The Morning Email: TERM TEDS & Dirty TEDS

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I'm a new page, come and visit me.

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.

Want something added? Let me know: jgoulding@ghco.com

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Quotes

	F.I. Futures and Cash			
	Last Decimal	Last 32	Last Yield*	MDuration
ZT	101.9438	101.302	4.850	1.86
ZF	104.0781	104.025	4.915	3.95
ZN	105.5313	105.170	4.982	5.77
2y	100.069	100.0220	4.838	2.00
5y	99.219	99.0700	4.928	4.26
10y	95.672	95.2150	5.057	7.80

	Eurodollars (ED)					
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month	
EDAU07	94.680	5.320	82	0.224	SEP	White Pack
EDAZ07	94.740	5.260	173	0.473	DEC	
EDAH08	94.820	5.180	264	0.723	MAR	
EDAM08	94.860	5.140	355	0.972	JUN	
EDAU08	94.845	5.155	446	1.221	SEP	Red Pack
EDAZ08	94.805	5.195	537	1.471	DEC	
EDAH09	94.765	5.235	628	1.720	MAR	
EDAM09	94.720	5.280	719	1.969	JUN	
EDAU09	94.665	5.335	810	2.219	SEP	Green Pack
EDAZ09	94.615	5.385	901	2.468	DEC	
EDAH10	94.580	5.420	992	2.717	MAR	
EDAM10	94.535	5.465	1083	2.966	JUN	
EDAU10	94.495	5.505	1174	3.216	SEP	
EDAZ10	94.445	5.555	1265	3.465	DEC	
EDAH11	94.385	5.615	1356	3.714	MAR	
EDAM11	94.395	5.605	1447	3.964	JUN	
EDAU11	94.330	5.670	1545	4.232	SEP	
EDAZ11	94.200	5.800	1636	4.482	DEC	
EDAH12	94.265	5.735	1727	4.731	MAR	
EDAM12	94.240	5.760	1818	4.980	JUN	

	Last Yield	Net Yield	Last Price
Q.ED.White	5.368	2.875	9477.500
Q.ED.Red	5.359	5.875	9478.375
Q.ED.Green	5.551	5.875	9459.875
Q.ED.Blue		3.875	9442.625
Q.ED.Gold		0.000	9426.250
Q.ED.Purple		0.000	9426.250

Pack Prices

Notes
Futures use CTD for Last Yield
Mduration = Modified Macaulay Duration

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Overview of Hedging

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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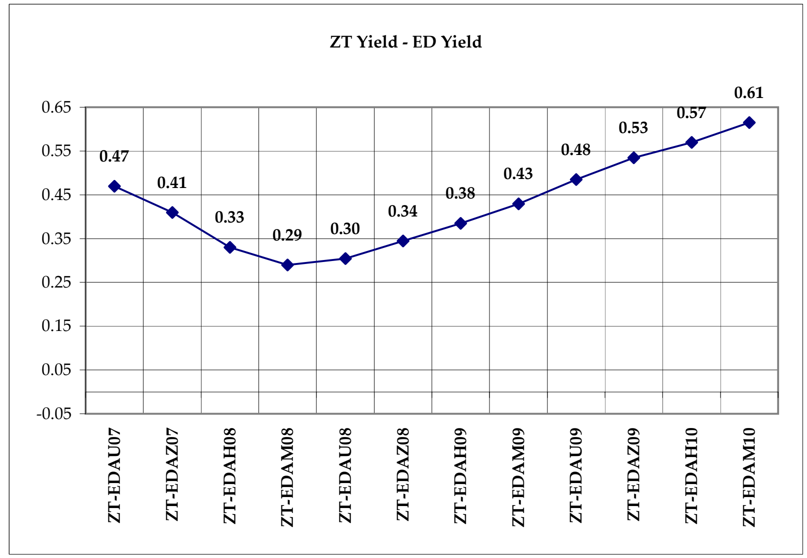
Eurodollar Color Codes for Individual Year Strips:

Color	Year	Contracts
White	One	1 – 4
Red	Two	5 – 8
Green	Three	9 – 12
Blue	Four	13 – 16
Gold	Five	17 – 20
Purple	Six	21 – 24
Orange	Seven	25 – 28
Pink	Eight	29 – 32
Silver	Nine	33 – 36
Copper	Ten	37 – 40

Dirty TED: ZT vs Eurodollar Contracts

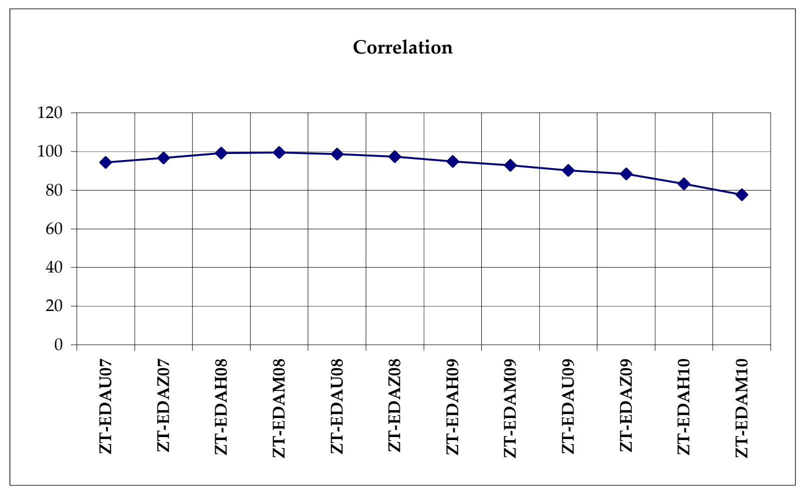
	ZT			
	Spread Price	**Spread Yield**	**Spread Name**	**Correlation* (percent)**
EDAU07	7.264	0.47	ZT-EDAU07	94.382
EDAZ07	7.204	0.41	ZT-EDAZ07	96.714
EDAH08	7.124	0.33	ZT-EDAH08	99.102
EDAM08	7.084	0.29	ZT-EDAM08	99.515
EDAU08	7.099	0.30	ZT-EDAU08	98.719
EDAZ08	7.139	0.34	ZT-EDAZ08	97.350
EDAH09	7.179	0.38	ZT-EDAH09	94.914
EDAM09	7.224	0.43	ZT-EDAM09	92.907
EDAU09	7.279	0.48	ZT-EDAU09	90.209
EDAZ09	7.329	0.53	ZT-EDAZ09	88.345
EDAH10	7.364	0.57	ZT-EDAH10	83.279
EDAM10	7.409	0.61	ZT-EDAM10	77.603

