

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	Last	Last	
	Decimal	€ 32.00	Yield*	MDuration
ZT	108.8500	108.2720	0.775	1.79
ZF	118.6469	118.2070	1.464	1.46
ZN	123.4063	123.1300	1.701	6.19
2y	99.9281	99.2970	0.907	1.97
5y	99.8656	99.2770	1.778	4.76
10y	108.5000	108.1600	2.752	8.17

Eurodollars (ED)						
	Last	Last Imp	Days til	Fraction	Month	
	Price	Yield	Expr.	of year		
EDAH09	98.710	1.290	41	0.112	MAR	
EDAM09	98.705	1.295	132	0.361	JUN	White Pack
EDAU09	98.635	1.365	223	0.610	SEP	
EDAZ09	98.490	1.510	314	0.860	DEC	
EDAH10	98.350	1.650	405	1.109	MAR	
EDAM10	98.120	1.880	496	1.358	JUN	Red Pack
EDAU10	97.895	2.105	587	1.608	SEP	
EDAZ10	97.665	2.335	678	1.857	DEC	
EDAH11	97.510	2.490	769	2.106	MAR	
EDAM11	97.335	2.665	860	2.356	JUN	Green Pack
EDAU11	97.180	2.820	958	2.624	SEP	
EDAZ11	97.035	2.965	1049	2.873	DEC	
EDAH12	97.015	2.985	1140	3.123	MAR	
EDAM12	96.905	3.095	1231	3.372	JUN	Blue Pack
EDAU12	96.895	3.105	1322	3.621	SEP	
EDAZ12	96.820	3.180	1413	3.871	DEC	
EDAH13	96.795	3.205	1504	4.120	MAR	
EDAM13	96.720	3.280	1595	4.369	JUN	Gold Pack
EDZU13	96.650	3.350	1686	4.619	SEP	
EDZZ13	96.545	3.455	1777	4.868	DEC	

	Last Yield	Net Yield	Last Price	
White Pack	1.389	1.375	9863.500	
Red Pack	2.030	-1.750	9800.750	Pack Prices
Green Pack	2.792	-3.000	9726.500	
Blue Pack		-0.250	9690.250	
Gold Pack		0.000	9665.750	

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.

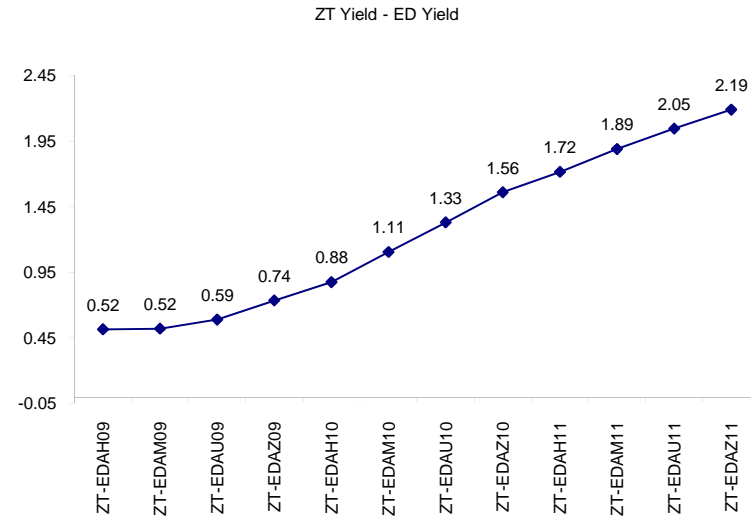
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Correlations (Important)

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.

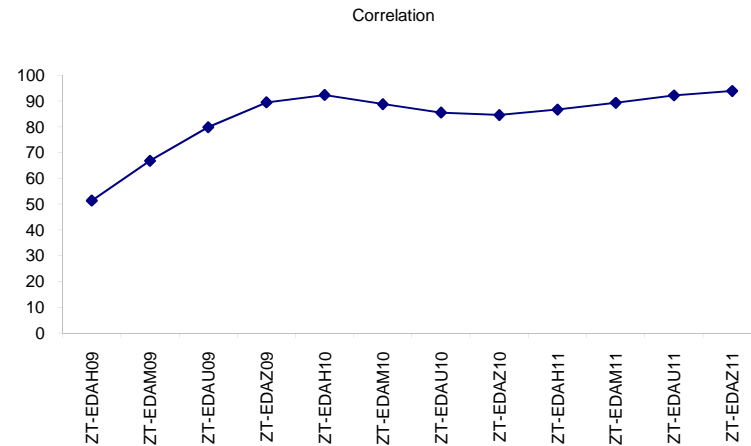
	ZT			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	10.140	0.52	ZT-EDAH09	51.352
EDAM09	10.145	0.52	ZT-EDAM09	66.805
EDAU09	10.215	0.59	ZT-EDAU09	79.818
EDAZ09	10.360	0.74	ZT-EDAZ09	89.443
EDAH10	10.500	0.88	ZT-EDAH10	92.309
EDAM10	10.730	1.11	ZT-EDAM10	88.770
EDAU10	10.955	1.33	ZT-EDAU10	85.494
EDAZ10	11.185	1.56	ZT-EDAZ10	84.557
EDAH11	11.340	1.72	ZT-EDAH11	86.638
EDAM11	11.515	1.89	ZT-EDAM11	89.291
EDAU11	11.670	2.05	ZT-EDAU11	92.166
EDAZ11	11.815	2.19	ZT-EDAZ11	93.883

