The Morning Email: TERM TEDS & Dirty TEDS

Table of Contents

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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F.I. Futures and Cash	Last Decimal	Last 32	Last Yield*	**MDuration
ZT	101.6875	101.220	5.011	1.86
ZF	103.5938	103.190	5.031	3.99
ZN	104.9375	104.300	5.118	5.80
Blank				
2y	99.766	99.2450	4.997	2.04
5y	98.709	98.2270	5.043	4.30
10y	95.203	95.0650	5.122	7.83

*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	94.638	5.363	7	0.019	JUN	White Pack
EDAU07	94.645	5.355	98	0.268	SEP	
EDAZ07	94.640	5.360	189	0.517	DEC	
EDAH08	94.675	5.325	280	0.766	MAR	
EDAM08	94.695	5.305	371	1.016	JUN	Red Pack
EDAU08	94.690	5.310	462	1.265	SEP	
EDAZ08	94.665	5.335	553	1.514	DEC	
EDAH09	94.640	5.360	644	1.764	MAR	
EDAM09	94.595	5.405	735	2.013	JUN	Green Pack
EDAU09	94.550	5.450	826	2.262	SEP	
EDAZ09	94.505	5.495	917	2.512	DEC	
EDAH10	94.485	5.515	1008	2.761	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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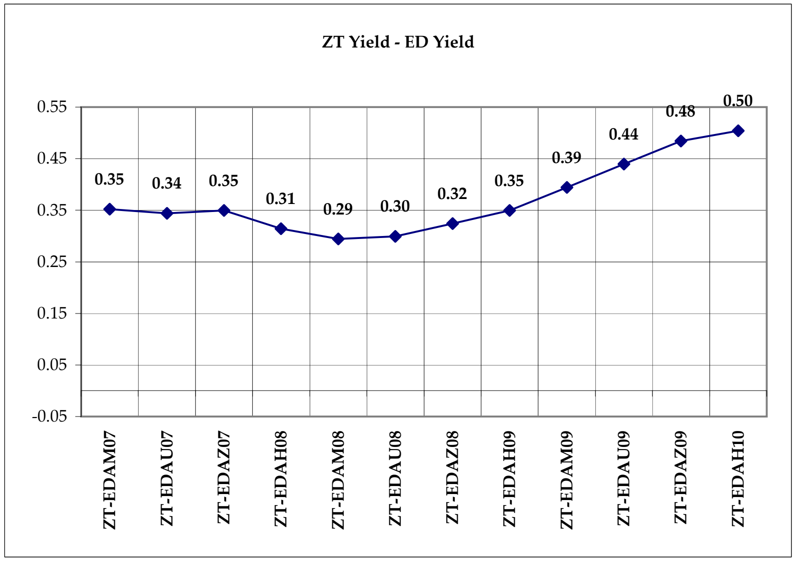
Eurodollar Color Codes for Individual Year Strips:

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

..

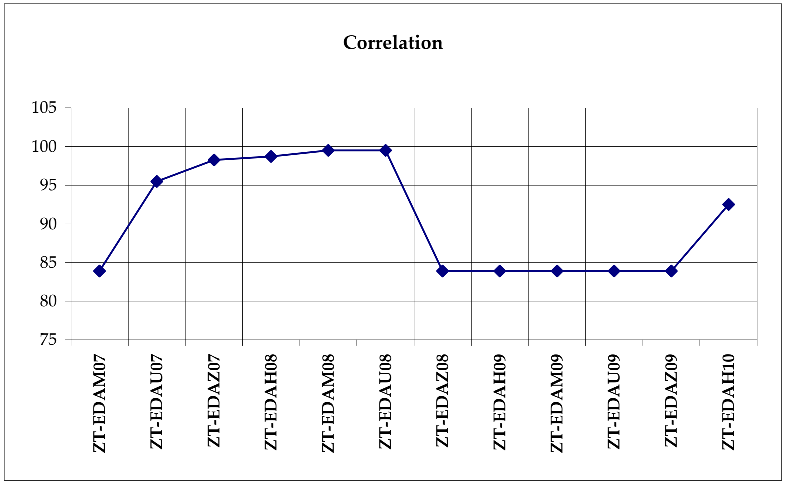
	ZT			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	7.050	0.35	ZT-EDAM07	83.897
EDAU07	7.043	0.34	ZT-EDAU07	95.494
EDAZ07	7.048	0.35	ZT-EDAZ07	98.243
EDAH08	7.013	0.31	ZT-EDAH08	98.694
EDAM08	6.992	0.29	ZT-EDAM08	99.487
EDAU08	6.998	0.30	ZT-EDAU08	99.498
EDAZ08	7.022	0.32	ZT-EDAZ08	83.897
EDAH09	7.048	0.35	ZT-EDAH09	83.897
EDAM09	7.093	0.39	ZT-EDAM09	83.897
EDAU09	7.138	0.44	ZT-EDAU09	83.897
EDAZ09	7.183	0.48	ZT-EDAZ09	83.897
EDAH10	7.203	0.50	ZT-EDAH10	92.517