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



	GE Duration as Fraction of year	**ZT Duration**	**Spread Duration**	
EDAU07	0.224	1.86	1.64	ZT-EDAU07
EDAZ07	0.473	1.86	1.39	ZT-EDAZ07
EDAH08	0.723	1.86	1.14	ZT-EDAH08
EDAM08	0.972	1.86	0.89	ZT-EDAM08
EDAU08	1.221	1.86	0.64	ZT-EDAU08
EDAZ08	1.471	1.86	0.39	ZT-EDAZ08
EDAH09	1.720	1.86	0.14	ZT-EDAH09
EDAM09	1.969	1.86	(0.11)	ZT-EDAM09
EDAU09	2.219	1.86	(0.36)	ZT-EDAU09
EDAZ09	2.468	1.86	(0.61)	ZT-EDAZ09
EDAH10	2.717	1.86	(0.86)	ZT-EDAH10
EDAM10	2.966	1.86	(1.11)	ZT-EDAM10

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



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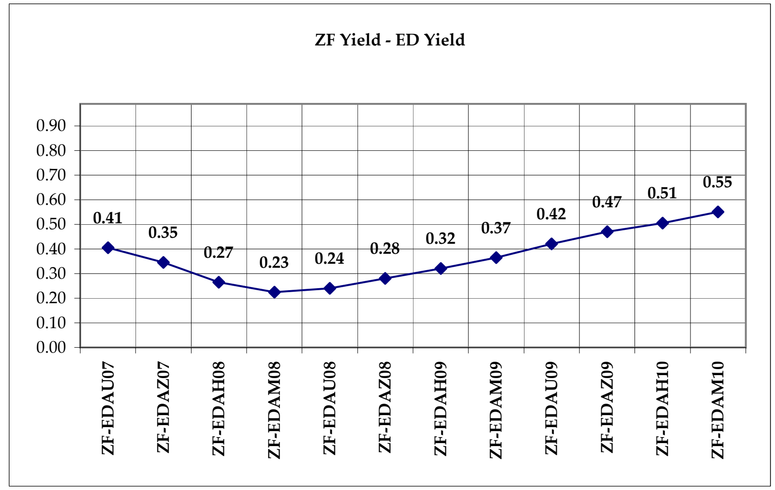
Dirty TED: ZF vs Eurodollar Contracts

	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU07	9.40	0.41	ZF-EDAU07	90.208
EDAZ07	9.34	0.35	ZF-EDAZ07	94.144
EDAH08	9.26	0.27	ZF-EDAH08	97.368
EDAM08	9.22	0.23	ZF-EDAM08	98.924
EDAU08	9.23	0.24	ZF-EDAU08	99.739
EDAZ08	9.27	0.28	ZF-EDAZ08	99.637
EDAH09	9.31	0.32	ZF-EDAH09	98.764
EDAM09	9.36	0.37	ZF-EDAM09	97.683
EDAU09	9.41	0.42	ZF-EDAU09	96.142
EDAZ09	9.46	0.47	ZF-EDAZ09	94.842
EDAH10	9.50	0.51	ZF-EDAH10	91.163
EDAM10	9.54	0.55	ZF-EDAM10	86.712

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



	GE Duration as Fraction of year	ZF Duration	Spread Duration	
EDAU07	0.224	3.95	3.72	ZF-EDAU07
EDAZ07	0.473	3.95	3.47	ZF-EDAZ07
EDAH08	0.723	3.95	3.22	ZF-EDAH08
EDAM08	0.972	3.95	2.97	ZF-EDAM08
EDAU08	1.221	3.95	2.73	ZF-EDAU08
EDAZ08	1.471	3.95	2.48	ZF-EDAZ08
EDAH09	1.720	3.95	2.23	ZF-EDAH09
EDAM09	1.969	3.95	1.98	ZF-EDAM09
EDAU09	2.219	3.95	1.73	ZF-EDAU09
EDAZ09	2.468	3.95	1.48	ZF-EDAZ09
EDAH10	2.717	3.95	1.23	ZF-EDAH10
EDAM10	2.966	3.95	0.98	ZF-EDAM10

The farther away from 0 the spread duration is
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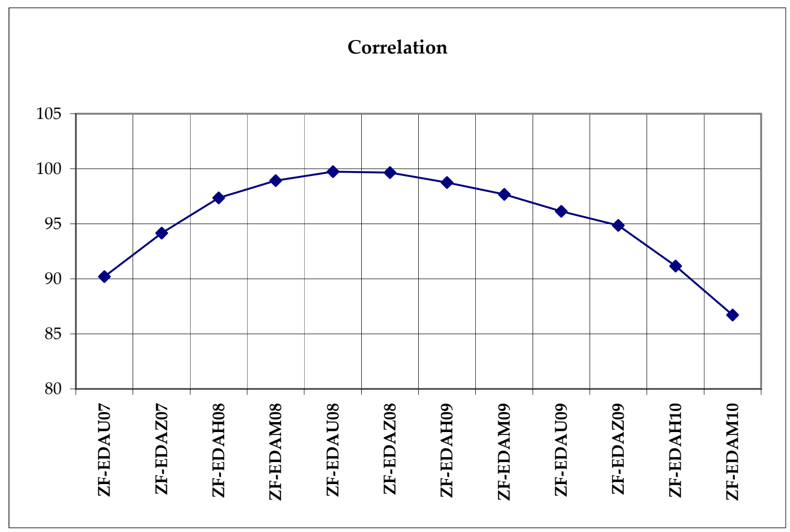

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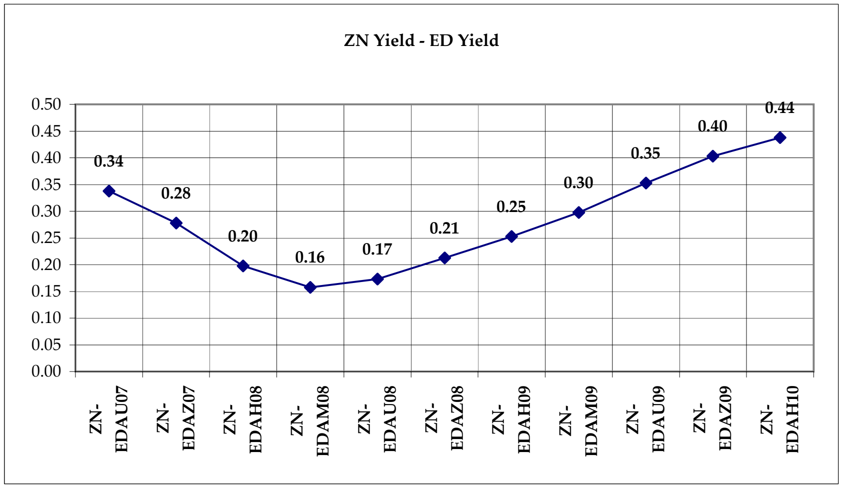
Dirty TED: ZN vs Eurodollar Contracts

