322	5.8120	5.3798	ZN-EDAZ09
EDAH10	0.6815	5.8120	5.1305	ZN-EDAH10
EDAM10	0.9309	5.8120	4.8811	ZN-EDAM10
EDAU10	1.1802	5.8120	4.6318	ZN-EDAU10
EDAZ10	1.4295	5.8120	4.3825	ZN-EDAZ10
EDAH11	1.6788	5.8120	4.1332	ZN-EDAH11
EDAM11	1.9281	5.8120	3.8839	ZN-EDAM11
EDAU11	2.1966	5.8120	3.6154	ZN-EDAU11
EDAZ11	2.4459	5.8120	3.3661	ZN-EDAZ11
EDAH12	2.6952	5.8120	3.1168	ZN-EDAH12
EDAM12	2.9446	5.8120	2.8674	ZN-EDAM12

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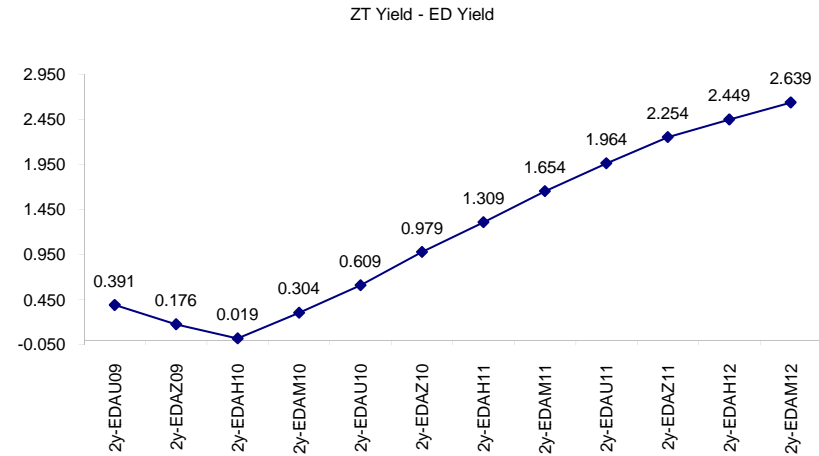


	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	0.91	0.391	2y-EDAU09	-96
EDAZ09	1.13	0.176	2y-EDAZ09	-94
EDAH10	1.32	0.019	2y-EDAH10	-94
EDAM10	1.61	0.304	2y-EDAM10	-94
EDAU10	1.91	0.609	2y-EDAU10	-94
EDAZ10	2.28	0.979	2y-EDAZ10	-95
EDAH11	2.61	1.309	2y-EDAH11	-95
EDAM11	2.96	1.654	2y-EDAM11	-94
EDAU11	3.27	1.964	2y-EDAU11	-94
EDAZ11	3.56	2.254	2y-EDAZ11	-93
EDAH12	3.75	2.449	2y-EDAH12	-92
EDAM12	3.94	2.639	2y-EDAM12	-91

Price = Outright Decimal Price - Euro Contract Price

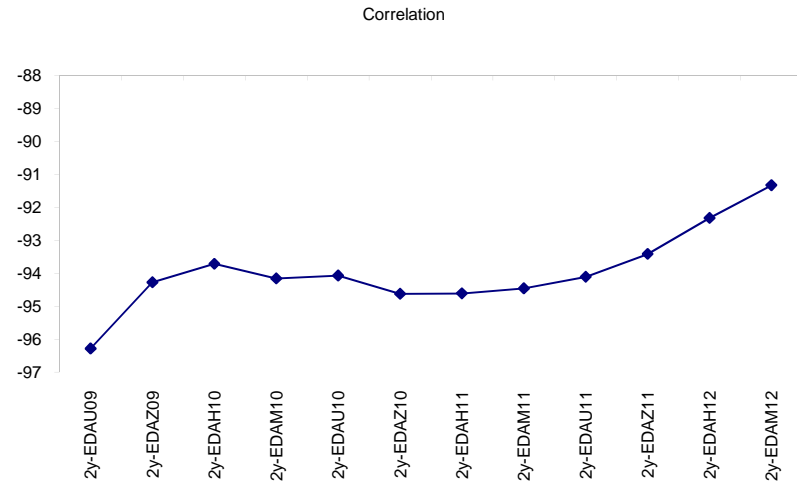
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

