The Morning Email: TERM TEDS & Dirty TEDS

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Also new, correlation matrixes for all contracts.
Please note that correlations on CASH treasuries are based on YIELD to PRICE. This means that correlations should be negative.

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

Disclaimer: All information within this newsletter is meant for internal use at GH Trader's LLC, only. All information has been recorded to the best of my ability. This material is based upon information that I consider reliable, but I do not represent that it is accurate or complete.

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	F.I. Futures and Cash			
	Last Decimal	Last 32	Last Yield*	**MDuration
ZT	101.7656	101.245	4.980	1.88
ZF	104.1094	104.035	4.918	4.00
ZN	105.9063	105.290	4.943	5.83
Blank				
2y	99.813	99.2600	4.972	2.06
5y	99.225	99.0720	4.927	4.32
10y	96.500	96.1600	4.950	7.87

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

	Eurodollars (ED)					
	Last Price	Last Imp Yield	Days til Expr.	Fraction of year	Month	
EDAM07	94.640	5.360	13	0.035	JUN	White Pack
EDAU07	94.645	5.355	104	0.284	SEP	
EDAZ07	94.655	5.345	195	0.534	DEC	
EDAH08	94.705	5.295	286	0.783	MAR	
EDAM08	94.750	5.250	377	1.032	JUN	Red Pack
EDAU08	94.765	5.235	468	1.282	SEP	
EDAZ08	94.765	5.235	559	1.531	DEC	
EDAH09	94.770	5.230	650	1.780	MAR	
EDAM09	94.760	5.240	741	2.029	JUN	Green Pack
EDAU09	94.735	5.265	832	2.279	SEP	
EDAZ09	94.710	5.290	923	2.528	DEC	
EDAH10	94.720	5.280	1014	2.777	MAR	

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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

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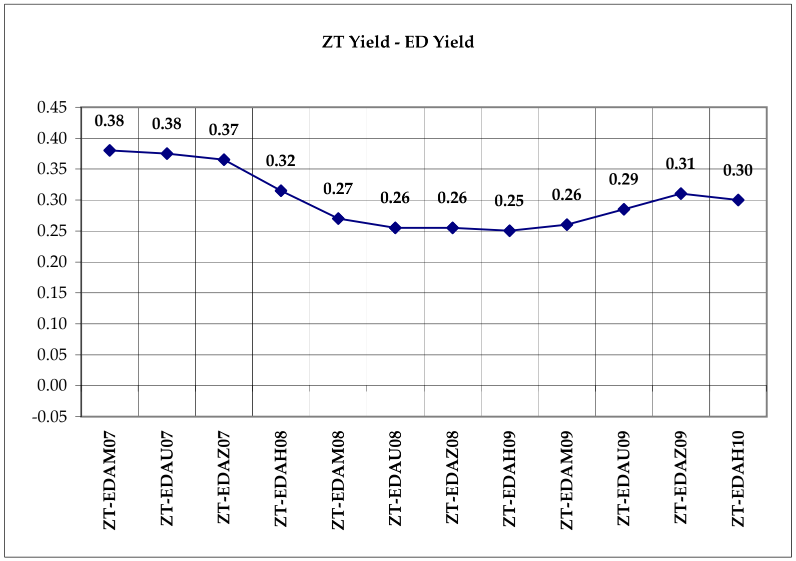
Dirty TED: ZT vs Eurodollar Contracts

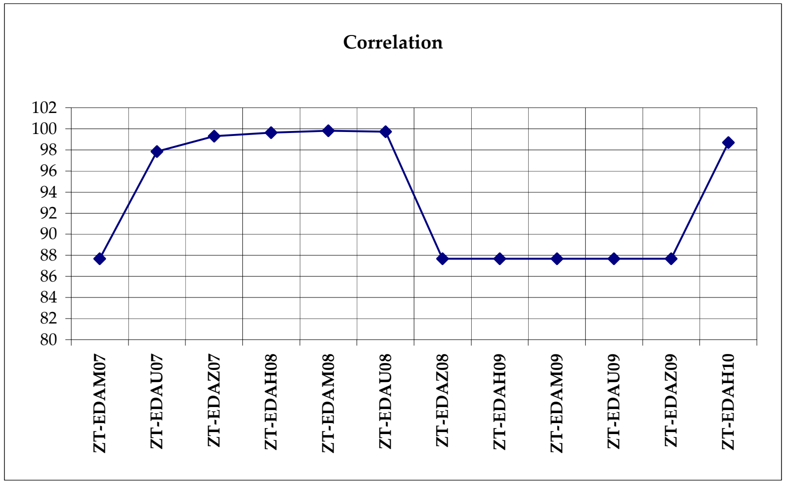
	ZT			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	7.126	0.38	ZT-EDAM07	87.663
EDAU07	7.121	0.38	ZT-EDAU07	97.830
EDAZ07	7.111	0.37	ZT-EDAZ07	99.290
EDAH08	7.061	0.32	ZT-EDAH08	99.626
EDAM08	7.016	0.27	ZT-EDAM08	99.812
EDAU08	7.001	0.26	ZT-EDAU08	99.734
EDAZ08	7.001	0.26	ZT-EDAZ08	87.663
EDAH09	6.996	0.25	ZT-EDAH09	87.663
EDAM09	7.006	0.26	ZT-EDAM09	87.663
EDAU09	7.031	0.29	ZT-EDAU09	87.663
EDAZ09	7.056	0.31	ZT-EDAZ09	87.663
EDAH10	7.046	0.30	ZT-EDAH10	98.704

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	
EDAM07	0.035	1.88	1.85	ZT-EDAM07
EDAU07	0.284	1.88	1.60	ZT-EDAU07
EDAZ07	0.534	1.88	1.35	ZT-EDAZ07
EDAH08	0.783	1.88	1.10	ZT-EDAH08
EDAM08	1.032	1.88	0.85	ZT-EDAM08
EDAU08	1.282	1.88	0.60	ZT-EDAU08
EDAZ08	1.531	1.88	0.35	ZT-EDAZ08
EDAH09	1.780	1.88	0.10	ZT-EDAH09
EDAM09	2.029	1.88	(0.15)	ZT-EDAM09
EDAU09	2.279	1.88	(0.40)	ZT-EDAU09
EDAZ09	2.528	1.88	(0.65)	ZT-EDAZ09
EDAH10	2.777	1.88	(0.90)	ZT-EDAH10