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	0.112	1.79	1.68	ZT-EDAH09		
EDAM09	0.361	1.79	1.43	ZT-EDAM09		
EDAU09	0.610	1.79	1.18	ZT-EDAU09		
EDAZ09	0.860	1.79	0.93	ZT-EDAZ09		
EDAH10	1.109	1.79	0.68	ZT-EDAH10		
EDAM10	1.358	1.79	0.43	ZT-EDAM10		
EDAU10	1.608	1.79	0.18	ZT-EDAU10		
EDAZ10	1.857	1.79	(0.06)	ZT-EDAZ10		
EDAH11	2.106	1.79	(0.31)	ZT-EDAH11		
EDAM11	2.356	1.79	(0.56)	ZT-EDAM11		
EDAU11	2.624	1.79	(0.83)	ZT-EDAU11		
EDAZ11	2.873	1.79	(1.08)	ZT-EDAZ11		

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

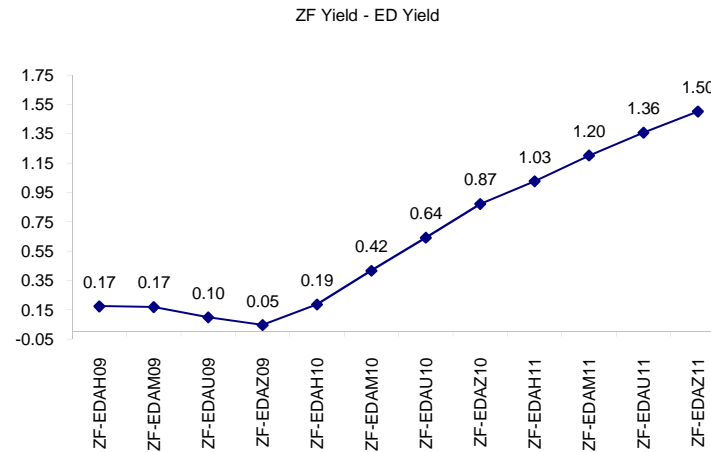


	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	19.937	0.17	ZF-EDAH09	32.589
EDAM09	19.942	0.17	ZF-EDAM09	46.863
EDAU09	20.012	0.10	ZF-EDAU09	61.529
EDAZ09	20.157	0.05	ZF-EDAZ09	74.807
EDAH10	20.297	0.19	ZF-EDAH10	85.196
EDAM10	20.527	0.42	ZF-EDAM10	88.882
EDAU10	20.752	0.64	ZF-EDAU10	91.266
EDAZ10	20.982	0.87	ZF-EDAZ10	94.698
EDAH11	21.137	1.03	ZF-EDAH11	97.404
EDAM11	21.312	1.20	ZF-EDAM11	97.756
EDAU11	21.467	1.36	ZF-EDAU11	96.600
EDAZ11	21.612	1.50	ZF-EDAZ11	94.682

Price = Outright Decimal Price - Euro Contract Price

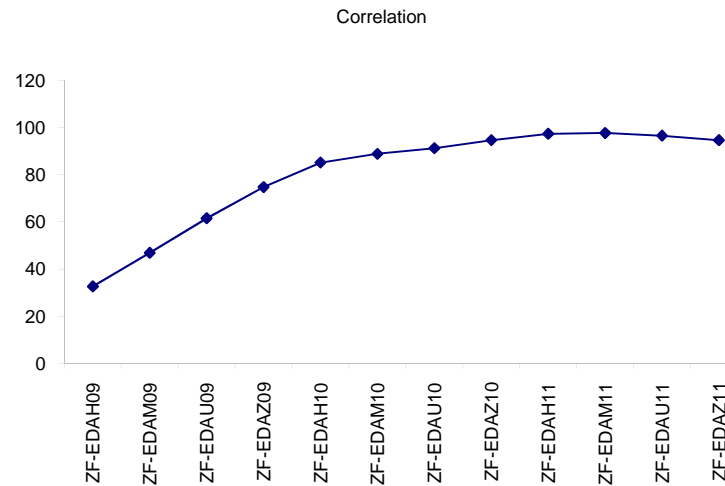
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as Fraction of year		ZF Duration	Spread Duration	
EDAH09	0.112	1.46	1.35		ZF-EDAH09
EDAM09	0.361	1.46	1.10		ZF-EDAM09
EDAU09	0.610	1.46	0.85		ZF-EDAU09
EDAZ09	0.860	1.46	0.60		ZF-EDAZ09
EDAH10	1.109	1.46	0.35		ZF-EDAH10
EDAM10	1.358	1.46	0.11		ZF-EDAM10
EDAU10	1.608	1.46	(0.14)		ZF-EDAU10
EDAZ10	1.857	1.46	(0.39)		ZF-EDAZ10
EDAH11	2.106	1.46	(0.64)		ZF-EDAH11
EDAM11	2.356	1.46	(0.89)		ZF-EDAM11
EDAU11	2.624	1.46	(1.16)		ZF-EDAU11
EDAZ11	2.873	1.46	(1.41)		ZF-EDAZ11