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



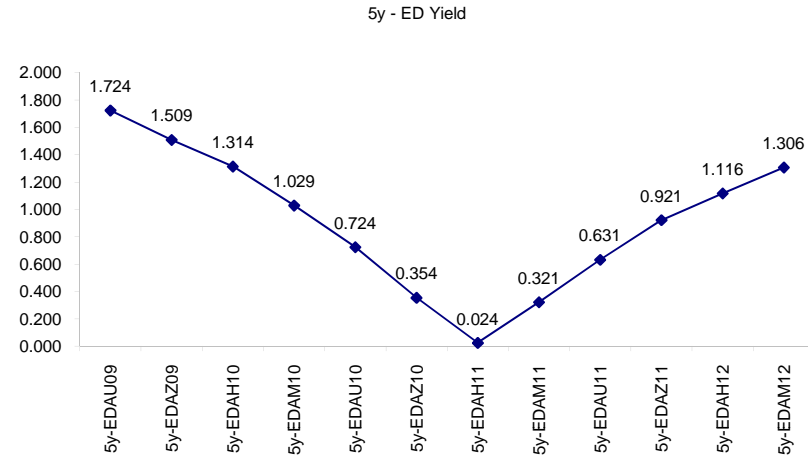
	ED Duration as		Spread Duration	
	Fraction of year	2Y Duration		
EDAU09	0.1829	1.9470	1.7641	2y-EDAU09
EDAZ09	0.4322	1.9470	1.5148	2y-EDAZ09
EDAH10	0.6815	1.9470	1.2655	2y-EDAH10
EDAM10	0.9309	1.9470	1.0162	2y-EDAM10
EDAU10	1.1802	1.9470	0.7669	2y-EDAU10
EDAZ10	1.4295	1.9470	0.5175	2y-EDAZ10
EDAH11	1.6788	1.9470	0.2682	2y-EDAH11
EDAM11	1.9281	1.9470	0.0189	2y-EDAM11
EDAU11	2.1966	1.9470	-0.2496	2y-EDAU11
EDAZ11	2.4459	1.9470	-0.4989	2y-EDAZ11
EDAH12	2.6952	1.9470	-0.7482	2y-EDAH12
EDAM12	2.9446	1.9470	-0.9975	2y-EDAM12

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



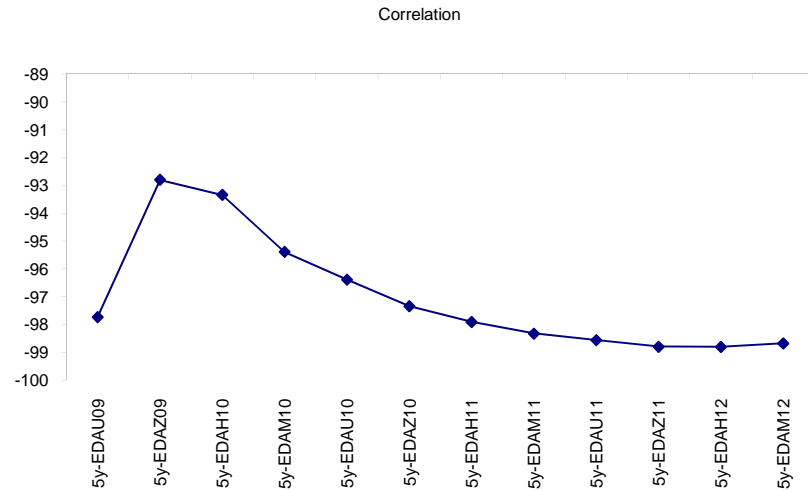
5y				Correlation* (percent)
Spread Price	Spread Yield	Spread Name		
EDAU09	2.20	1.724	5y-EDAU09	-98
EDAZ09	2.42	1.509	5y-EDAZ09	-93
EDAH10	2.61	1.314	5y-EDAH10	-93
EDAM10	2.90	1.029	5y-EDAM10	-95
EDAU10	3.20	0.724	5y-EDAU10	-96
EDAZ10	3.57	0.354	5y-EDAZ10	-97
EDAH11	3.90	0.024	5y-EDAH11	-98
EDAM11	4.25	0.321	5y-EDAM11	-98
EDAU11	4.56	0.631	5y-EDAU11	-99
EDAZ11	4.85	0.921	5y-EDAZ11	-99
EDAH12	5.04	1.116	5y-EDAH12	-99
EDAM12	5.23	1.306	5y-EDAM12	-99