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



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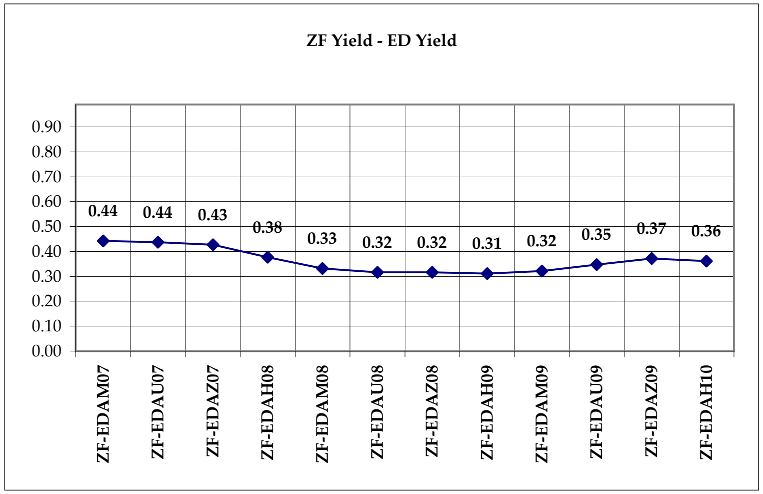
Dirty TED: ZF vs Eurodollar Contracts

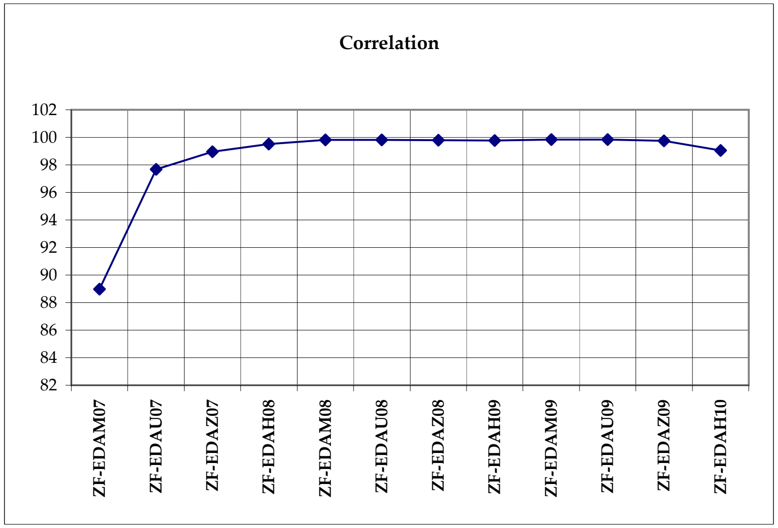
	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	9.47	0.44	ZF-EDAM07	88.977
EDAU07	9.46	0.44	ZF-EDAU07	97.667
EDAZ07	9.45	0.43	ZF-EDAZ07	98.955
EDAH08	9.40	0.38	ZF-EDAH08	99.504
EDAM08	9.36	0.33	ZF-EDAM08	99.814
EDAU08	9.34	0.32	ZF-EDAU08	99.803
EDAZ08	9.34	0.32	ZF-EDAZ08	99.802
EDAH09	9.34	0.31	ZF-EDAH09	99.778
EDAM09	9.35	0.32	ZF-EDAM09	99.837
EDAU09	9.37	0.35	ZF-EDAU09	99.834
EDAZ09	9.40	0.37	ZF-EDAZ09	99.734
EDAH10	9.39	0.36	ZF-EDAH10	99.057

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	
EDAM07	0.035	4.00	3.97	ZF-EDAM07
EDAU07	0.284	4.00	3.72	ZF-EDAU07
EDAZ07	0.534	4.00	3.47	ZF-EDAZ07
EDAH08	0.783	4.00	3.22	ZF-EDAH08
EDAM08	1.032	4.00	2.97	ZF-EDAM08
EDAU08	1.282	4.00	2.72	ZF-EDAU08
EDAZ08	1.531	4.00	2.47	ZF-EDAZ08
EDAH09	1.780	4.00	2.22	ZF-EDAH09
EDAM09	2.029	4.00	1.98	ZF-EDAM09
EDAU09	2.279	4.00	1.73	ZF-EDAU09
EDAZ09	2.528	4.00	1.48	ZF-EDAZ09
EDAH10	2.777	4.00	1.23	ZF-EDAH10

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



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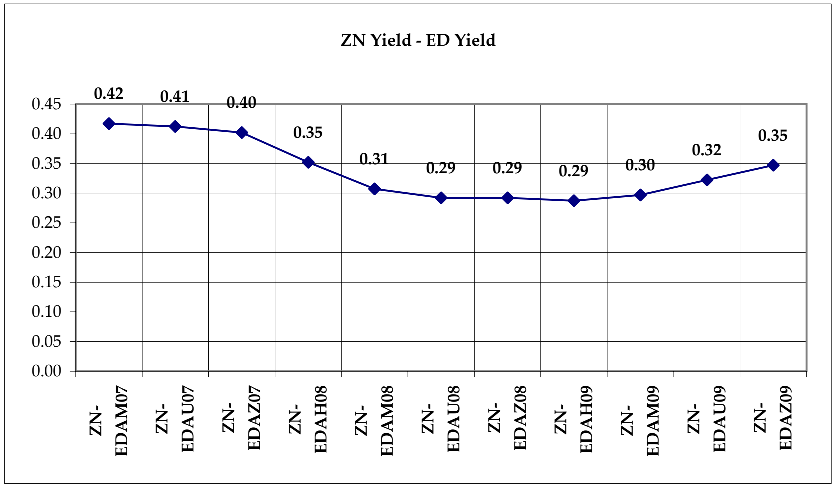
Dirty TED: ZN vs Eurodollar Contracts