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

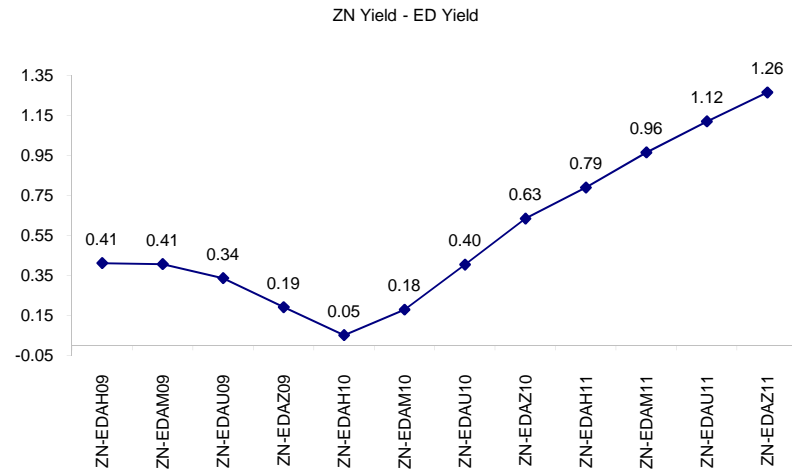


	ZN			Correlation* (percent)
	Spread Price	Spread Yield	Spread Name	
EDAH09	24.696	0.41	ZN-EDAH09	37.125
EDAM09	24.701	0.41	ZN-EDAM09	49.375
EDAU09	24.771	0.34	ZN-EDAU09	61.551
EDAZ09	24.916	0.19	ZN-EDAZ09	72.438
EDAH10	25.056	0.05	ZN-EDAH10	81.387
EDAM10	25.286	0.18	ZN-EDAM10	84.533
EDAU10	25.511	0.40	ZN-EDAU10	87.582
EDAZ10	25.741	0.63	ZN-EDAZ10	92.195
EDAH11	25.896	0.79	ZN-EDAH11	96.501
EDAM11	26.071	0.96	ZN-EDAM11	97.764
EDAU11	26.226	1.12	ZN-EDAU11	96.978
EDAZ11	26.371	1.26	ZN-EDAZ11	95.432

Price = Outright Decimal Price - Euro Contract Price

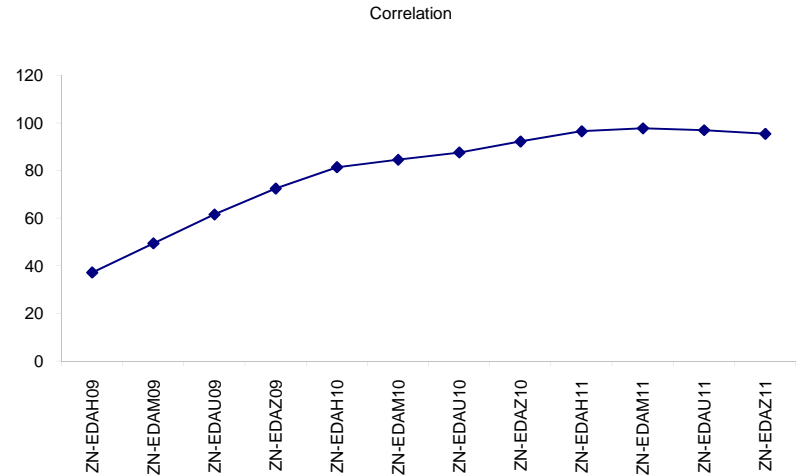
Yield = ABS (Proxy Yield - Implied Euro Contract yield)

*Correlation = ED Correlation to Treasury Future over 10 days



	ED Duration as			ZN Duration	Spread Duration	
	Fraction of year	Duration				
EDAH09	0.112	6.19	6.07	ZN-EDAH09		
EDAM09	0.361	6.19	5.83	ZN-EDAM09		
EDAU09	0.610	6.19	5.58	ZN-EDAU09		
EDAZ09	0.860	6.19	5.33	ZN-EDAZ09		
EDAH10	1.109	6.19	5.08	ZN-EDAH10		
EDAM10	1.358	6.19	4.83	ZN-EDAM10		
EDAU10	1.608	6.19	4.58	ZN-EDAU10		
EDAZ10	1.857	6.19	4.33	ZN-EDAZ10		
EDAH11	2.106	6.19	4.08	ZN-EDAH11		
EDAM11	2.356	6.19	3.83	ZN-EDAM11		
EDAU11	2.624	6.19	3.56	ZN-EDAU11		
EDAZ11	2.873	6.19	3.31	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	1.218	0.38	2y-EDAH09	-30.945
EDAM09	1.223	0.39	2y-EDAM09	-48.010
EDAU09	1.293	0.46	2y-EDAU09	-63.548
EDAZ09	1.438	0.60	2y-EDAZ09	-76.576
EDAH10	1.578	0.74	2y-EDAH10	-82.791
EDAM10	1.808	0.97	2y-EDAM10	-80.364
EDAU10	2.033	1.20	2y-EDAU10	-78.135
EDAZ10	2.263	1.43	2y-EDAZ10	-79.107
EDAH11	2.418	1.58	2y-EDAH11	-83.552
EDAM11	2.593	1.76	2y-EDAM11	-88.120
EDAU11	2.748	1.91	2y-EDAU11	-91.839
EDAZ11	2.893	2.06	2y-EDAZ11	-93.595