Price = Outright Decimal Price - Euro Contract Price
 Yield = ABS (Proxy Yield - Implied Euro Contract yield)
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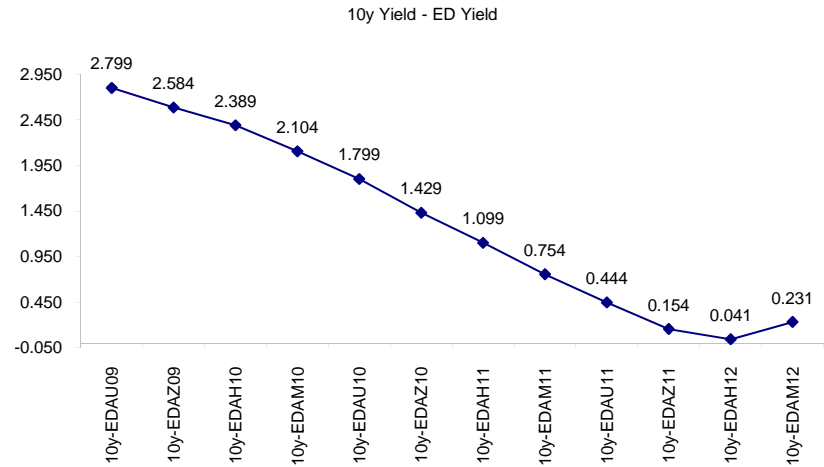
ED Duration as Fraction of year				5Y Duration	Spread Duration	Contract
EDAU09	EDAZ09	EDAH10	EDAM10			
EDAU09	0.1829	4.6428	4.4598	5y-EDAU09		
EDAZ09	0.4322	4.6428	4.2105	5y-EDAZ09		
EDAH10	0.6815	4.6428	3.9612	5y-EDAH10		
EDAM10	0.9309	4.6428	3.7119	5y-EDAM10		
EDAU10	1.1802	4.6428	3.4626	5y-EDAU10		
EDAZ10	1.4295	4.6428	3.2133	5y-EDAZ10		
EDAH11	1.6788	4.6428	2.9640	5y-EDAH11		
EDAM11	1.9281	4.6428	2.7146	5y-EDAM11		
EDAU11	2.1966	4.6428	2.4461	5y-EDAU11		
EDAZ11	2.4459	4.6428	2.1968	5y-EDAZ11		
EDAH12	2.6952	4.6428	1.9475	5y-EDAH12		
EDAM12	2.9446	4.6428	1.6982	5y-EDAM12		

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10y				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU09	2.20	2.799	10y-EDAU09	-84
EDAZ09	2.42	2.584	10y-EDAZ09	-78
EDAH10	2.61	2.389	10y-EDAH10	-80
EDAM10	2.90	2.104	10y-EDAM10	-82
EDAU10	3.20	1.799	10y-EDAU10	-83
EDAZ10	3.57	1.429	10y-EDAZ10	-84
EDAH11	3.90	1.099	10y-EDAH11	-86
EDAM11	4.25	0.754	10y-EDAM11	-87
EDAU11	4.56	0.444	10y-EDAU11	-88
EDAZ11	4.85	0.154	10y-EDAZ11	-90
EDAH12	5.04	0.041	10y-EDAH12	-91
EDAM12	5.23	0.231	10y-EDAM12	-93

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	0.1829	8.3577	8.1747	10y-EDAU09		
EDAZ09	0.4322	8.3577	7.9254	10y-EDAZ09		
EDAH10	0.6815	8.3577	7.6761	10y-EDAH10		
EDAM10	0.9309	8.3577	7.4268	10y-EDAM10		
EDAU10	1.1802	8.3577	7.1775	10y-EDAU10		
EDAZ10	1.4295	8.3577	6.9282	10y-EDAZ10		
EDAH11	1.6788	8.3577	6.6789	10y-EDAH11		
EDAM11	1.9281	8.3577	6.4295	10y-EDAM11		
EDAU11	2.1966	8.3577	6.1610	10y-EDAU11		
EDAZ11	2.4459	8.3577	5.9117	10y-EDAZ11		
EDAH12	2.6952	8.3577	5.6624	10y-EDAH12		
EDAM12	2.9446	8.3577	5.4131	10y-EDAM12		