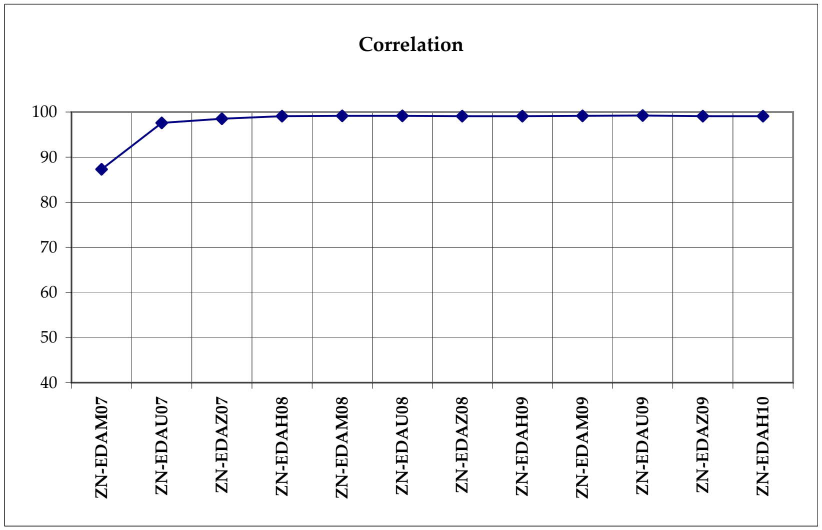
	ZN			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	11.27	0.42	ZN-EDAM07	87.30
EDAU07	11.26	0.41	ZN-EDAU07	97.56
EDAZ07	11.25	0.40	ZN-EDAZ07	98.53
EDAH08	11.20	0.35	ZN-EDAH08	99.07
EDAM08	11.16	0.31	ZN-EDAM08	99.12
EDAU08	11.14	0.29	ZN-EDAU08	99.12
EDAZ08	11.14	0.29	ZN-EDAZ08	99.10
EDAH09	11.14	0.29	ZN-EDAH09	99.06
EDAM09	11.15	0.30	ZN-EDAM09	99.14
EDAU09	11.17	0.32	ZN-EDAU09	99.22
EDAZ09	11.20	0.35	ZN-EDAZ09	99.10
EDAH10	11.19	0.34	ZN-EDAH10	99.06

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	
EDAM07	0.035	5.83	5.79	ZN-EDAM07
EDAU07	0.284	5.83	5.54	ZN-EDAU07
EDAZ07	0.534	5.83	5.29	ZN-EDAZ07
EDAH08	0.783	5.83	5.04	ZN-EDAH08
EDAM08	1.032	5.83	4.79	ZN-EDAM08
EDAU08	1.282	5.83	4.54	ZN-EDAU08
EDAZ08	1.531	5.83	4.30	ZN-EDAZ08
EDAH09	1.780	5.83	4.05	ZN-EDAH09
EDAM09	2.029	5.83	3.80	ZN-EDAM09
EDAU09	2.279	5.83	3.55	ZN-EDAU09
EDAZ09	2.528	5.83	3.30	ZN-EDAZ09
EDAH10	2.777	5.83	3.05	ZN-EDAH10

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)
EDAM07	5.17	0.39	2y-EDAM07	-86.617
EDAU07	5.17	0.38	2y-EDAU07	-97.970
EDAZ07	5.16	0.37	2y-EDAZ07	-99.036
EDAH08	5.11	0.32	2y-EDAH08	-99.463
EDAM08	5.06	0.28	2y-EDAM08	-99.708
EDAU08	5.05	0.26	2y-EDAU08	-99.678
EDAZ08	5.05	0.26	2y-EDAZ08	-86.617
EDAH09	5.04	0.26	2y-EDAH09	-86.617
EDAM09	5.05	0.27	2y-EDAM09	-86.617
EDAU09	5.08	0.29	2y-EDAU09	-86.617
EDAZ09	5.10	0.32	2y-EDAZ09	-86.617
EDAH10	5.09	0.31	2y-EDAH10	-98.208

Price = Outright Decimal Price - Euro Contract Price
Yield = ABS(Proxy Yield - Implied Euro Contract yield)
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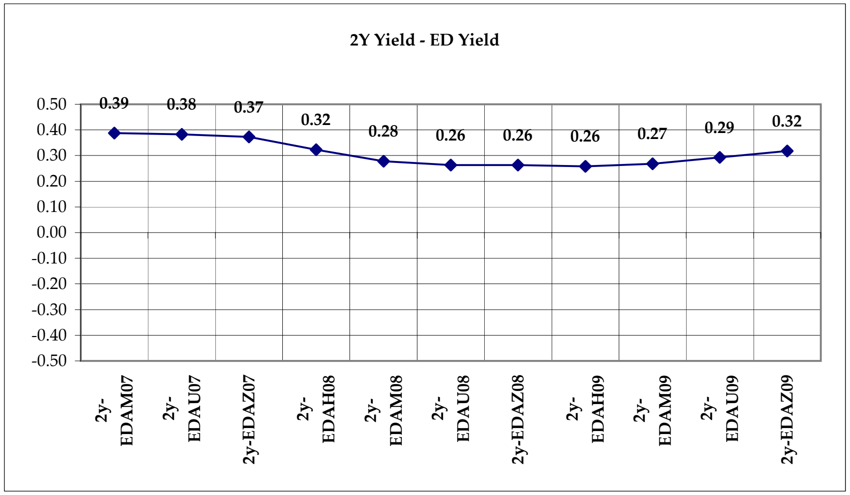
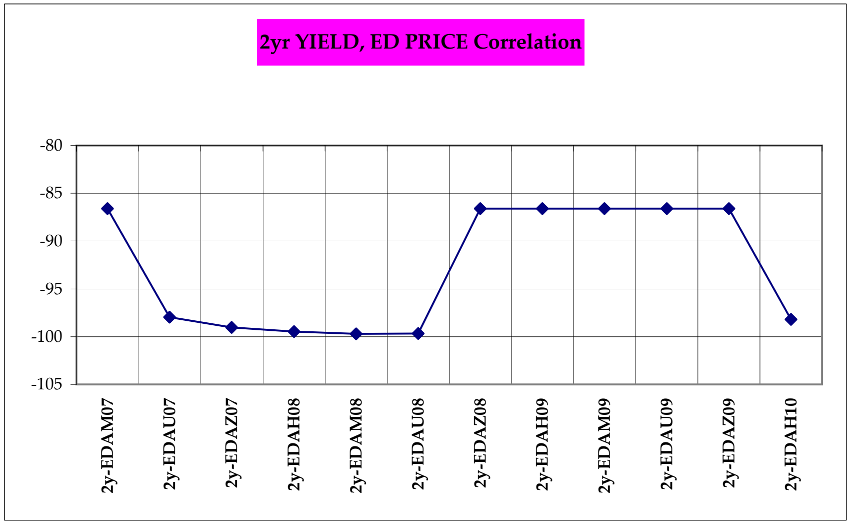
These are YIELD correlations.