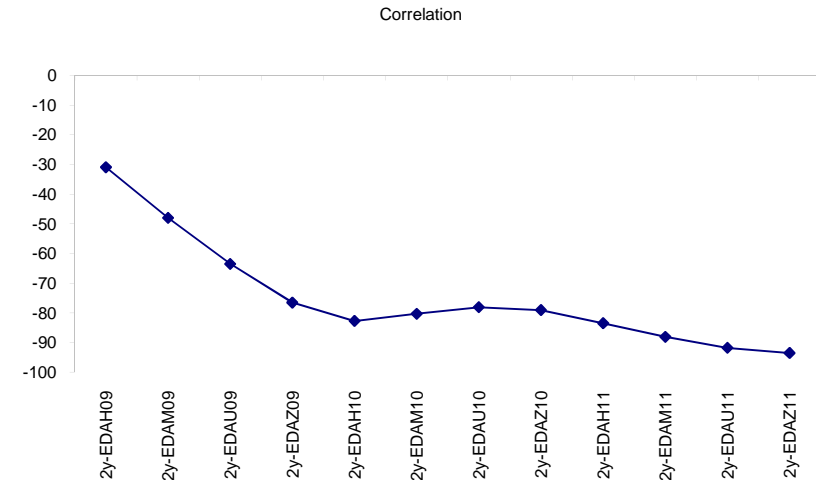
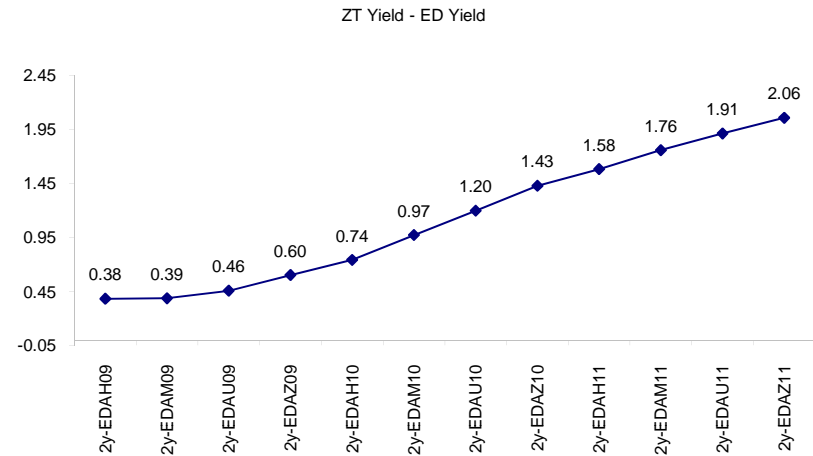
Price = Outright Decimal Price - Euro Contract Price

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

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

	ED Duration as			
	Fraction of year	2Y Duration	Spread Duration	
EDAH09	0.112	1.97	1.86	2y-EDAH09
EDAM09	0.361	1.97	1.61	2y-EDAM09
EDAU09	0.610	1.97	1.36	2y-EDAU09
EDAZ09	0.860	1.97	1.11	2y-EDAZ09
EDAH10	1.109	1.97	0.86	2y-EDAH10
EDAM10	1.358	1.97	0.61	2y-EDAM10
EDAU10	1.608	1.97	0.36	2y-EDAU10
EDAZ10	1.857	1.97	0.11	2y-EDAZ10
EDAH11	2.106	1.97	(0.14)	2y-EDAH11
EDAM11	2.356	1.97	(0.39)	2y-EDAM11
EDAU11	2.624	1.97	(0.66)	2y-EDAU11
EDAZ11	2.873	1.97	(0.91)	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	1.156	0.49	5y-EDAH09	-47.779
EDAM09	1.161	0.48	5y-EDAM09	-62.093
EDAU09	1.231	0.41	5y-EDAU09	-75.535
EDAZ09	1.376	0.27	5y-EDAZ09	-86.430
EDAH10	1.516	0.13	5y-EDAH10	-93.973
EDAM10	1.746	0.10	5y-EDAM10	-95.978
EDAU10	1.971	0.33	5y-EDAU10	-96.511
EDAZ10	2.201	0.56	5y-EDAZ10	-97.117
EDAH11	2.356	0.71	5y-EDAH11	-97.412
EDAM11	2.531	0.89	5y-EDAM11	-97.204
EDAU11	2.686	1.04	5y-EDAU11	-96.763
EDAZ11	2.831	1.19	5y-EDAZ11	-95.889

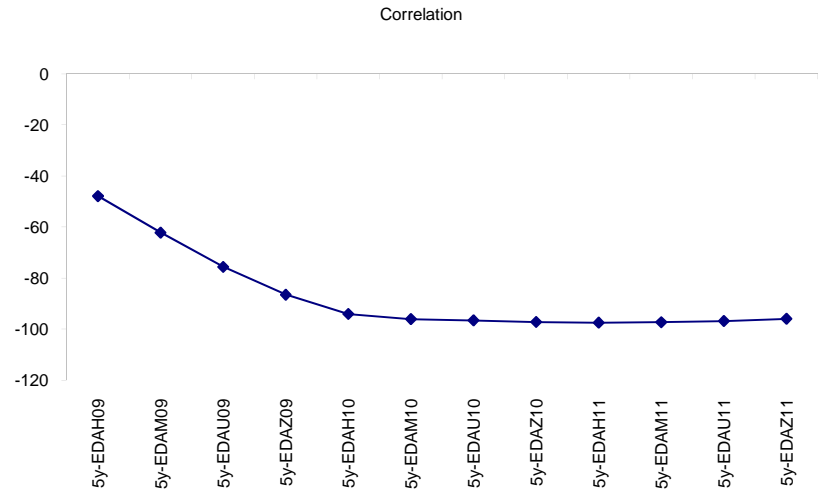
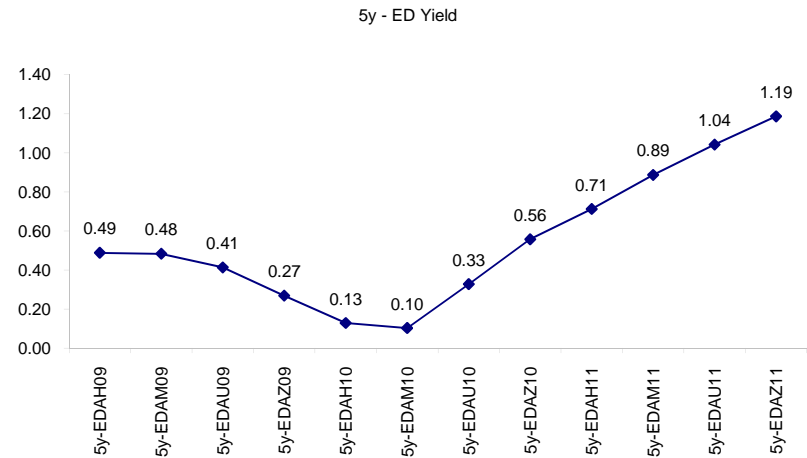
Price = Outright Decimal Price - Euro Contract Price