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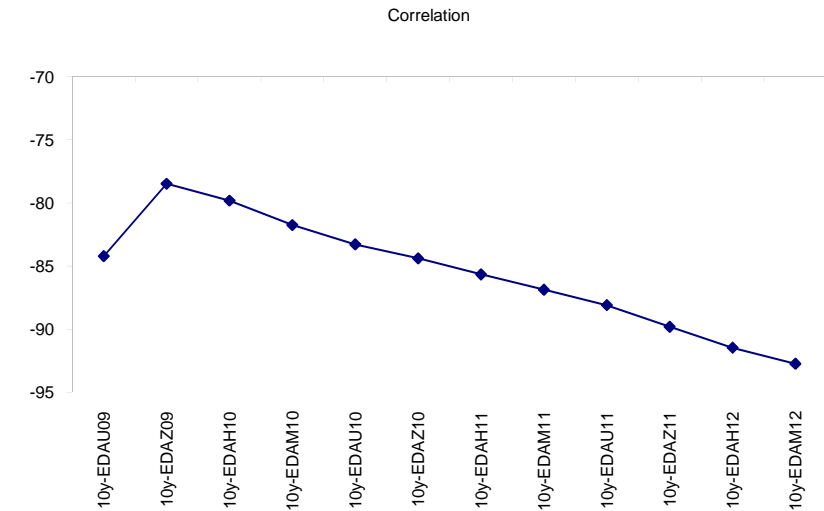


Chart values show the differences between ED contract and Treasury Futures contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.