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	0.019	1.86	1.85	ZT-EDAM07
EDAU07	0.268	1.86	1.60	ZT-EDAU07
EDAZ07	0.517	1.86	1.35	ZT-EDAZ07
EDAH08	0.766	1.86	1.10	ZT-EDAH08
EDAM08	1.016	1.86	0.85	ZT-EDAM08
EDAU08	1.265	1.86	0.60	ZT-EDAU08
EDAZ08	1.514	1.86	0.35	ZT-EDAZ08
EDAH09	1.764	1.86	0.10	ZT-EDAH09
EDAM09	2.013	1.86	(0.15)	ZT-EDAM09
EDAU09	2.262	1.86	(0.40)	ZT-EDAU09
EDAZ09	2.512	1.86	(0.65)	ZT-EDAZ09
EDAH10	2.761	1.86	(0.90)	ZT-EDAH10

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



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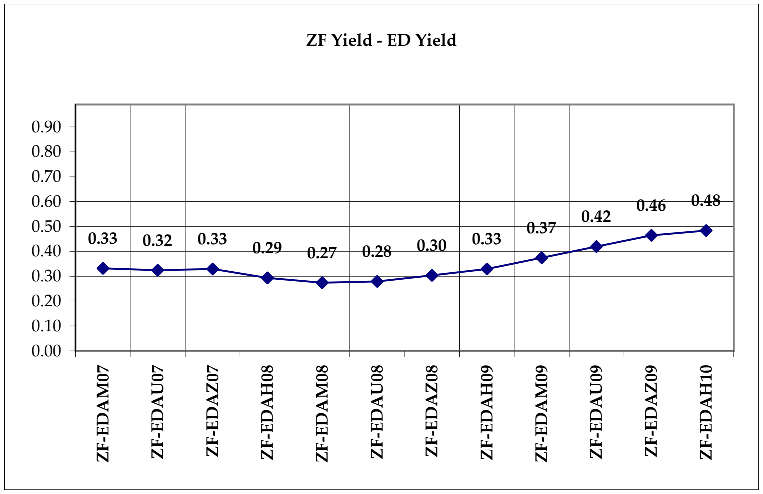
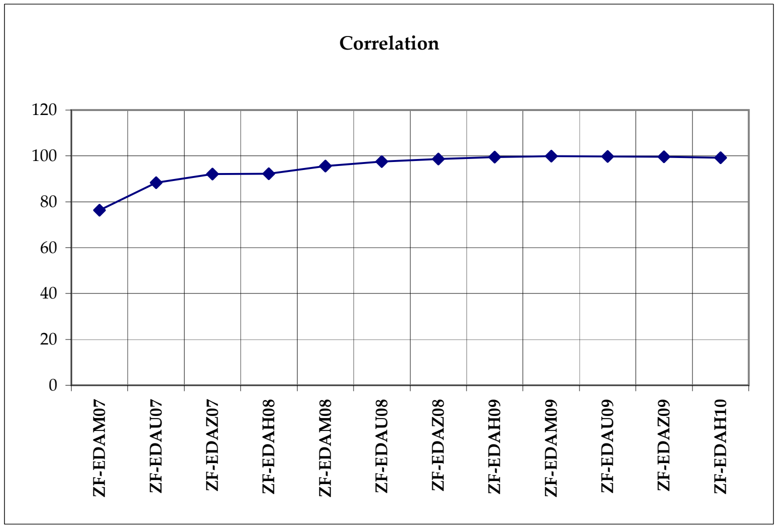
	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	8.96	0.33	ZF-EDAM07	76.270
EDAU07	8.95	0.32	ZF-EDAU07	88.295
EDAZ07	8.95	0.33	ZF-EDAZ07	92.051
EDAH08	8.92	0.29	ZF-EDAH08	92.261
EDAM08	8.90	0.27	ZF-EDAM08	95.527
EDAU08	8.90	0.28	ZF-EDAU08	97.599
EDAZ08	8.93	0.30	ZF-EDAZ08	98.621
EDAH09	8.95	0.33	ZF-EDAH09	99.447
EDAM09	9.00	0.37	ZF-EDAM09	99.864
EDAU09	9.04	0.42	ZF-EDAU09	99.763
EDAZ09	9.09	0.46	ZF-EDAZ09	99.591
EDAH10	9.11	0.48	ZF-EDAH10	99.258