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	0.112	4.76	4.64	5y-EDAH09
EDAM09	0.361	4.76	4.39	5y-EDAM09
EDAU09	0.610	4.76	4.15	5y-EDAU09
EDAZ09	0.860	4.76	3.90	5y-EDAZ09
EDAH10	1.109	4.76	3.65	5y-EDAH10
EDAM10	1.358	4.76	3.40	5y-EDAM10
EDAU10	1.608	4.76	3.15	5y-EDAU10
EDAZ10	1.857	4.76	2.90	5y-EDAZ10
EDAH11	2.106	4.76	2.65	5y-EDAH11
EDAM11	2.356	4.76	2.40	5y-EDAM11
EDAU11	2.624	4.76	2.13	5y-EDAU11
EDAZ11	2.873	4.76	1.88	5y-EDAZ11

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

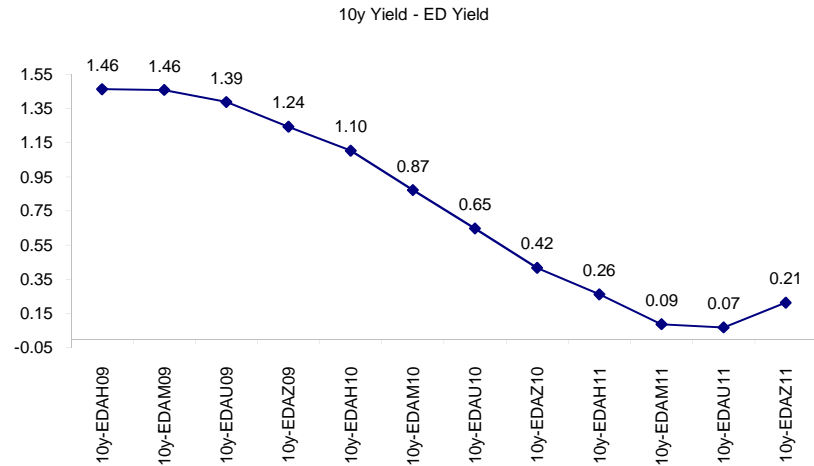


	10y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAH09	1.156	1.46	10y-EDAH09	-40.596
EDAM09	1.161	1.46	10y-EDAM09	-54.436
EDAU09	1.231	1.39	10y-EDAU09	-67.619
EDAZ09	1.376	1.24	10y-EDAZ09	-78.961
EDAH10	1.516	1.10	10y-EDAH10	-87.899
EDAM10	1.746	0.87	10y-EDAM10	-90.735
EDAU10	1.971	0.65	10y-EDAU10	-92.644
EDAZ10	2.201	0.42	10y-EDAZ10	-95.421
EDAH11	2.356	0.26	10y-EDAH11	-98.089
EDAM11	2.531	0.09	10y-EDAM11	-99.270
EDAU11	2.686	0.07	10y-EDAU11	-99.092
EDAZ11	2.831	0.21	10y-EDAZ11	-98.142

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	0.112	8.17	8.06	10y-EDAH09
EDAM09	0.361	8.17	7.81	10y-EDAM09
EDAU09	0.610	8.17	7.56	10y-EDAU09
EDAZ09	0.860	8.17	7.31	10y-EDAZ09
EDAH10	1.109	8.17	7.06	10y-EDAH10
EDAM10	1.358	8.17	6.81	10y-EDAM10
EDAU10	1.608	8.17	6.56	10y-EDAU10
EDAZ10	1.857	8.17	6.31	10y-EDAZ10
EDAH11	2.106	8.17	6.07	10y-EDAH11
EDAM11	2.356	8.17	5.82	10y-EDAM11
EDAU11	2.624	8.17	5.55	10y-EDAU11
EDAZ11	2.873	8.17	5.30	10y-EDAZ11