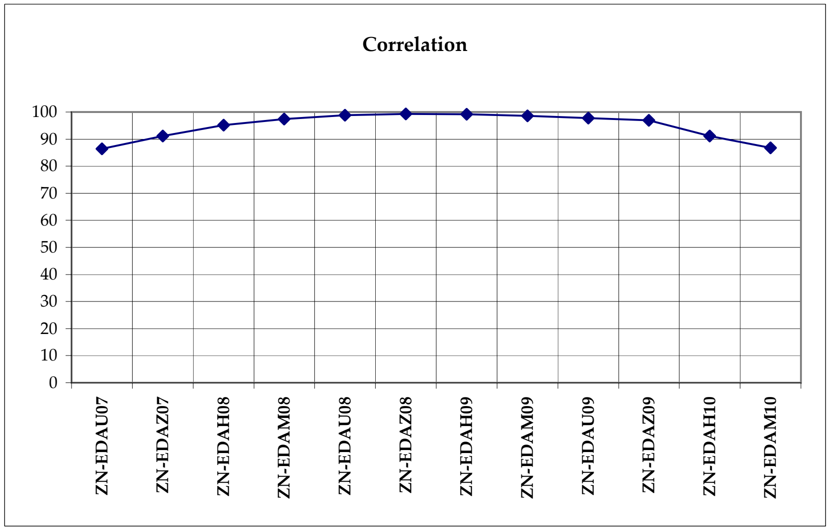
	ZN			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU07	10.85	0.34	ZN-EDAU07	86.37
EDAZ07	10.79	0.28	ZN-EDAZ07	91.14
EDAH08	10.71	0.20	ZN-EDAH08	95.20
EDAM08	10.67	0.16	ZN-EDAM08	97.34
EDAU08	10.69	0.17	ZN-EDAU08	98.85
EDAZ08	10.73	0.21	ZN-EDAZ08	99.31
EDAH09	10.77	0.25	ZN-EDAH09	99.13
EDAM09	10.81	0.30	ZN-EDAM09	98.62
EDAU09	10.87	0.35	ZN-EDAU09	97.77
EDAZ09	10.92	0.40	ZN-EDAZ09	96.96
EDAH10	10.95	0.44	ZN-EDAH10	91.16
EDAM10	11.00	0.48	ZN-EDAM10	86.71

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



	GE Duration as Fraction of year	ZN Duration	Spread Duration	
EDAU07	0.224	5.77	5.54	ZN-EDAU07
EDAZ07	0.473	5.77	5.29	ZN-EDAZ07
EDAH08	0.723	5.77	5.04	ZN-EDAH08
EDAM08	0.972	5.77	4.79	ZN-EDAM08
EDAU08	1.221	5.77	4.54	ZN-EDAU08
EDAZ08	1.471	5.77	4.29	ZN-EDAZ08
EDAH09	1.720	5.77	4.05	ZN-EDAH09
EDAM09	1.969	5.77	3.80	ZN-EDAM09
EDAU09	2.219	5.77	3.55	ZN-EDAU09
EDAZ09	2.468	5.77	3.30	ZN-EDAZ09
EDAH10	2.717	5.77	3.05	ZN-EDAH10
EDAM10	2.966	5.77	2.80	ZN-EDAM10

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



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TERM TED: 2y vs Eurodollar Contracts

	2y			
	Spread Price	**Spread Yield**	**Spread Name**	**Correlation* (percent)**
EDAU07	5.39	0.48	2y-EDAU07	-94.598
EDAZ07	5.33	0.42	2y-EDAZ07	-97.455
EDAH08	5.25	0.34	2y-EDAH08	-98.824
EDAM08	5.21	0.30	2y-EDAM08	-98.873
EDAU08	5.22	0.32	2y-EDAU08	-98.061
EDAZ08	5.26	0.36	2y-EDAZ08	-98.873
EDAH09	5.30	0.40	2y-EDAH09	-94.423
EDAM09	5.35	0.44	2y-EDAM09	-92.054
EDAU09	5.40	0.50	2y-EDAU09	-88.965
EDAZ09	5.45	0.55	2y-EDAZ09	-86.618
EDAH10	5.49	0.58	2y-EDAH10	-81.206
EDAM10	5.53	0.63	2y-EDAM10	-75.416

Price = Outright Decimal Price - Euro Contract Price
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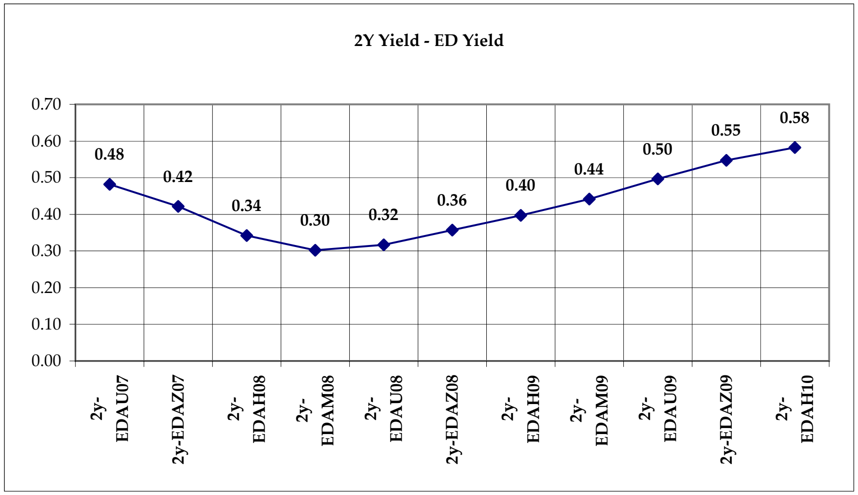

	GE Duration as Fraction of year	**2Y Duration**	**Spread Duration**	
EDAU07	0.224	2.00	1.77	2y-EDAU07
EDAZ07	0.473	2.00	1.52	2y-EDAZ07
EDAH08	0.723	2.00	1.28	2y-EDAH08
EDAM08	0.972	2.00	1.03	2y-EDAM08
EDAU08	1.221	2.00	0.78	2y-EDAU08
EDAZ08	1.471	2.00	0.53	2y-EDAZ08
EDAH09	1.720	2.00	0.28	2y-EDAH09
EDAM09	1.969	2.00	0.03	2y-EDAM09
EDAU09	2.219	2.00	(0.22)	2y-EDAU09
EDAZ09	2.468	2.00	(0.47)	2y-EDAZ09
EDAH10	2.717	2.00	(0.72)	2y-EDAH10
EDAM10	2.966	2.00	(0.97)	2y-EDAM10

The farther away from 0 the spread duration is
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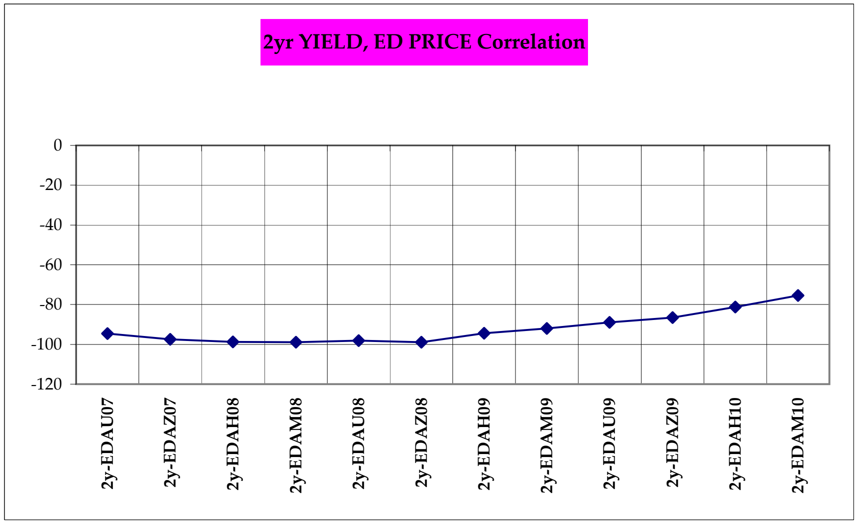