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	0.019	3.99	3.97	ZF-EDAM07
EDAU07	0.268	3.99	3.72	ZF-EDAU07
EDAZ07	0.517	3.99	3.47	ZF-EDAZ07
EDAH08	0.766	3.99	3.22	ZF-EDAH08
EDAM08	1.016	3.99	2.97	ZF-EDAM08
EDAU08	1.265	3.99	2.72	ZF-EDAU08
EDAZ08	1.514	3.99	2.47	ZF-EDAZ08
EDAH09	1.764	3.99	2.22	ZF-EDAH09
EDAM09	2.013	3.99	1.97	ZF-EDAM09
EDAU09	2.262	3.99	1.72	ZF-EDAU09
EDAZ09	2.512	3.99	1.47	ZF-EDAZ09
EDAH10	2.761	3.99	1.22	ZF-EDAH10

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



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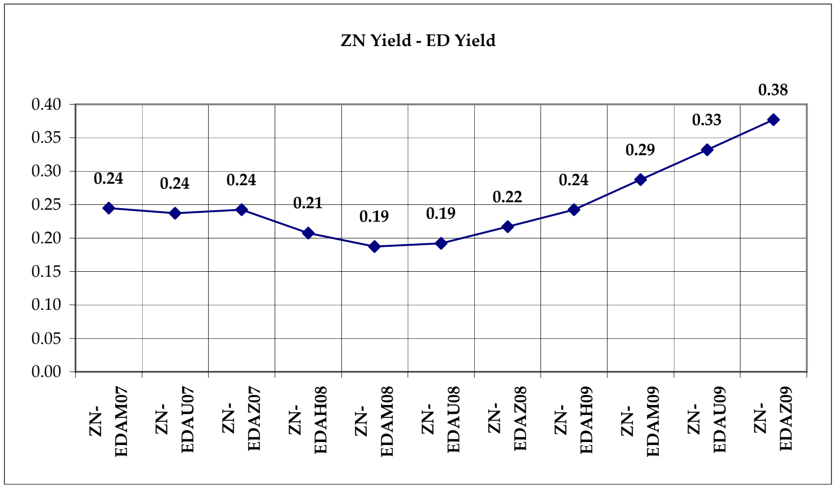
	ZN			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	10.30	0.24	ZN-EDAM07	72.09
EDAU07	10.29	0.24	ZN-EDAU07	84.21
EDAZ07	10.30	0.24	ZN-EDAZ07	87.93
EDAH08	10.26	0.21	ZN-EDAH08	88.00
EDAM08	10.24	0.19	ZN-EDAM08	92.13
EDAU08	10.25	0.19	ZN-EDAU08	94.97
EDAZ08	10.27	0.22	ZN-EDAZ08	96.48
EDAH09	10.30	0.24	ZN-EDAH09	97.98
EDAM09	10.34	0.29	ZN-EDAM09	99.19
EDAU09	10.39	0.33	ZN-EDAU09	99.61
EDAZ09	10.43	0.38	ZN-EDAZ09	99.82
EDAH10	10.45	0.40	ZN-EDAH10	99.26

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	0.019	5.80	5.78	ZN-EDAM07
EDAU07	0.268	5.80	5.53	ZN-EDAU07
EDAZ07	0.517	5.80	5.28	ZN-EDAZ07
EDAH08	0.766	5.80	5.03	ZN-EDAH08
EDAM08	1.016	5.80	4.78	ZN-EDAM08
EDAU08	1.265	5.80	4.53	ZN-EDAU08
EDAZ08	1.514	5.80	4.28	ZN-EDAZ08
EDAH09	1.764	5.80	4.04	ZN-EDAH09
EDAM09	2.013	5.80	3.79	ZN-EDAM09
EDAU09	2.262	5.80	3.54	ZN-EDAU09
EDAZ09	2.512	5.80	3.29	ZN-EDAZ09
EDAH10	2.761	5.80	3.04	ZN-EDAH10