	GE Duration as Fraction of year	2Y Duration	Spread Duration	
EDAM07	0.035	2.06	2.02	2y-EDAM07
EDAU07	0.284	2.06	1.77	2y-EDAU07
EDAZ07	0.534	2.06	1.52	2y-EDAZ07
EDAH08	0.783	2.06	1.27	2y-EDAH08
EDAM08	1.032	2.06	1.02	2y-EDAM08
EDAU08	1.282	2.06	0.77	2y-EDAU08
EDAZ08	1.531	2.06	0.53	2y-EDAZ08
EDAH09	1.780	2.06	0.28	2y-EDAH09
EDAM09	2.029	2.06	0.03	2y-EDAM09
EDAU09	2.279	2.06	(0.22)	2y-EDAU09
EDAZ09	2.528	2.06	(0.47)	2y-EDAZ09
EDAH10	2.777	2.06	(0.72)	2y-EDAH10

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



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TERM TED: 5y vs Eurodollar Contracts

	5y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	4.59	0.43	5y-EDAM07	-87.560
EDAU07	4.58	0.43	5y-EDAU07	-97.771
EDAZ07	4.57	0.42	5y-EDAZ07	-98.747
EDAH08	4.52	0.37	5y-EDAH08	-99.276
EDAM08	4.48	0.32	5y-EDAM08	-99.723
EDAU08	4.46	0.31	5y-EDAU08	-99.778
EDAZ08	4.46	0.31	5y-EDAZ08	-87.560
EDAH09	4.46	0.30	5y-EDAH09	-87.560
EDAM09	4.47	0.31	5y-EDAM09	-87.560
EDAU09	4.49	0.34	5y-EDAU09	-87.560
EDAZ09	4.52	0.36	5y-EDAZ09	-87.560
EDAH10	4.51	0.35	5y-EDAH10	-98.383

Price = Outright Decimal Price - Euro Contract Price
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***Correlation = ED Correlation to Treasury Future over 10 days**
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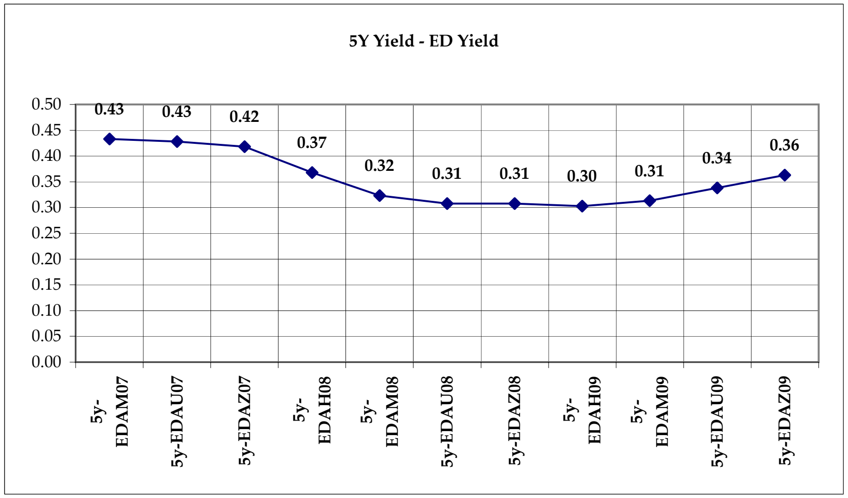
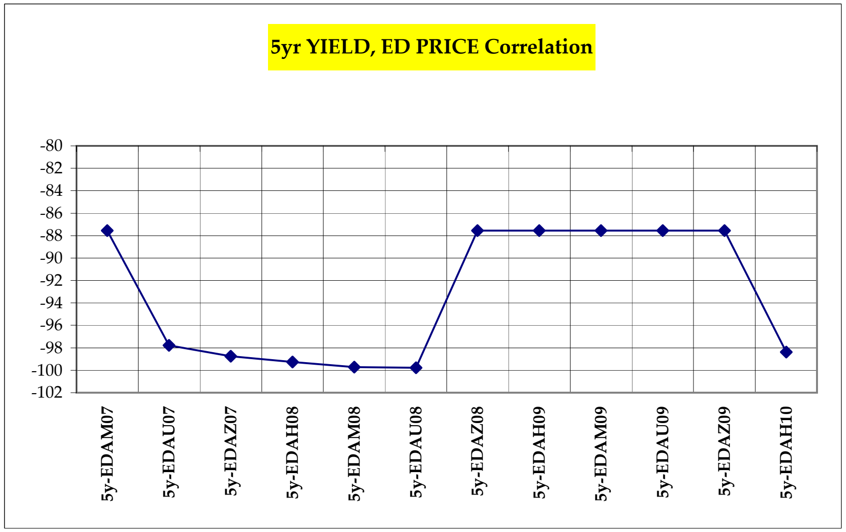


	GE Duration as Fraction of year	5Y Duration	Spread Duration	
EDAM07	0.035	4.32	4.29	5y-EDAM07
EDAU07	0.284	4.32	4.04	5y-EDAU07
EDAZ07	0.534	4.32	3.79	5y-EDAZ07
EDAH08	0.783	4.32	3.54	5y-EDAH08
EDAM08	1.032	4.32	3.29	5y-EDAM08
EDAU08	1.282	4.32	3.04	5y-EDAU08
EDAZ08	1.531	4.32	2.79	5y-EDAZ08
EDAH09	1.780	4.32	2.54	5y-EDAH09
EDAM09	2.029	4.32	2.29	5y-EDAM09
EDAU09	2.279	4.32	2.04	5y-EDAU09
EDAZ09	2.528	4.32	1.79	5y-EDAZ09
EDAH10	2.777	4.32	1.54	5y-EDAH10