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TERM TED: 5y vs Eurodollar Contracts

	5y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU07	4.54	0.39	5y-EDAU07	-88.558
EDAZ07	4.48	0.33	5y-EDAZ07	-93.249
EDAH08	4.40	0.25	5y-EDAH08	-96.793
EDAM08	4.36	0.21	5y-EDAM08	-98.284
EDAU08	4.37	0.23	5y-EDAU08	-98.769
EDAZ08	4.41	0.27	5y-EDAZ08	-98.284
EDAH09	4.45	0.31	5y-EDAH09	-97.487
EDAM09	4.50	0.35	5y-EDAM09	-96.419
EDAU09	4.55	0.41	5y-EDAU09	-95.005
EDAZ09	4.60	0.46	5y-EDAZ09	-93.662
EDAH10	4.64	0.49	5y-EDAH10	-90.084
EDAM10	4.68	0.54	5y-EDAM10	-85.875

Price = Outright Decimal Price - Euro Contract Price
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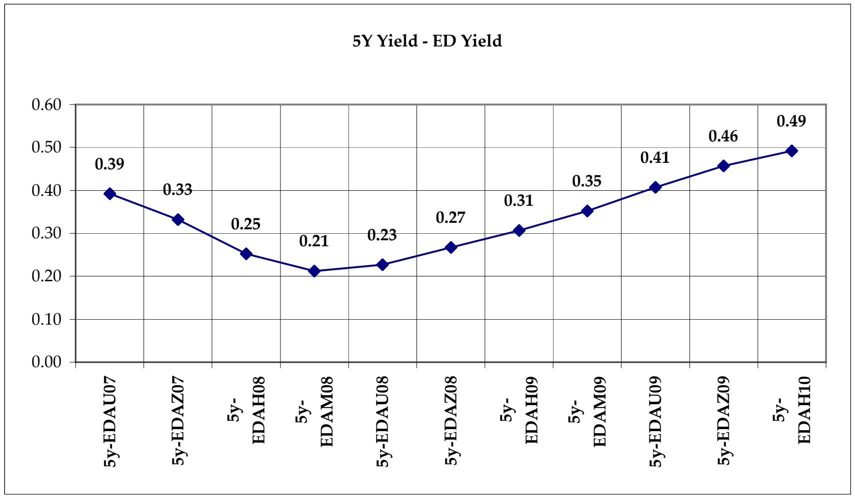
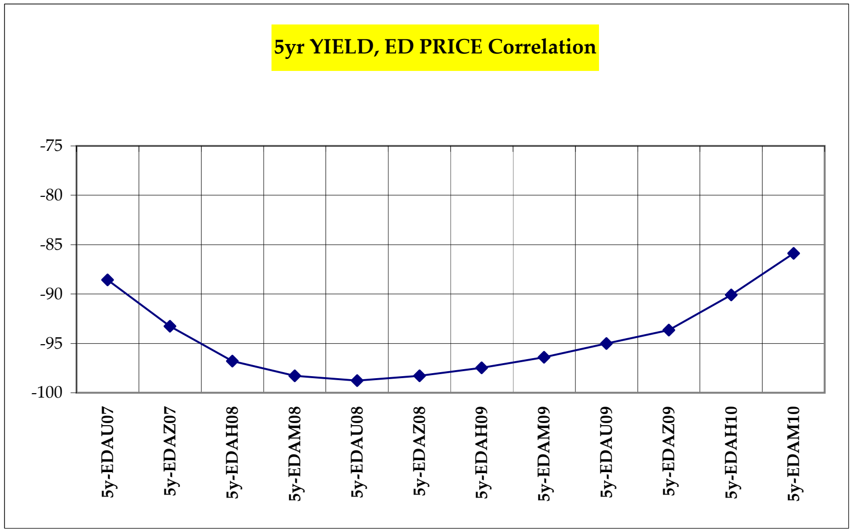
These are measuring YIELD correlations.



	GE Duration as Fraction of year	5Y Duration	Spread Duration	
EDAU07	0.224	4.26	4.04	5y-EDAU07
EDAZ07	0.473	4.26	3.79	5y-EDAZ07
EDAH08	0.723	4.26	3.54	5y-EDAH08
EDAM08	0.972	4.26	3.29	5y-EDAM08
EDAU08	1.221	4.26	3.04	5y-EDAU08
EDAZ08	1.471	4.26	2.79	5y-EDAZ08
EDAH09	1.720	4.26	2.54	5y-EDAH09
EDAM09	1.969	4.26	2.29	5y-EDAM09
EDAU09	2.219	4.26	2.04	5y-EDAU09
EDAZ09	2.468	4.26	1.79	5y-EDAZ09
EDAH10	2.717	4.26	1.54	5y-EDAH10
EDAM10	2.966	4.26	1.30	5y-EDAM10

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



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TERM TED: 10y vs Eurodollar Contracts

	10y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAU07	4.54	0.26	10y-EDAU07	-76.661
EDAZ07	4.48	0.20	10y-EDAZ07	-83.429
EDAH08	4.40	0.12	10y-EDAH08	-89.179
EDAM08	4.36	0.08	10y-EDAM08	-92.279
EDAU08	4.37	0.10	10y-EDAU08	-94.337
EDAZ08	4.41	0.14	10y-EDAZ08	-92.279
EDAH09	4.45	0.18	10y-EDAH09	-96.007
EDAM09	4.50	0.22	10y-EDAM09	-96.500
EDAU09	4.55	0.28	10y-EDAU09	-97.115
EDAZ09	4.60	0.33	10y-EDAZ09	-97.027
EDAH10	4.64	0.36	10y-EDAH10	-95.893
EDAM10	4.68	0.41	10y-EDAM10	-93.811