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

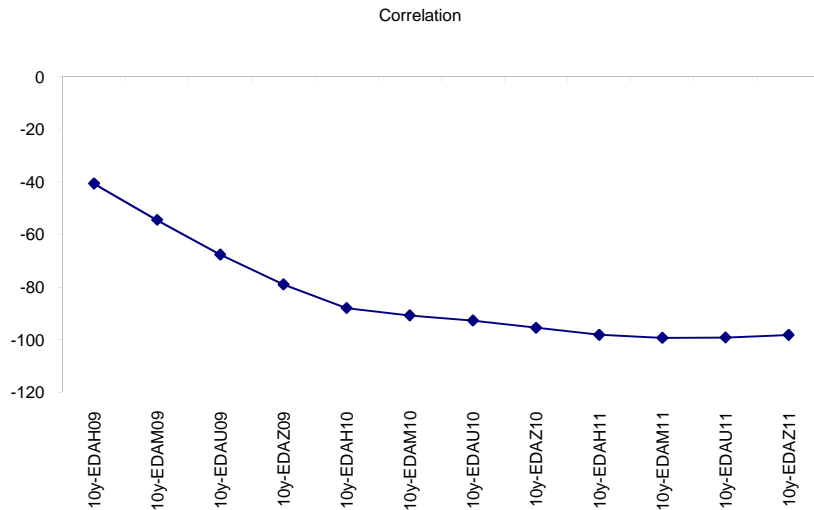


Chart values show the differences between ED contract and Treasury Futures contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.