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



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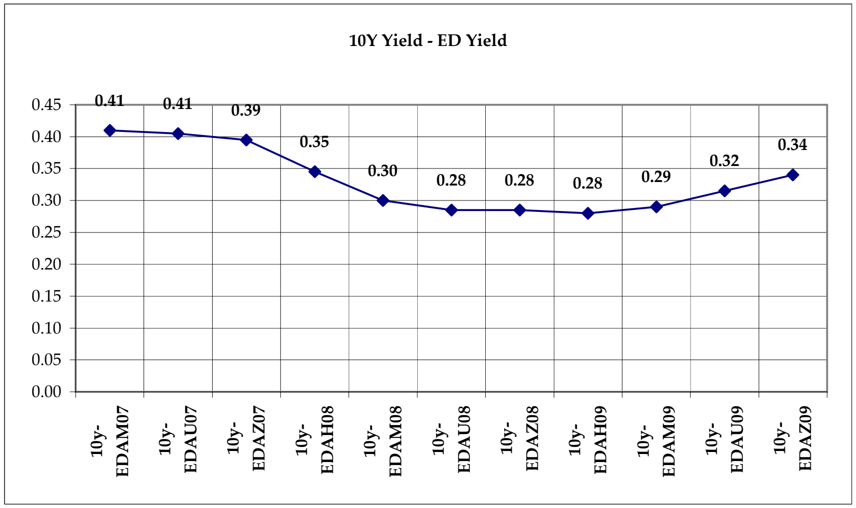
TERM TED: 10y vs Eurodollar Contracts

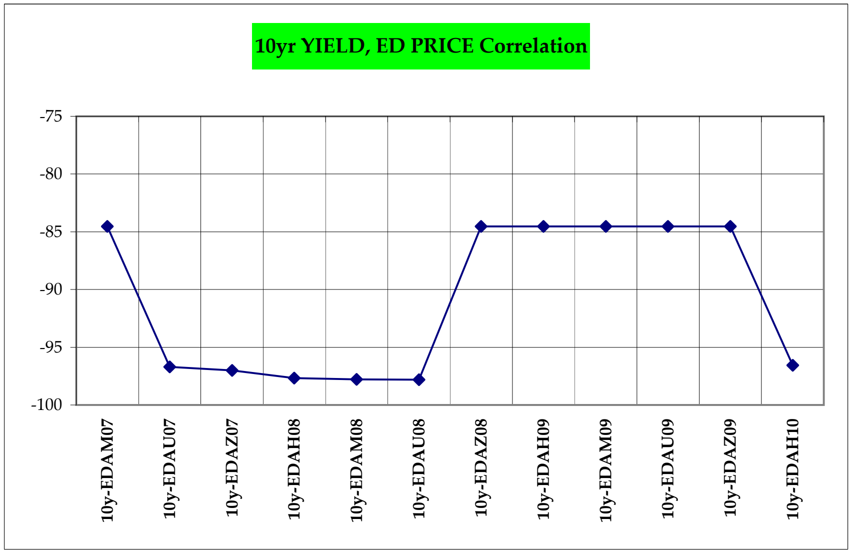
	10y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	4.59	0.41	10y-EDAM07	-84.536
EDAU07	4.58	0.41	10y-EDAU07	-96.695
EDAZ07	4.57	0.39	10y-EDAZ07	-97.005
EDAH08	4.52	0.35	10y-EDAH08	-97.668
EDAM08	4.48	0.30	10y-EDAM08	-97.770
EDAU08	4.46	0.28	10y-EDAU08	-97.811
EDAZ08	4.46	0.28	10y-EDAZ08	-84.536
EDAH09	4.46	0.28	10y-EDAH09	-84.536
EDAM09	4.47	0.29	10y-EDAM09	-84.536
EDAU09	4.49	0.32	10y-EDAU09	-84.536
EDAZ09	4.52	0.34	10y-EDAZ09	-84.536
EDAH10	4.51	0.33	10y-EDAH10	-96.563

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



	GE Duration as Fraction of year	10Y Duration	Spread Duration	
EDAM07	0.035	7.87	7.83	10y-EDAM07
EDAU07	0.284	7.87	7.58	10y-EDAU07
EDAZ07	0.534	7.87	7.33	10y-EDAZ07
EDAH08	0.783	7.87	7.08	10y-EDAH08
EDAM08	1.032	7.87	6.83	10y-EDAM08
EDAU08	1.282	7.87	6.59	10y-EDAU08
EDAZ08	1.531	7.87	6.34	10y-EDAZ08
EDAH09	1.780	7.87	6.09	10y-EDAH09
EDAM09	2.029	7.87	5.84	10y-EDAM09
EDAU09	2.279	7.87	5.59	10y-EDAU09
EDAZ09	2.528	7.87	5.34	10y-EDAZ09
EDAH10	2.777	7.87	5.09	10y-EDAH10

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



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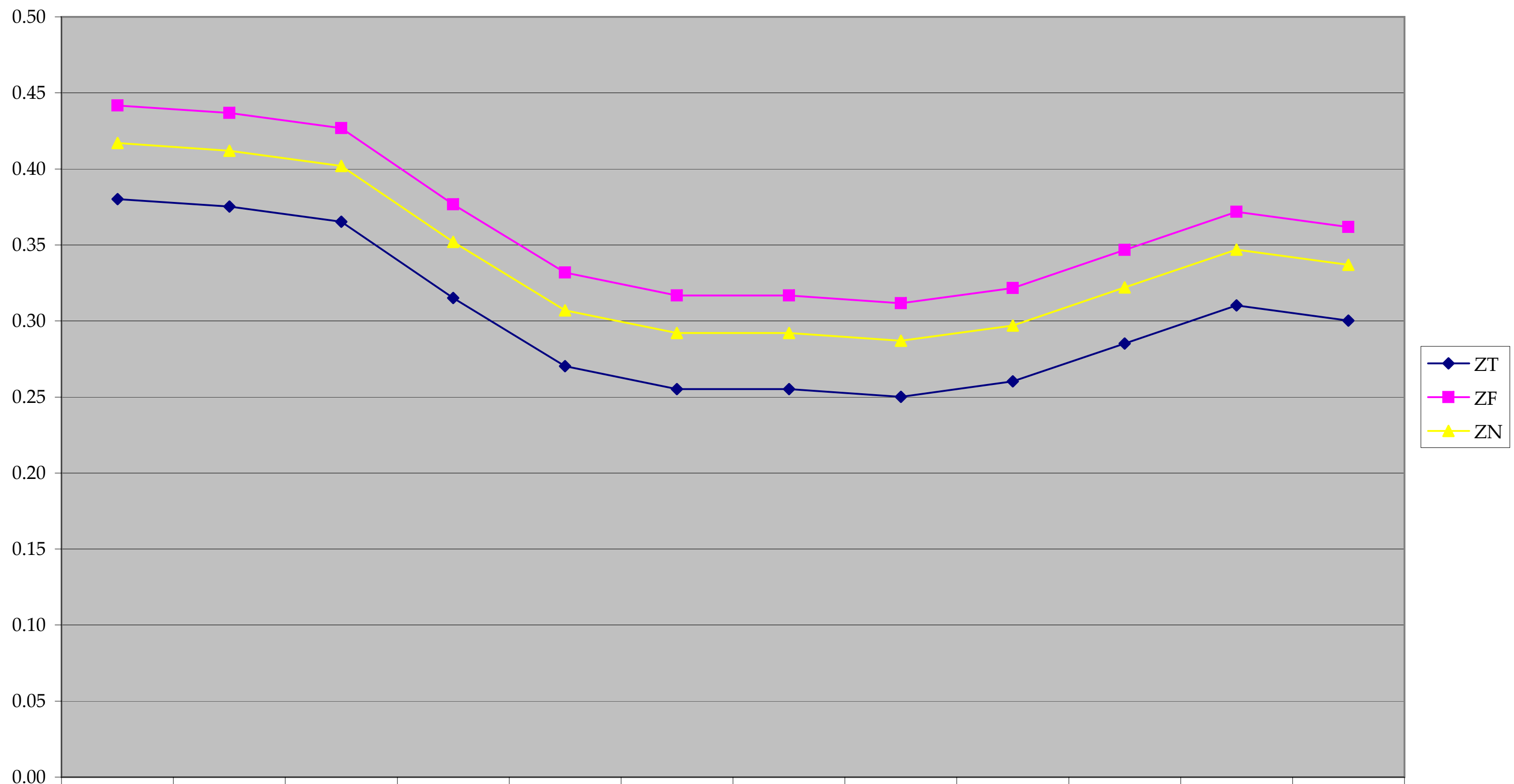
Dirty TED Curve