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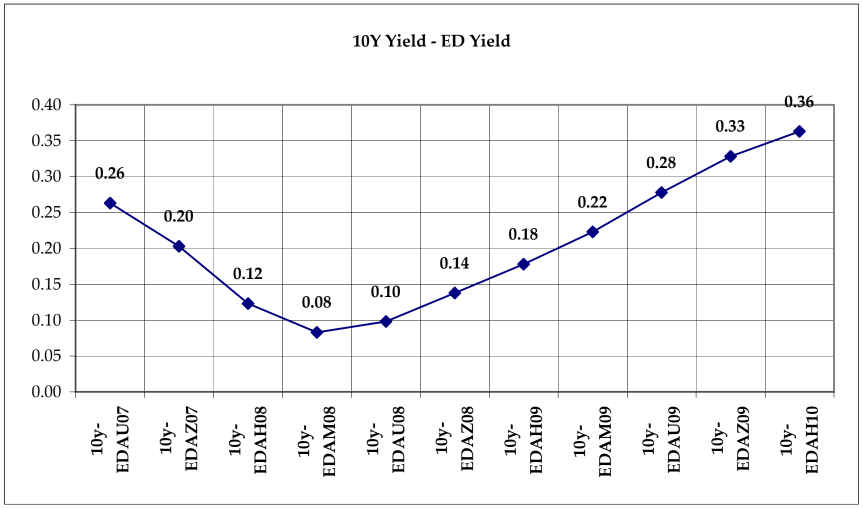
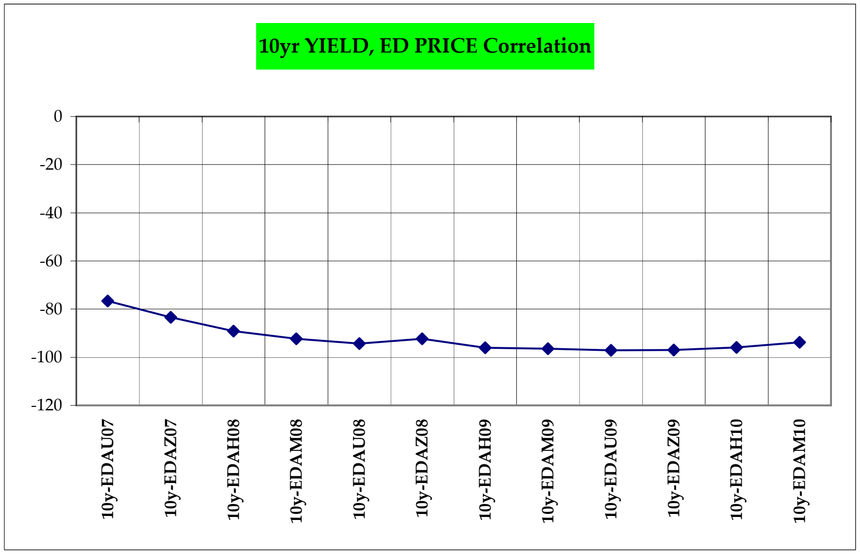


	GE Duration as Fraction of year	10Y Duration	Spread Duration	
EDAU07	0.224	7.80	7.57	10y-EDAU07
EDAZ07	0.473	7.80	7.32	10y-EDAZ07
EDAH08	0.723	7.80	7.07	10y-EDAH08
EDAM08	0.972	7.80	6.82	10y-EDAM08
EDAU08	1.221	7.80	6.57	10y-EDAU08
EDAZ08	1.471	7.80	6.32	10y-EDAZ08
EDAH09	1.720	7.80	6.08	10y-EDAH09
EDAM09	1.969	7.80	5.83	10y-EDAM09
EDAU09	2.219	7.80	5.58	10y-EDAU09
EDAZ09	2.468	7.80	5.33	10y-EDAZ09
EDAH10	2.717	7.80	5.08	10y-EDAH10
EDAM10	2.966	7.80	4.83	10y-EDAM10

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



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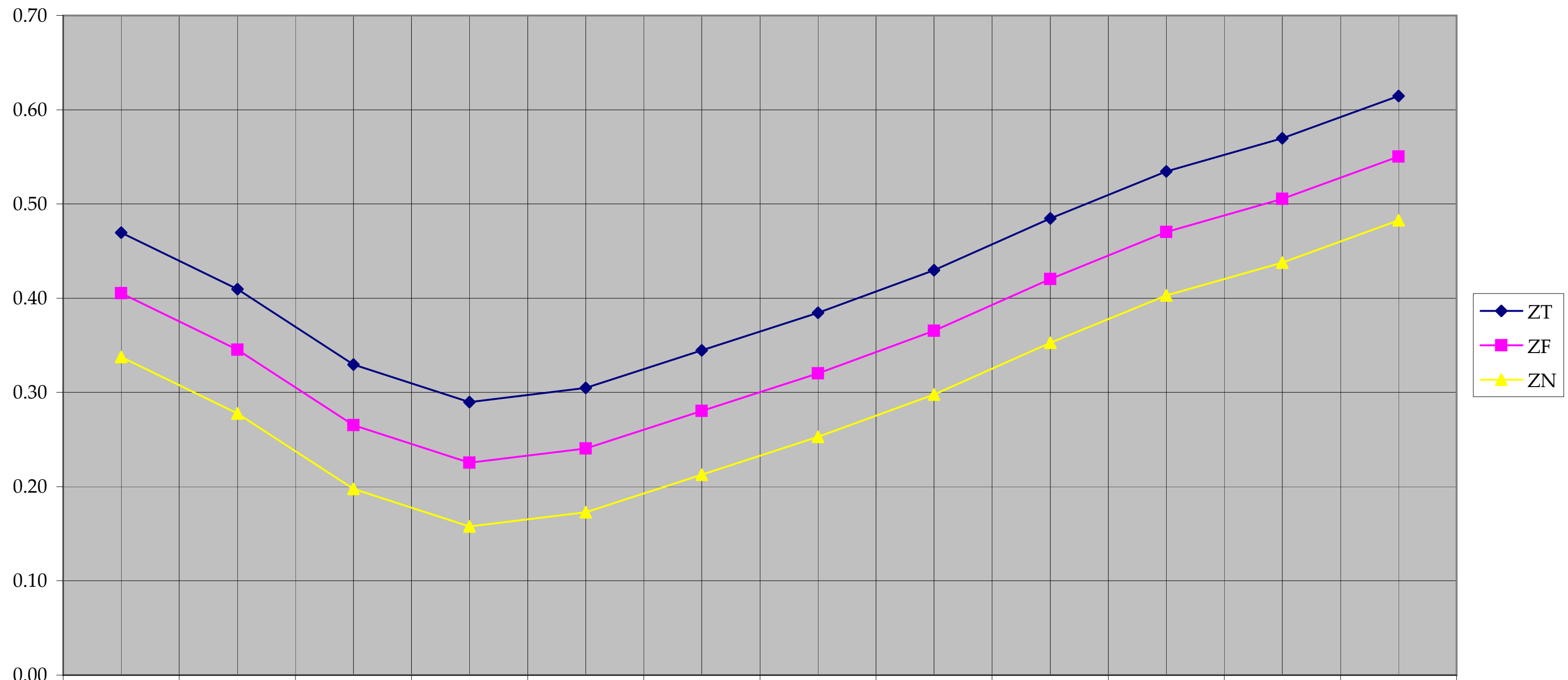
Dirty TED Curve

Chart values show the differences between ED contract and Treasury Futures conctract. 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.