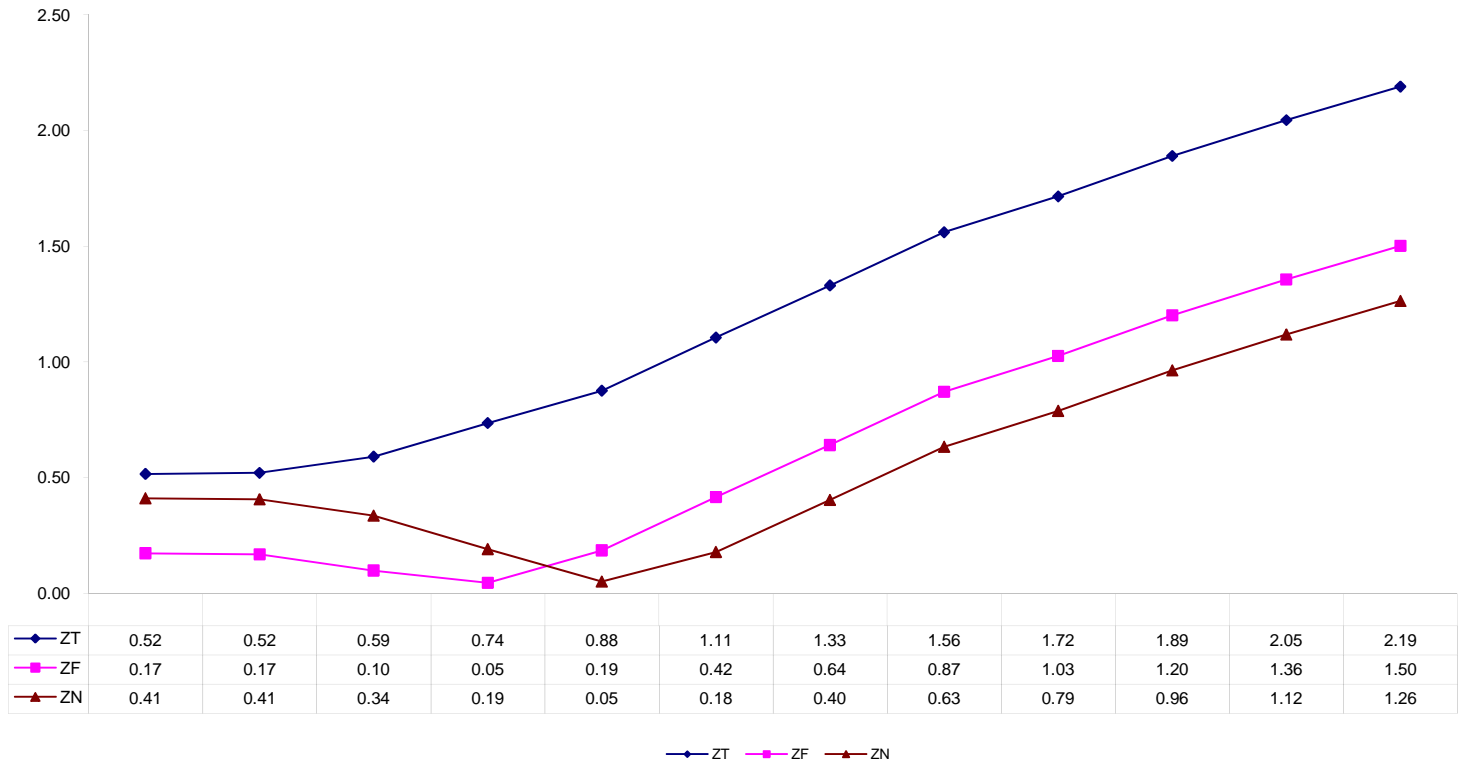
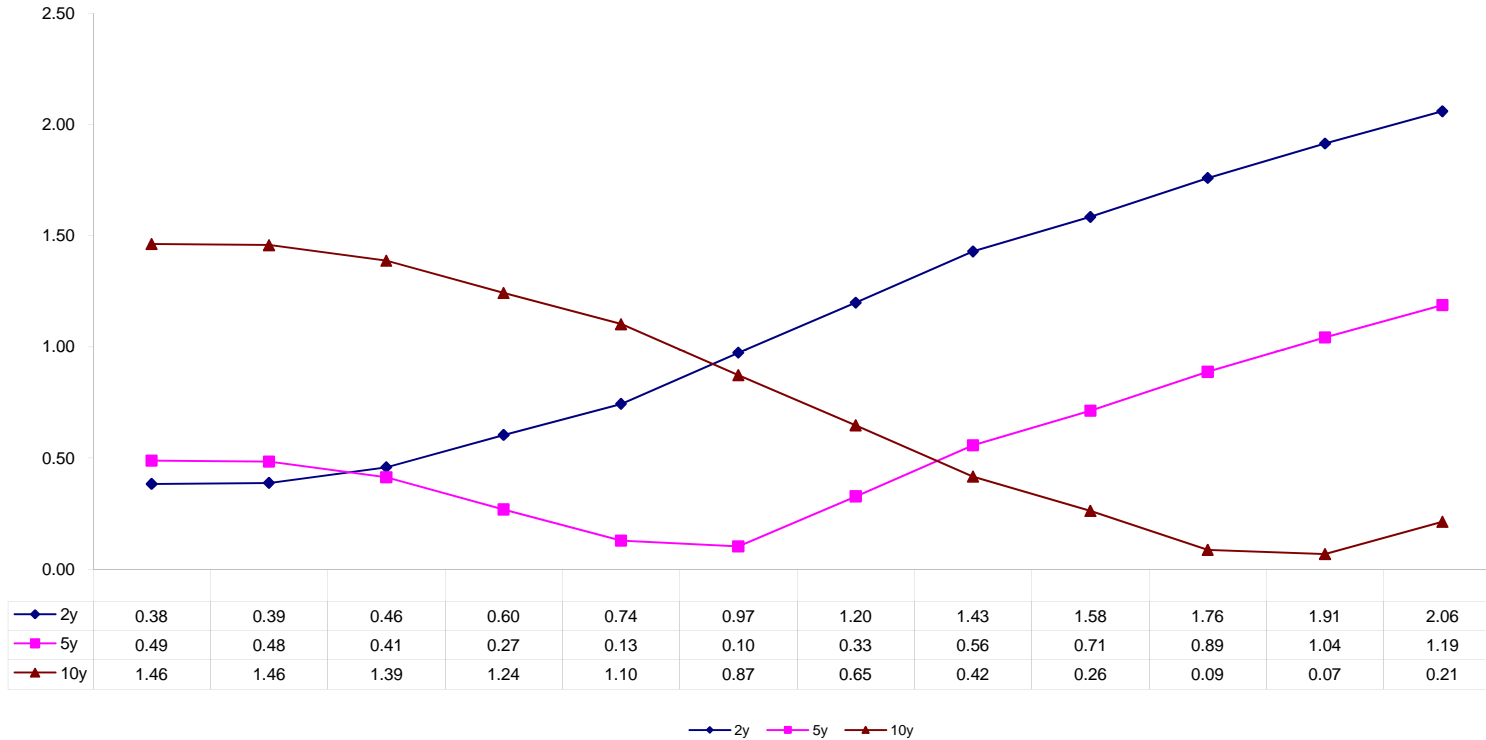
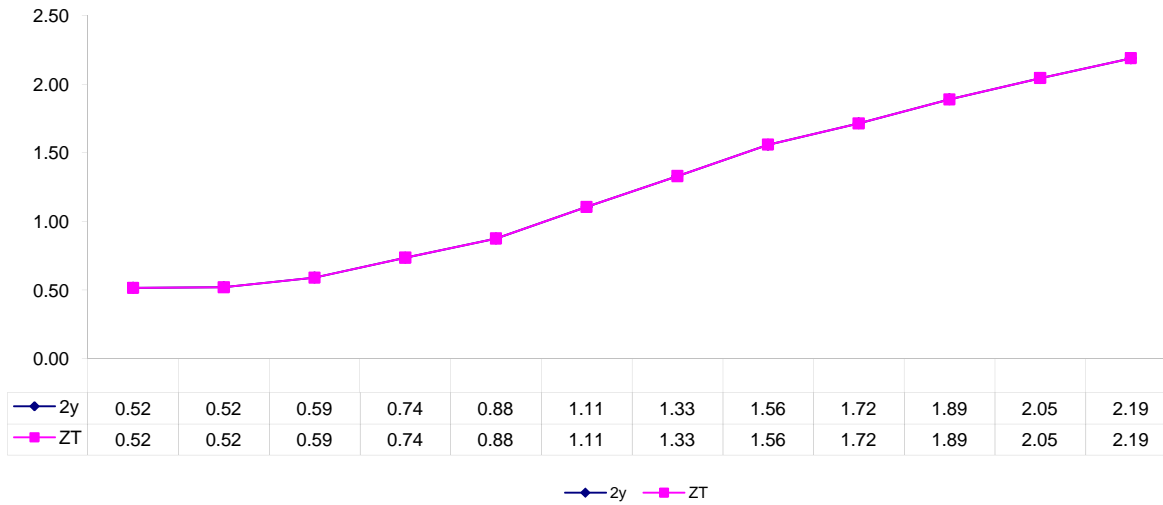
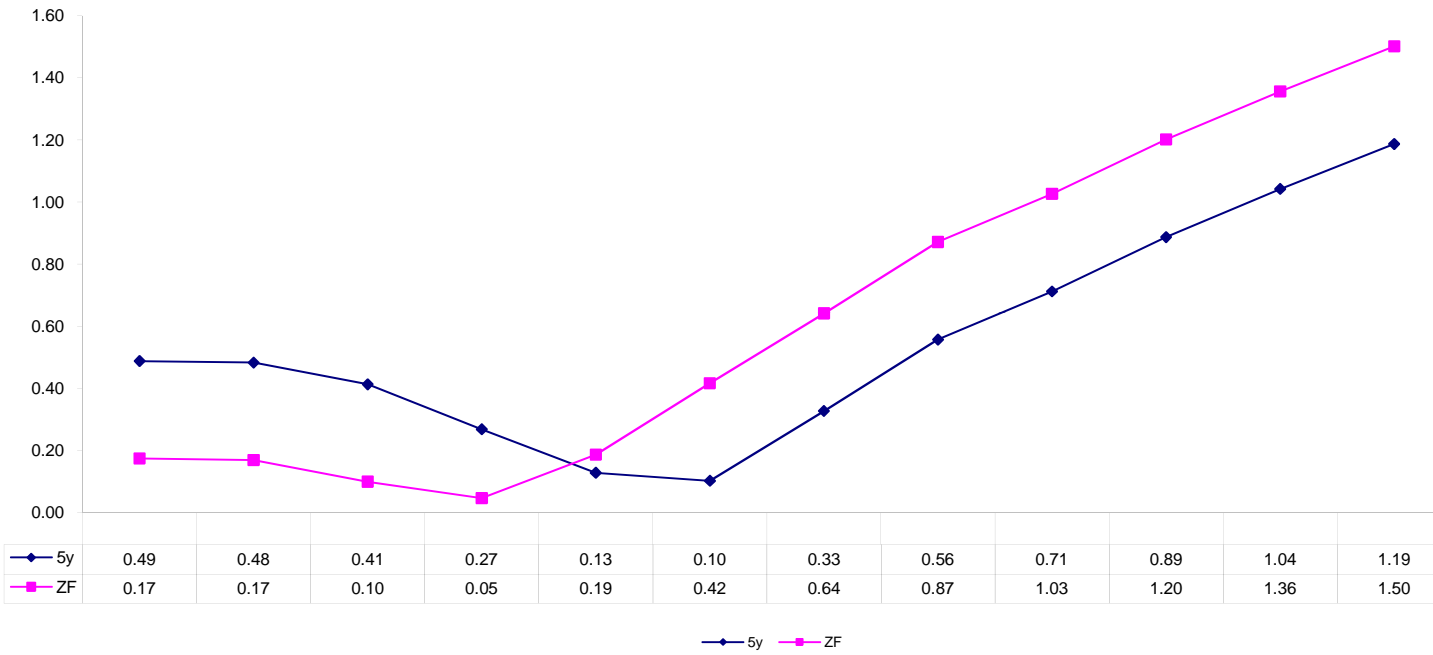