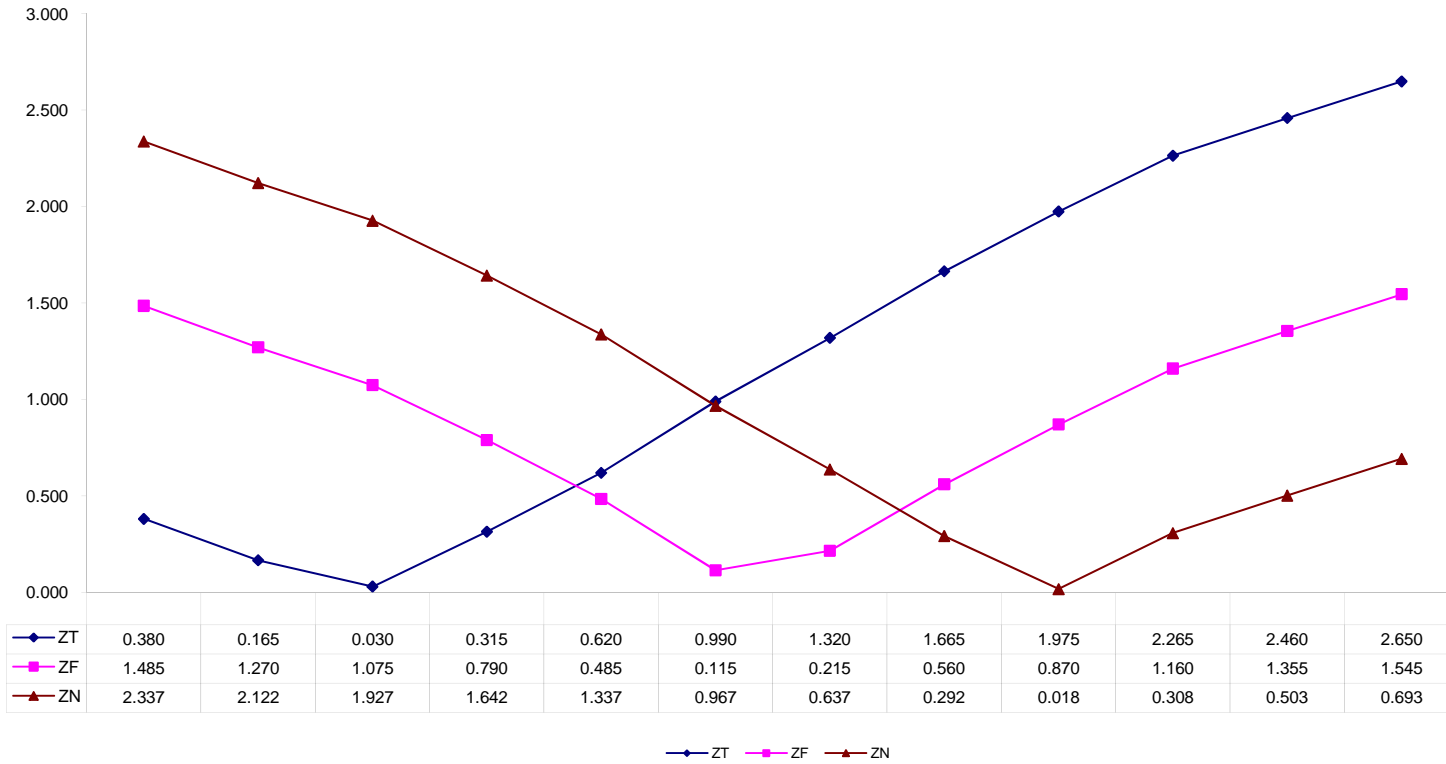
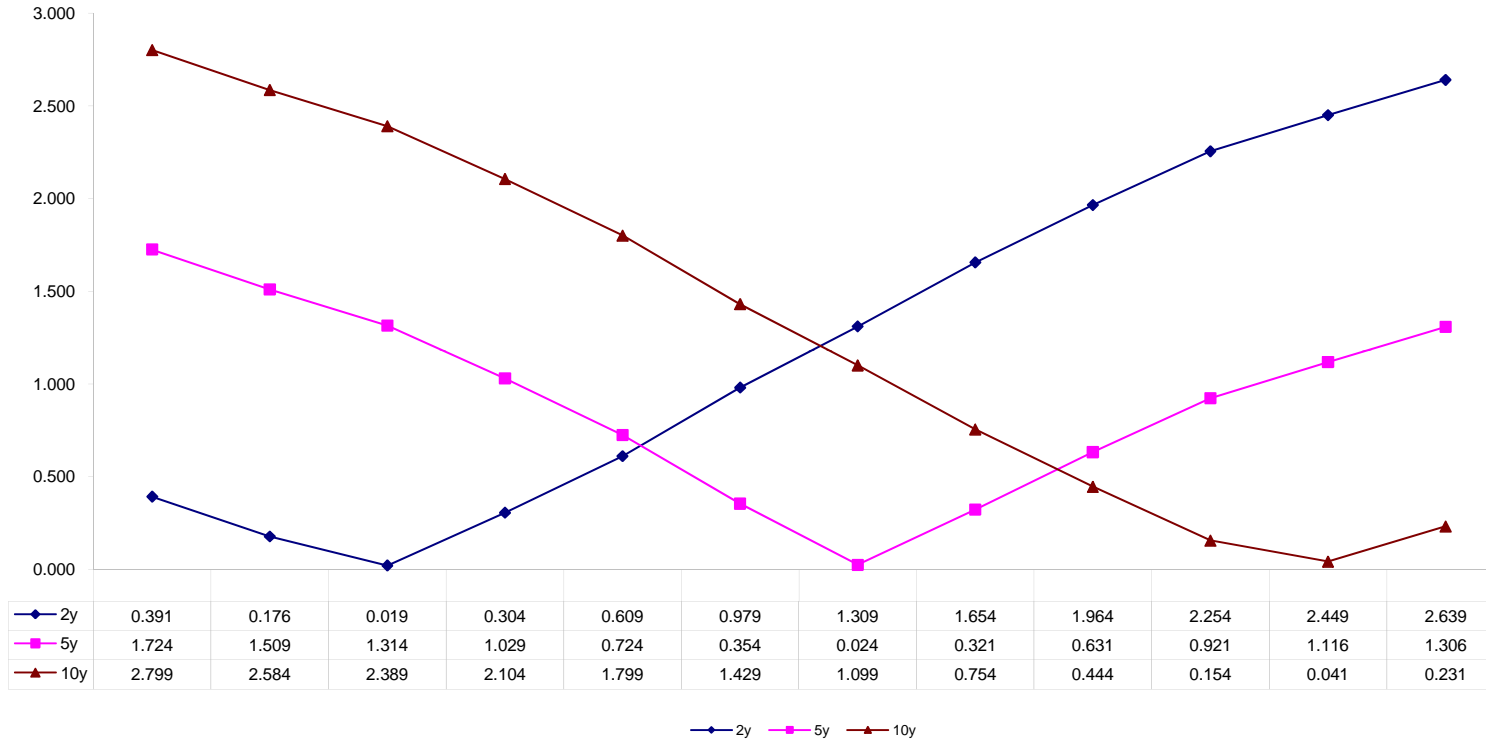