The farther away from 0 the spread duration is
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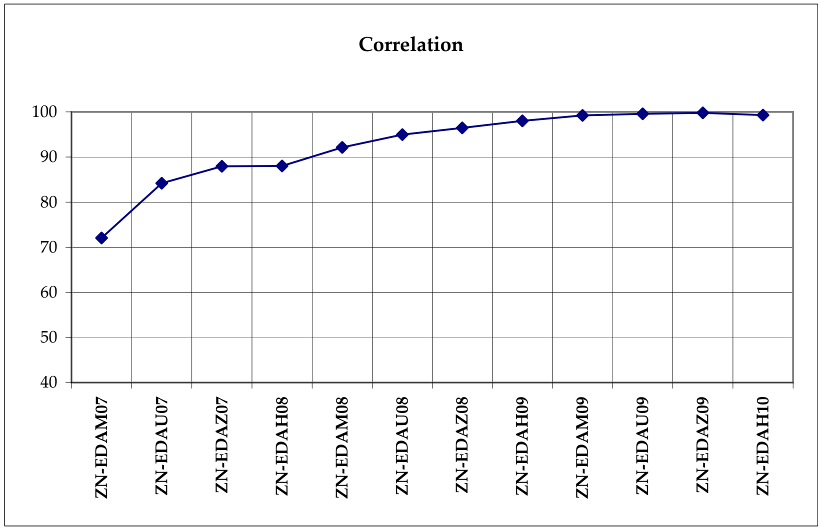

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	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	5.13	0.37	2y-EDAM07	-87.467
EDAU07	5.12	0.36	2y-EDAU07	-96.634
EDAZ07	5.13	0.36	2y-EDAZ07	-95.207
EDAH08	5.09	0.33	2y-EDAH08	-96.364
EDAM08	5.07	0.31	2y-EDAM08	-97.003
EDAU08	5.08	0.31	2y-EDAU08	-96.579
EDAZ08	5.10	0.34	2y-EDAZ08	-87.467
EDAH09	5.13	0.36	2y-EDAH09	-87.467
EDAM09	5.17	0.41	2y-EDAM09	-87.467
EDAU09	5.22	0.45	2y-EDAU09	-87.467
EDAZ09	5.26	0.50	2y-EDAZ09	-87.467
EDAH10	5.28	0.52	2y-EDAH10	-86.668

Price = Outright Decimal Price - Euro Contract Price
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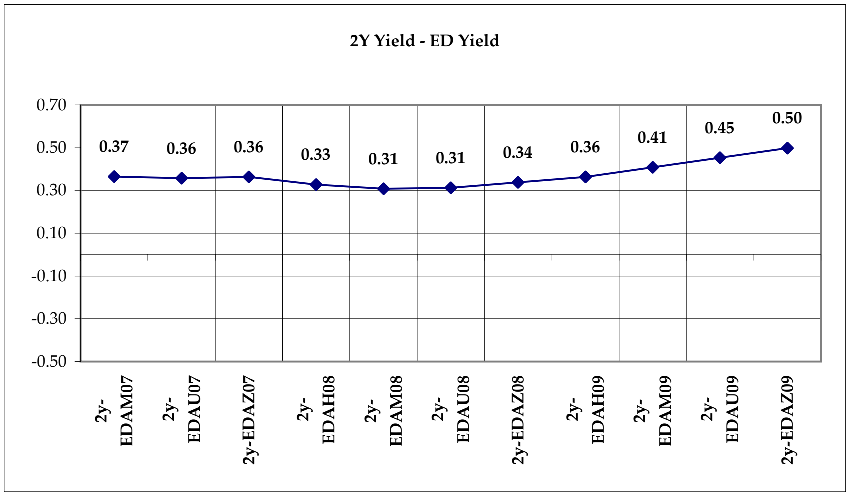
***Correlation = ED Correlation to Treasury Future over 10 days.**
These are measuring YIELD correlations.



	GE Duration as Fraction of year	2Y Duration	Spread Duration	
EDAM07	0.019	2.04	2.02	2y-EDAM07
EDAU07	0.268	2.04	1.77	2y-EDAU07
EDAZ07	0.517	2.04	1.52	2y-EDAZ07
EDAH08	0.766	2.04	1.27	2y-EDAH08
EDAM08	1.016	2.04	1.02	2y-EDAM08
EDAU08	1.265	2.04	0.77	2y-EDAU08
EDAZ08	1.514	2.04	0.52	2y-EDAZ08
EDAH09	1.764	2.04	0.28	2y-EDAH09
EDAM09	2.013	2.04	0.03	2y-EDAM09
EDAU09	2.262	2.04	(0.22)	2y-EDAU09
EDAZ09	2.512	2.04	(0.47)	2y-EDAZ09
EDAH10	2.761	2.04	(0.72)	2y-EDAH10