	EDAU07	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10	EDAM10
ZT	0.47	0.41	0.33	0.29	0.30	0.34	0.38	0.43	0.48	0.53	0.57	0.61
ZF	0.41	0.35	0.27	0.23	0.24	0.28	0.32	0.37	0.42	0.47	0.51	0.55
ZN	0.34	0.28	0.20	0.16	0.17	0.21	0.25	0.30	0.35	0.40	0.44	0.48

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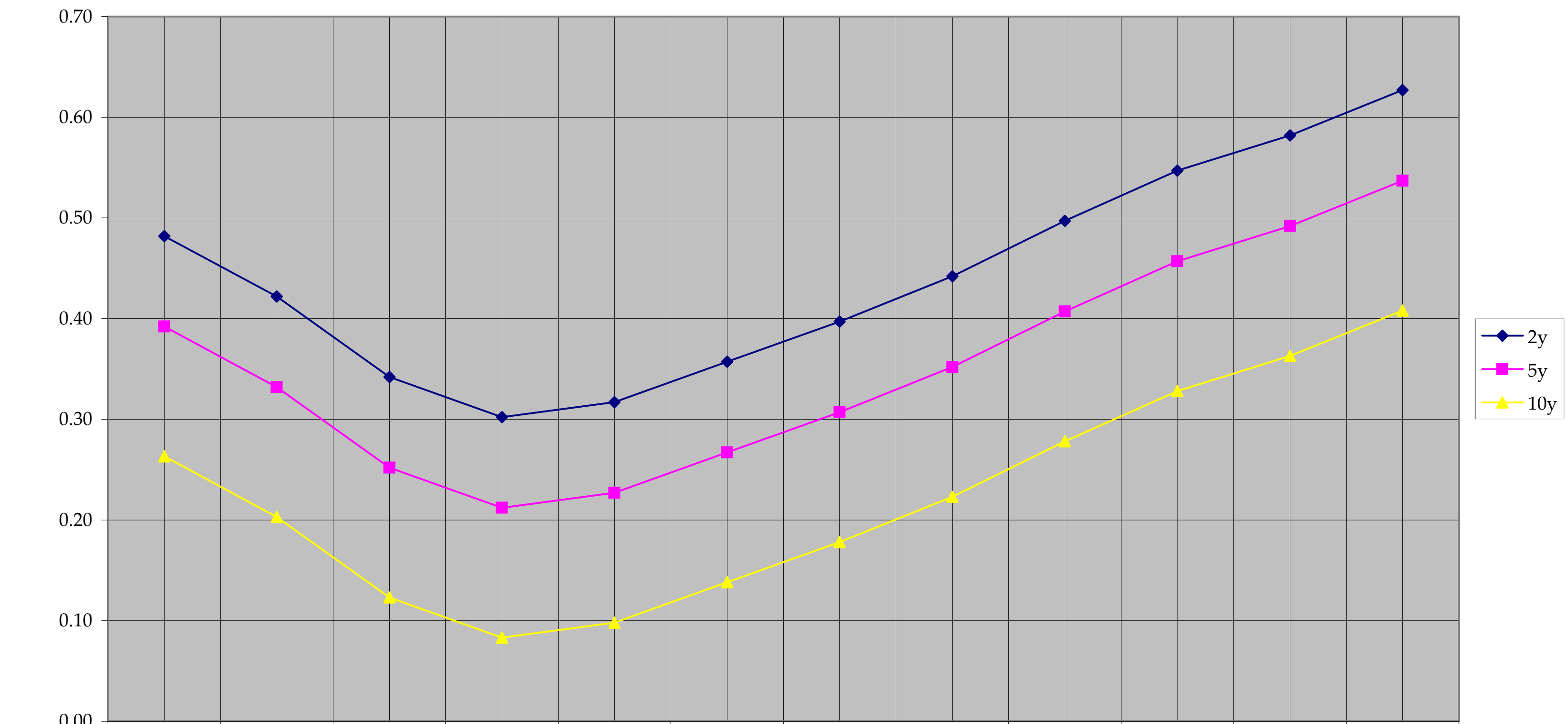
Chart values show the differences between ED contract and Treasury Cash conctract. Those values can be seen in the table at the bottom of the chart.
Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



	EDAU07	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10	EDAM10
2y	0.48	0.42	0.34	0.30	0.32	0.36	0.40	0.44	0.50	0.55	0.58	0.63
5y	0.39	0.33	0.25	0.21	0.23	0.27	0.31	0.35	0.41	0.46	0.49	0.54
10y	0.26	0.20	0.12	0.08	0.10	0.14	0.18	0.22	0.28	0.33	0.36	0.41

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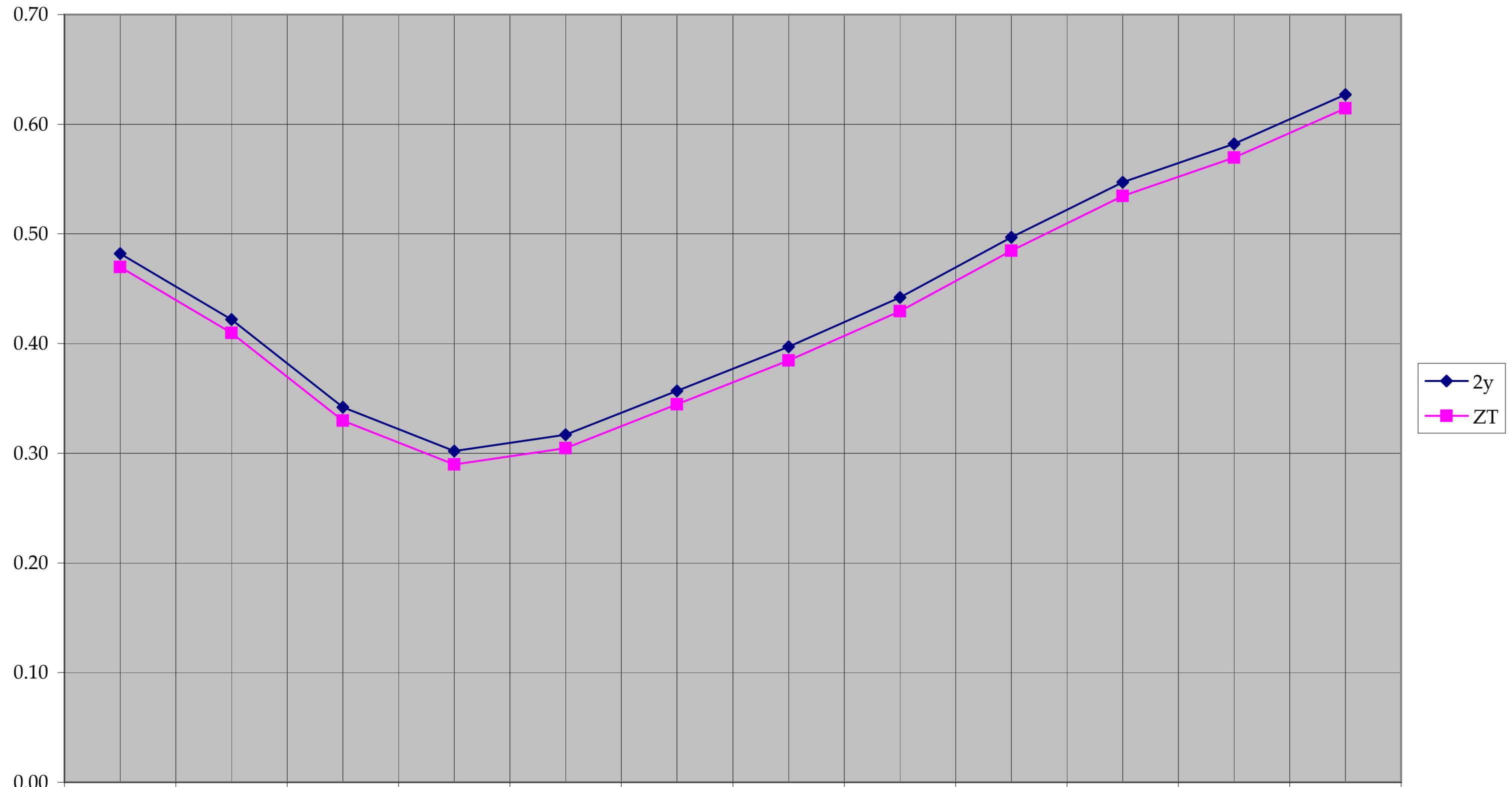
2y Basis TED Curve