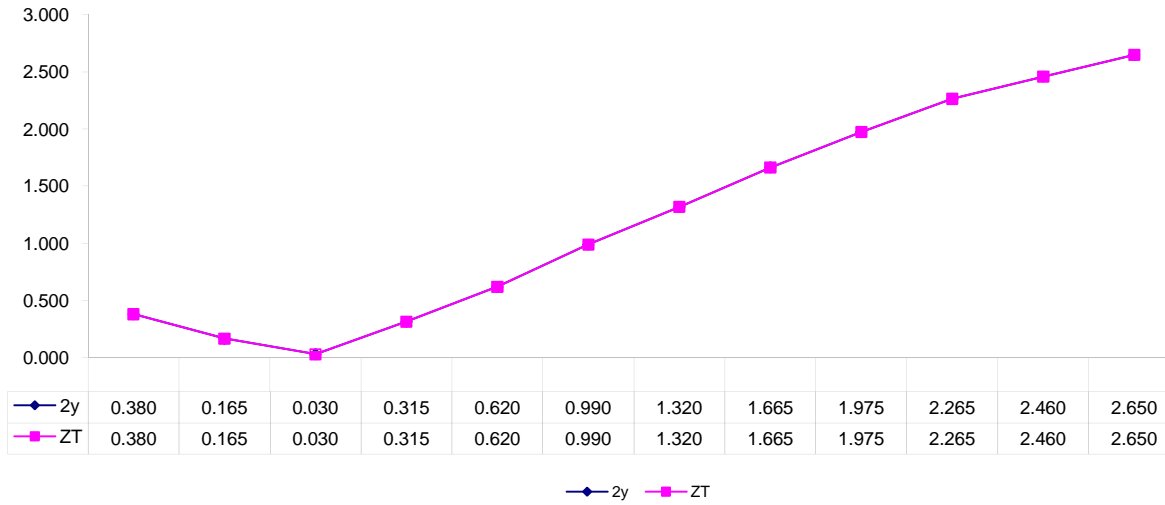
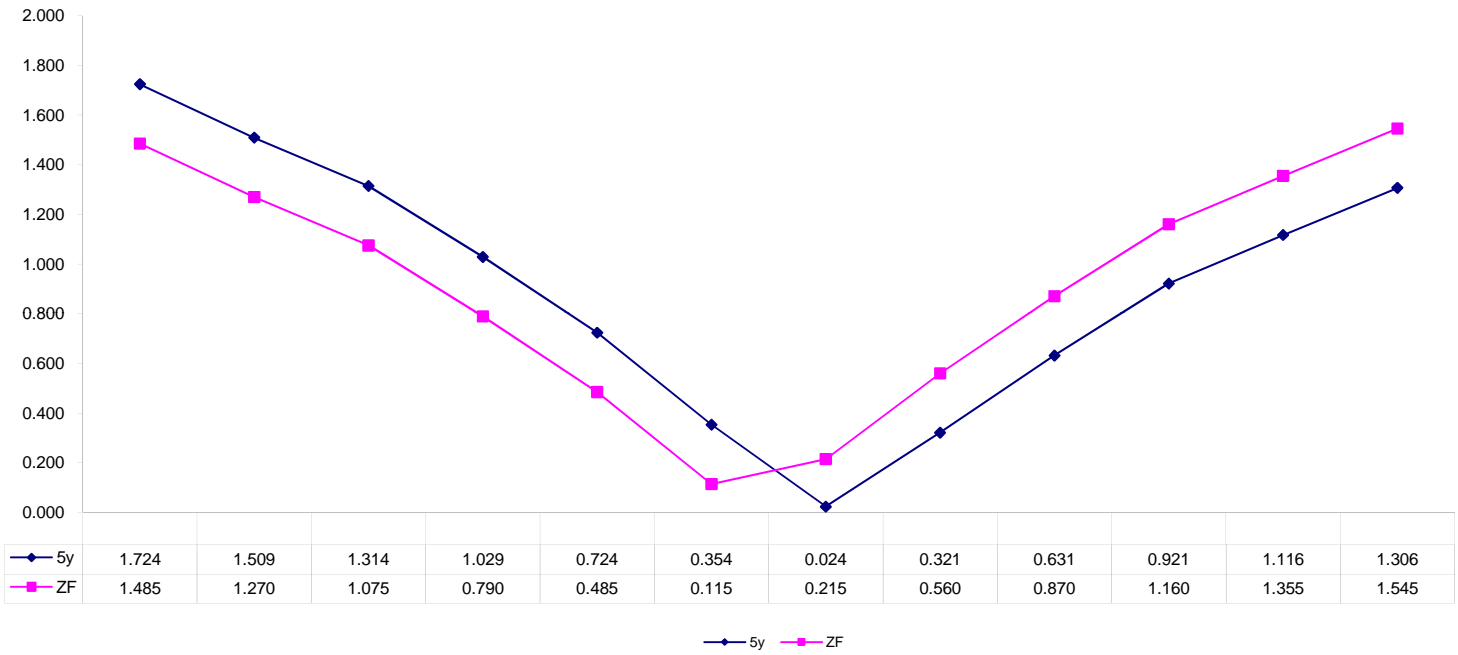