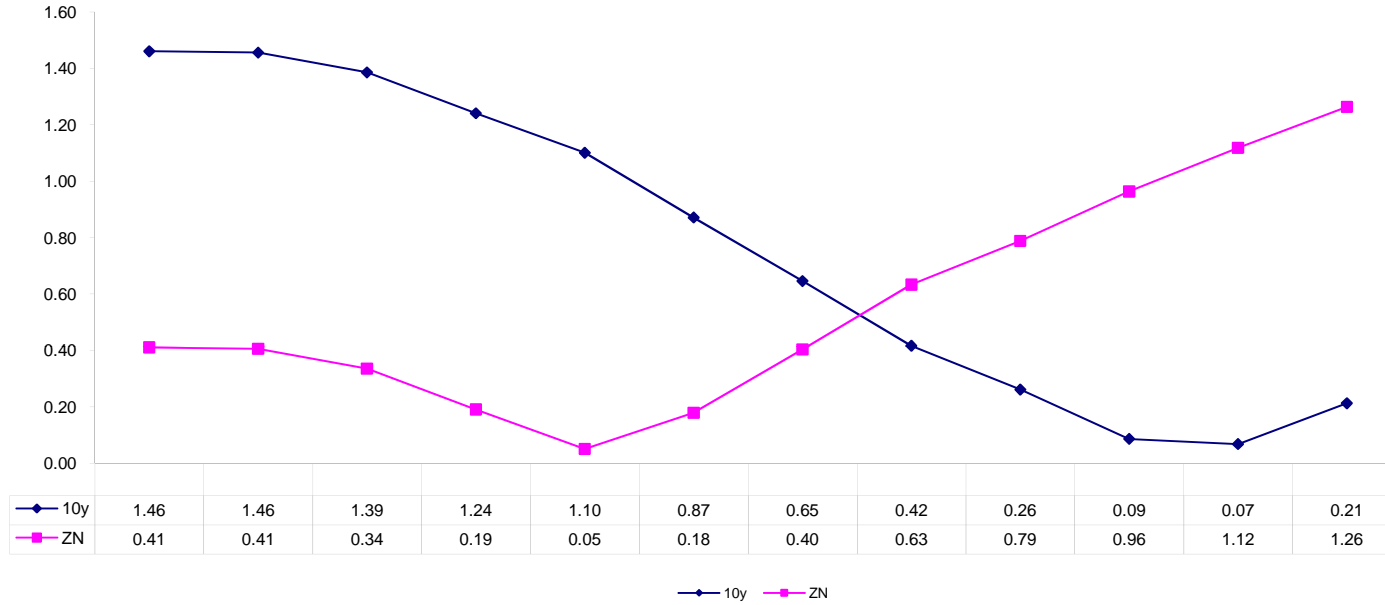
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



2y Basis TED Curve







	Last Yield	Net Last Yield	Last Price
White Pack	1.389	1.375	9863.500
Red Pack	2.030	-1.750	9800.750
Green Pack	2.792	-3.000	9726.500
Blue Pack		-0.250	9690.250
Gold Pack		0.000	9665.750