	EDAU07	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10	EDAM10
2y	0.48	0.42	0.34	0.30	0.32	0.36	0.40	0.44	0.50	0.55	0.58	0.63
ZT	0.47	0.41	0.33	0.29	0.30	0.34	0.38	0.43	0.48	0.53	0.57	0.61

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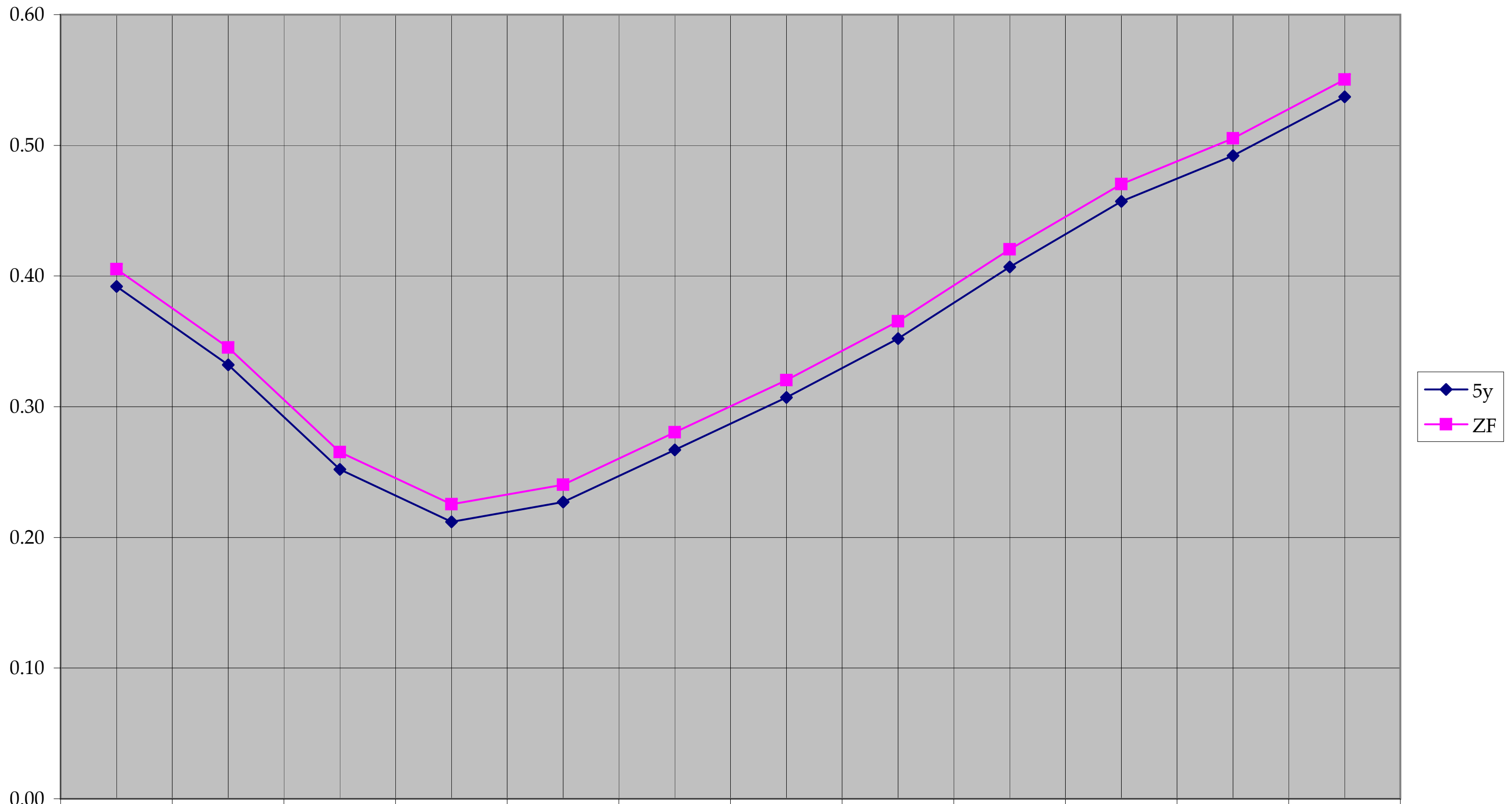
5y Basis TED Curve



	EDAU07	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10	EDAM10
5y	0.39	0.33	0.25	0.21	0.23	0.27	0.31	0.35	0.41	0.46	0.49	0.54
ZF	0.41	0.35	0.27	0.23	0.24	0.28	0.32	0.37	0.42	0.47	0.51	0.55