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.

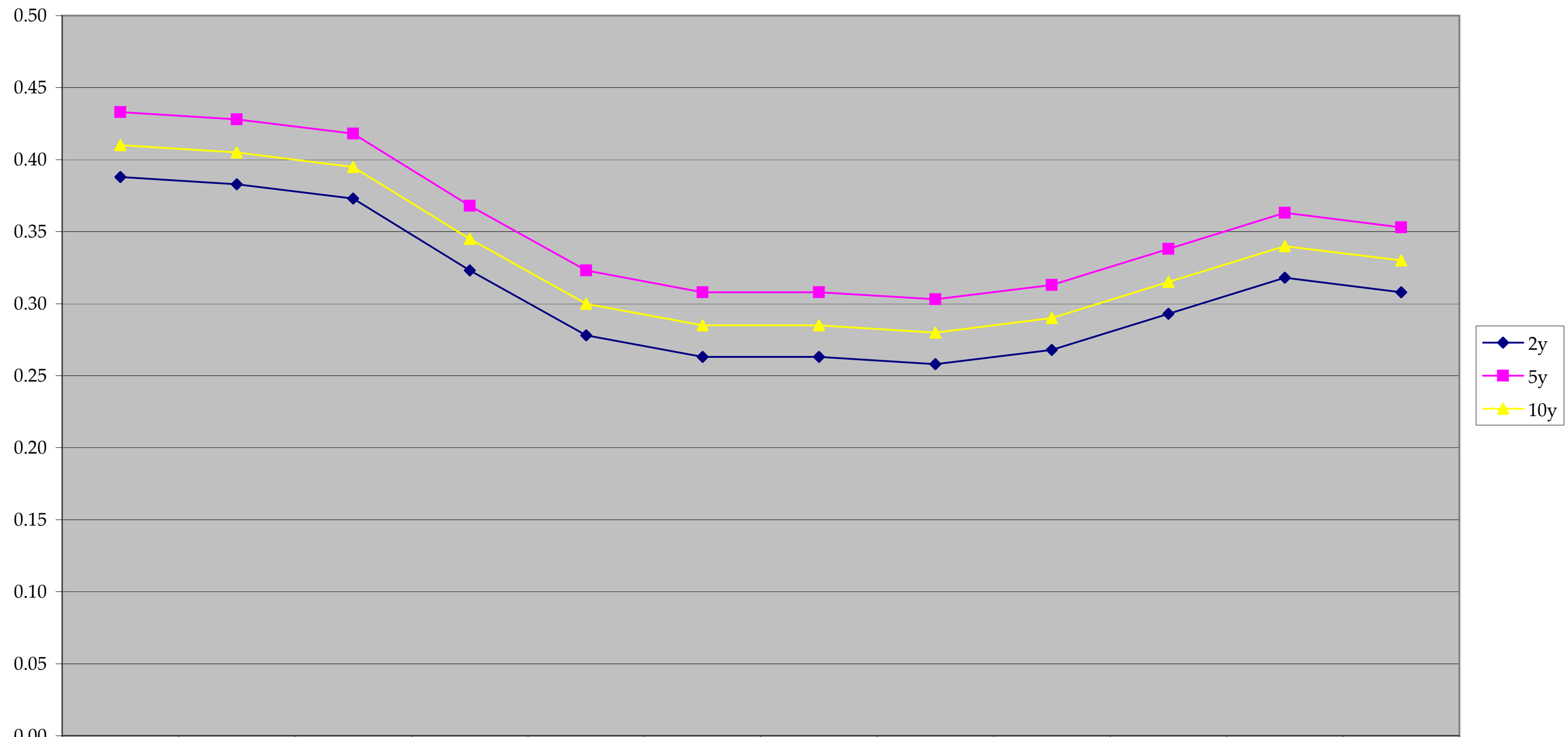
Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



	EDAM07	EDAU07	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10
ZT	0.38	0.38	0.37	0.32	0.27	0.26	0.26	0.25	0.26	0.29	0.31	0.30
ZF	0.44	0.44	0.43	0.38	0.33	0.32	0.32	0.31	0.32	0.35	0.37	0.36
ZN	0.42	0.41	0.40	0.35	0.31	0.29	0.29	0.29	0.30	0.32	0.35	0.34

TED Curve

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.