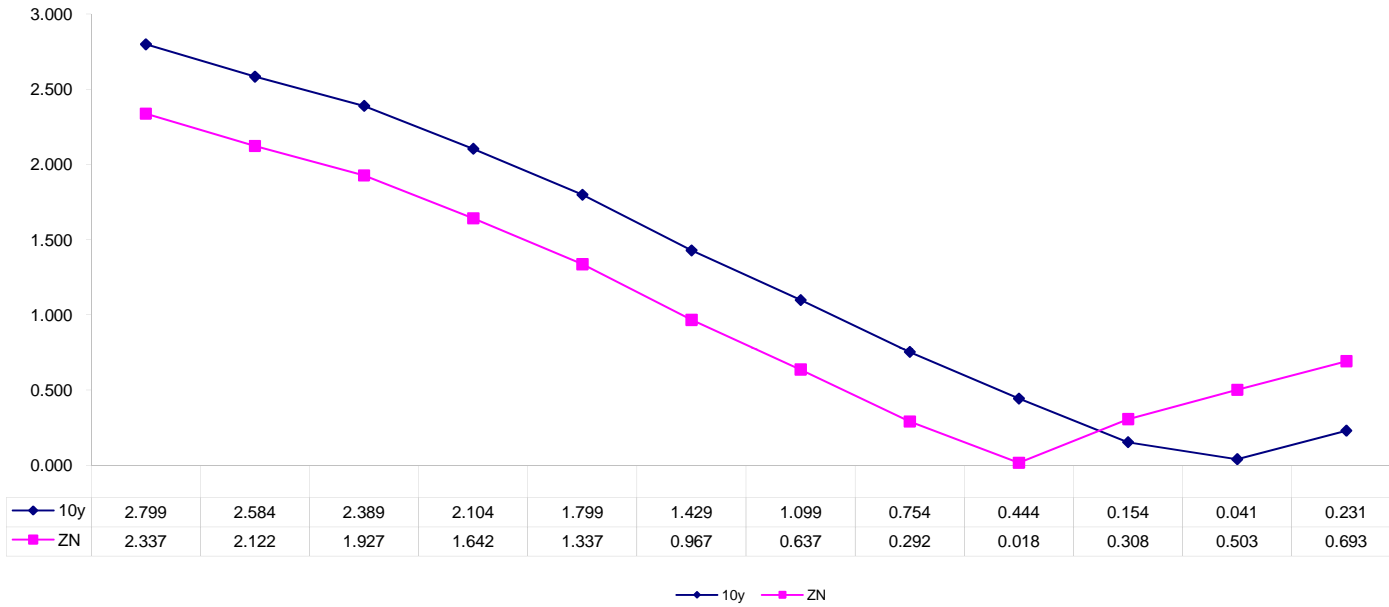
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



2y Basis TED Curve







	Last Yield	Net Last Yield	Last Price
White Pack	0.889	-2.875	9912.5000
Red Pack	2.114	-6.000	9792.6250
Green Pack	3.335	-7.250	9673.7500
Blue Pack	4.005	-6.125	9608.8750
Gold Pack		0.000	9573.1250