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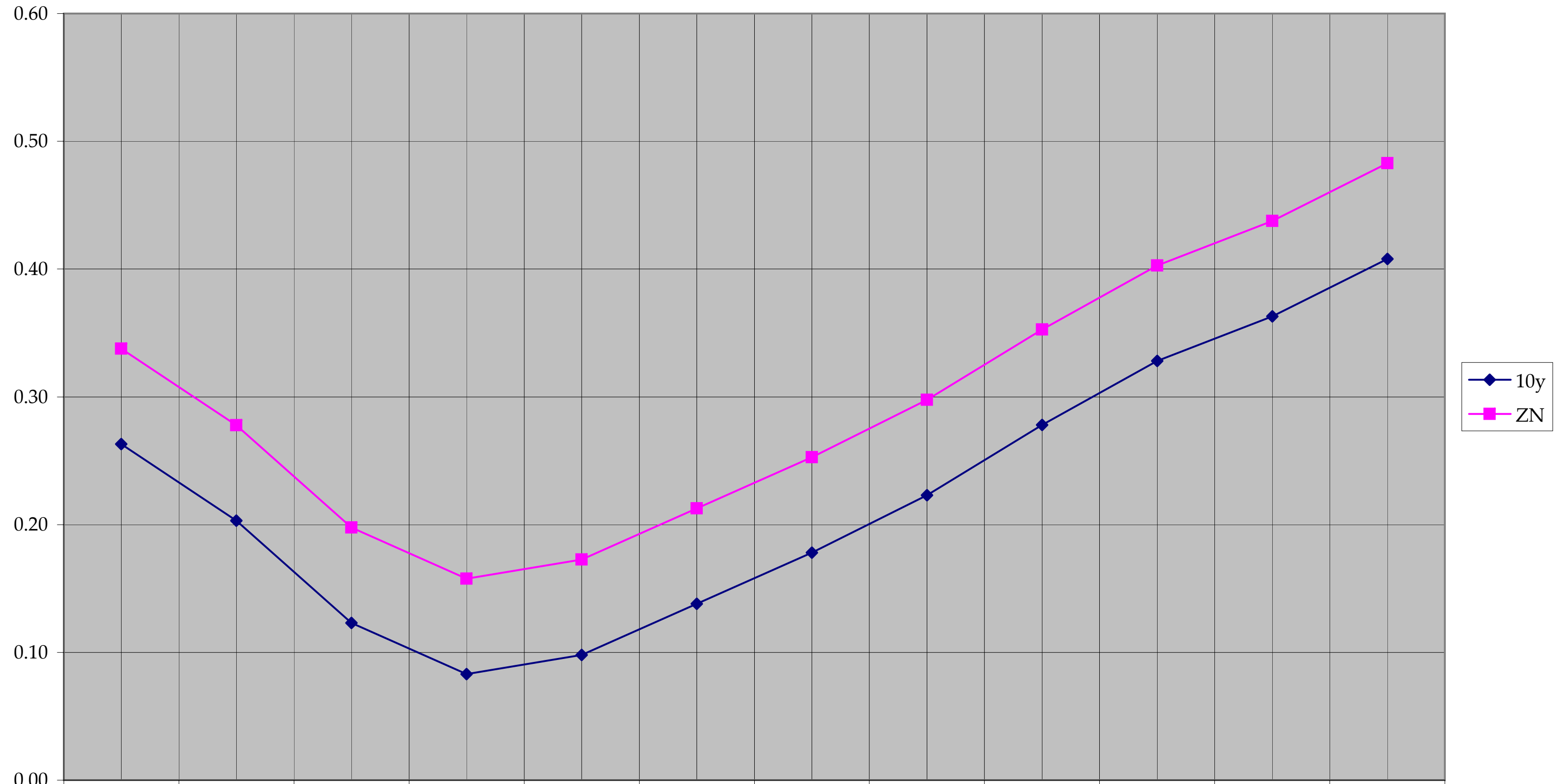
10y Basis TED Curve



	EDAU07	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10	EDAM10
10y	0.26	0.20	0.12	0.08	0.10	0.14	0.18	0.22	0.28	0.33	0.36	0.41
ZN	0.34	0.28	0.20	0.16	0.17	0.21	0.25	0.30	0.35	0.40	0.44	0.48

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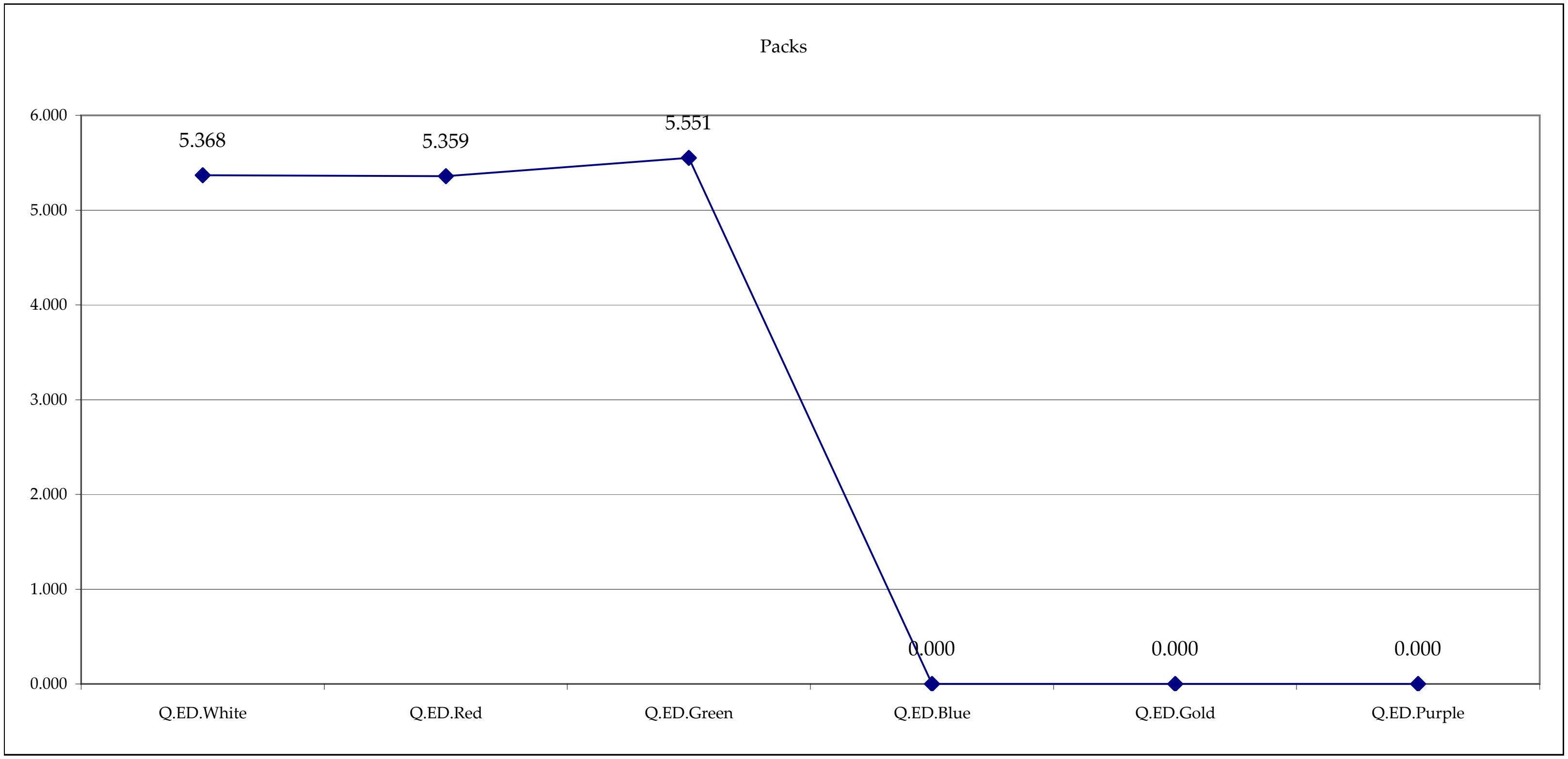
Packs

	last Yield	Net Last Yield	Last Price	Duration			
Q.ED.White	5.368	2.875	9477.500				
Q.ED.Red	5.359	5.875	9478.375				
Q.ED.Green	5.551	5.875	9459.875				
Q.ED.Blue		3.875	9442.625				
Q.ED.Gold		0.000	9426.250				
Q.ED.Purple		0.000	9426.250				



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