	EDAM07	EDAU07	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10
2y	0.39	0.38	0.37	0.32	0.28	0.26	0.26	0.26	0.27	0.29	0.32	0.31
5y	0.43	0.43	0.42	0.37	0.32	0.31	0.31	0.30	0.31	0.34	0.36	0.35
10y	0.41	0.41	0.39	0.35	0.30	0.28	0.28	0.28	0.29	0.32	0.34	0.33

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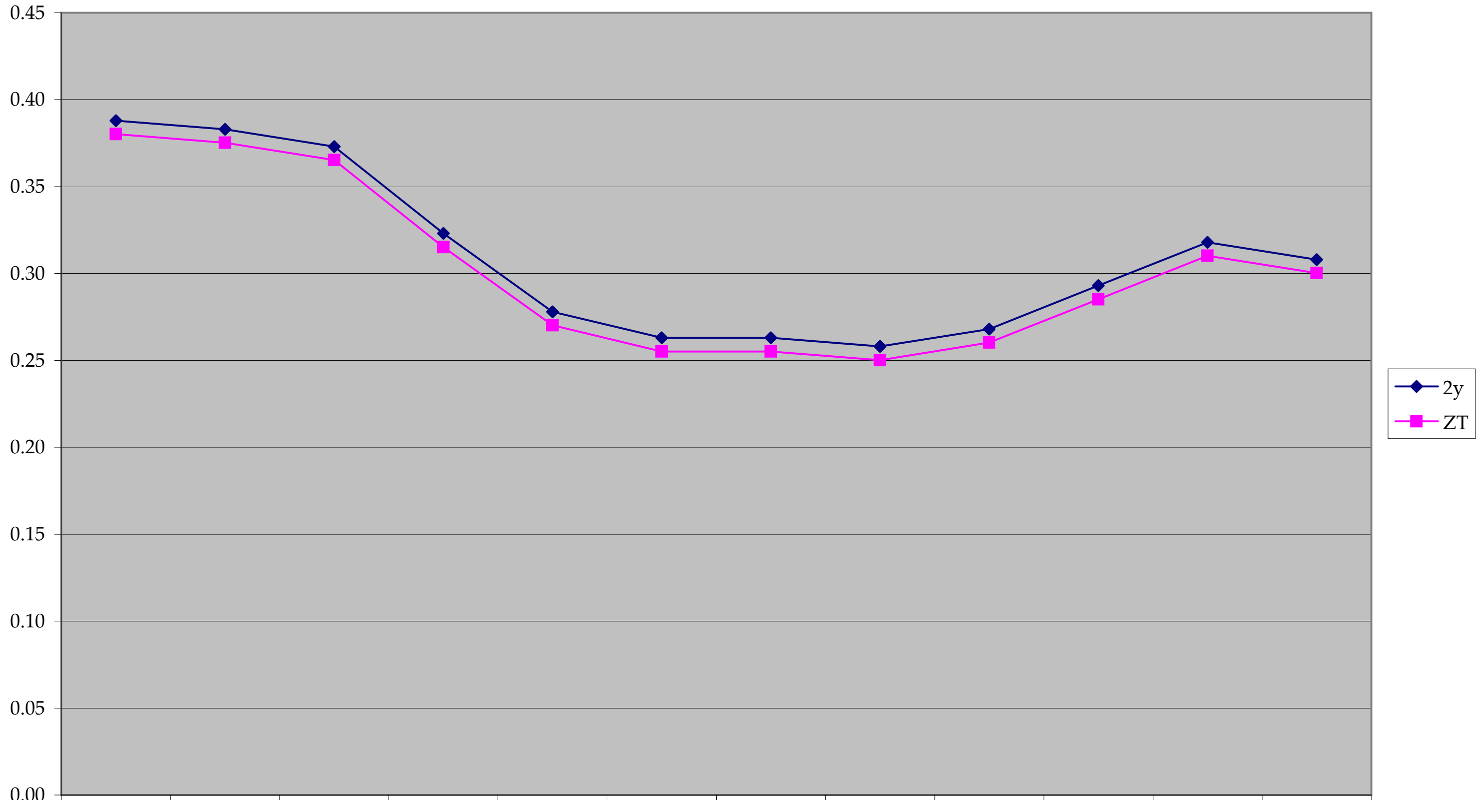
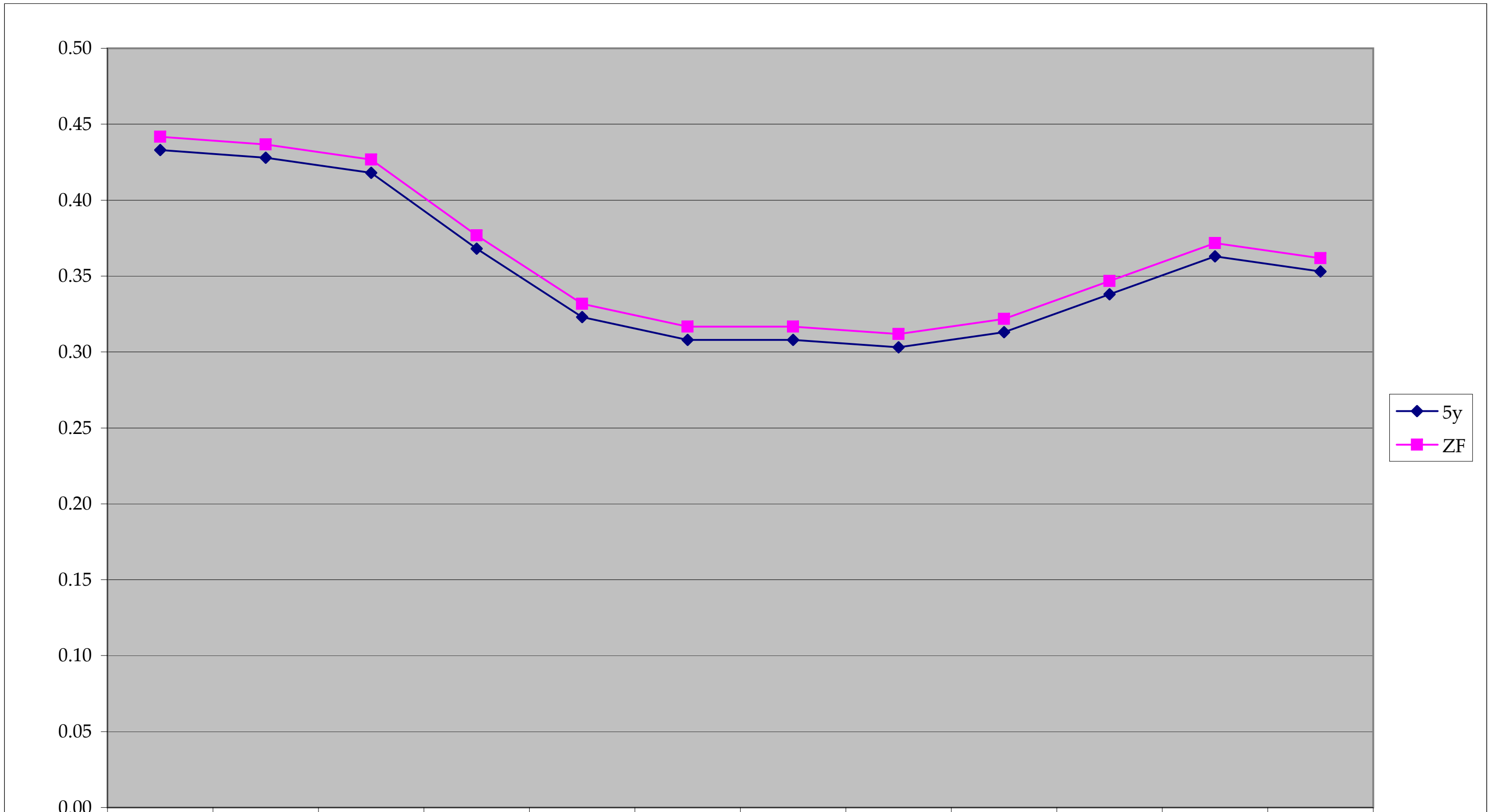
2y Basis TED Curve



	EDAM07	EDAU07	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10
2y	0.39	0.38	0.37	0.32	0.28	0.26	0.26	0.26	0.27	0.29	0.32	0.31
ZT	0.38	0.38	0.37	0.32	0.27	0.26	0.26	0.25	0.26	0.29	0.31	0.30

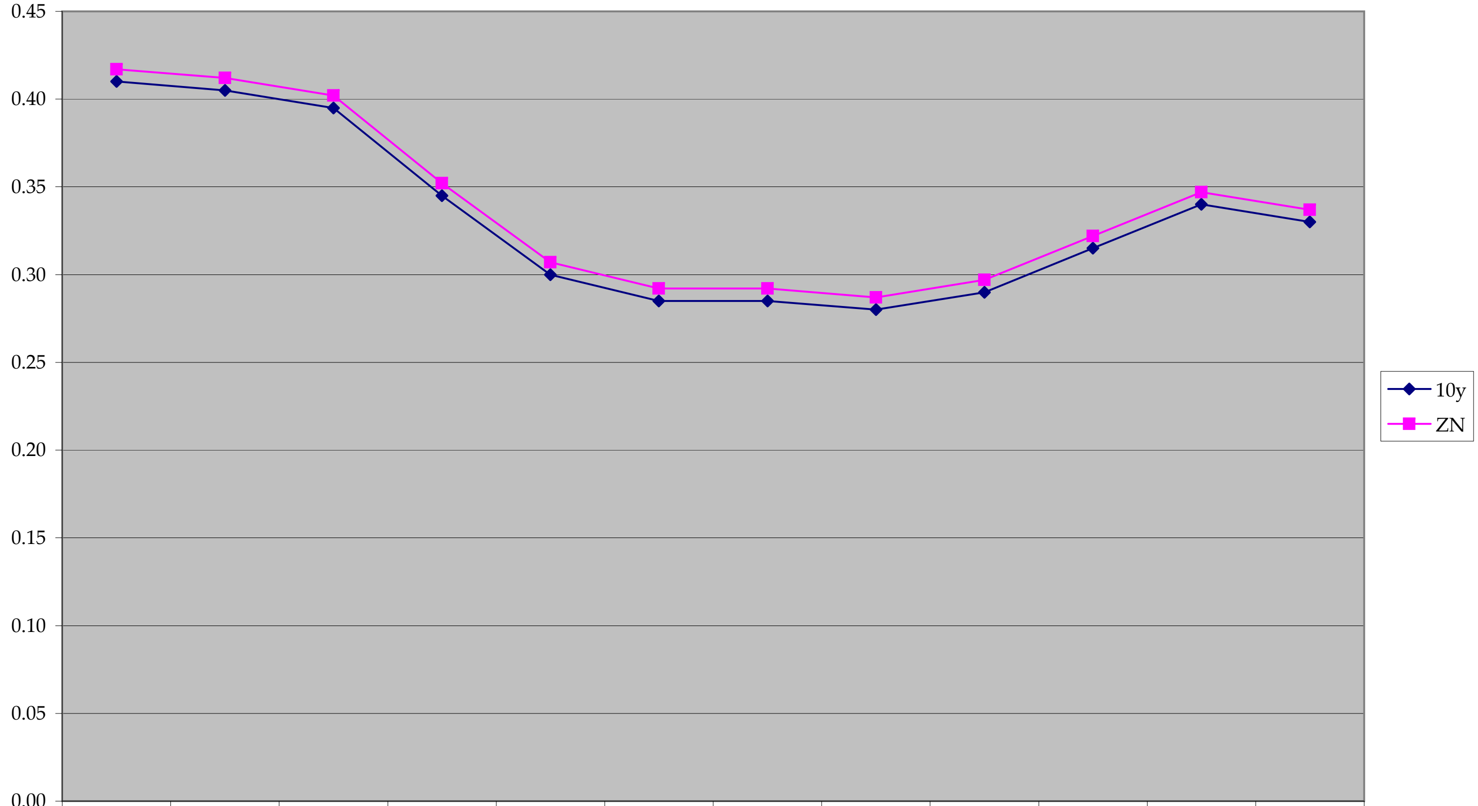
5y Basis TED Curve



	EDAM07	EDAU07	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10
5y	0.43	0.43	0.42	0.37	0.32	0.31	0.31	0.30	0.31	0.34	0.36	0.35
ZF	0.44	0.44	0.43	0.38	0.33	0.32	0.32	0.31	0.32	0.35	0.37	0.36

0

10y Basis TED Curve



	EDAM07	EDAU07	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10
10y	0.41	0.41	0.39	0.35	0.30	0.28	0.28	0.28	0.29	0.32	0.34	0.33
ZN	0.42	0.41	0.40	0.35	0.31	0.29	0.29	0.29	0.30	0.32	0.35	0.34

0