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

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	5y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	4.07	0.32	5y-EDAM07	-75.517
EDAU07	4.06	0.31	5y-EDAU07	-88.270
EDAZ07	4.07	0.32	5y-EDAZ07	-89.464
EDAH08	4.03	0.28	5y-EDAH08	-90.108
EDAM08	4.01	0.26	5y-EDAM08	-93.767
EDAU08	4.02	0.27	5y-EDAU08	-96.160
EDAZ08	4.04	0.29	5y-EDAZ08	-75.517
EDAH09	4.07	0.32	5y-EDAH09	-75.517
EDAM09	4.11	0.36	5y-EDAM09	-75.517
EDAU09	4.16	0.41	5y-EDAU09	-75.517
EDAZ09	4.20	0.45	5y-EDAZ09	-75.517
EDAH10	4.22	0.47	5y-EDAH10	-97.391

Price = Outright Decimal Price - Euro Contract Price
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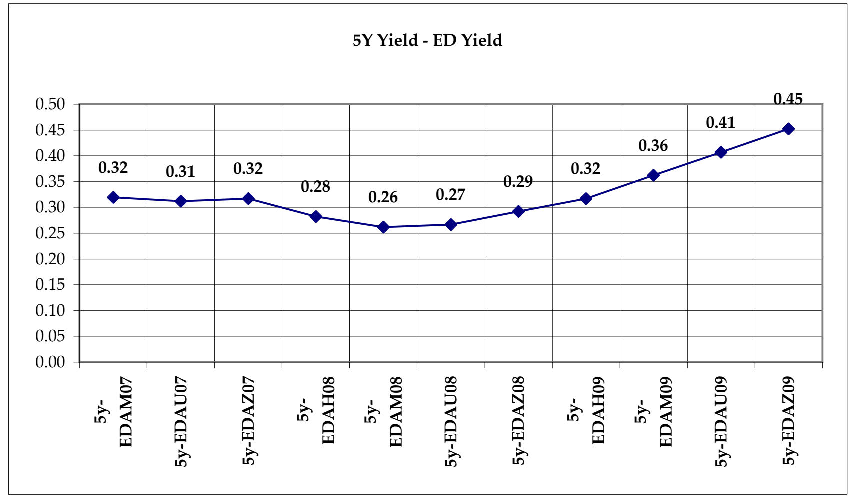
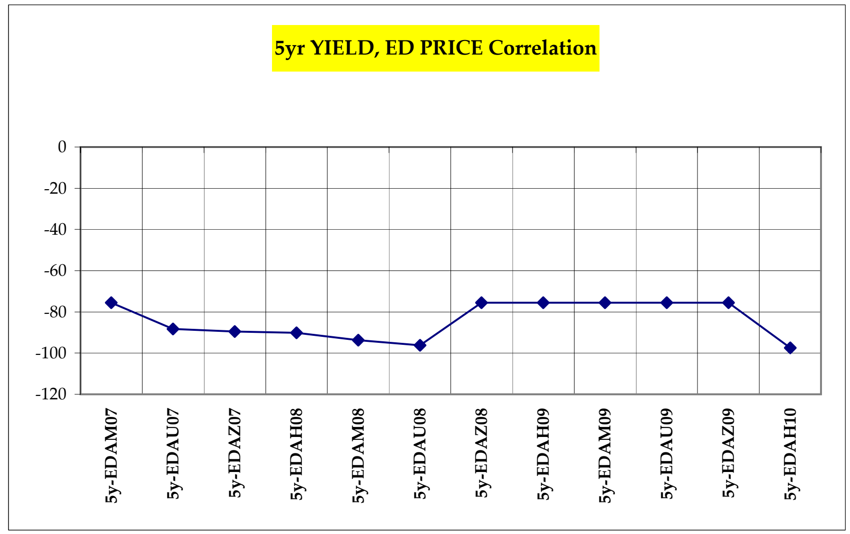


	GE Duration as Fraction of year	5Y Duration	Spread Duration	
EDAM07	0.019	4.30	4.28	5y-EDAM07
EDAU07	0.268	4.30	4.03	5y-EDAU07
EDAZ07	0.517	4.30	3.78	5y-EDAZ07
EDAH08	0.766	4.30	3.53	5y-EDAH08
EDAM08	1.016	4.30	3.28	5y-EDAM08
EDAU08	1.265	4.30	3.04	5y-EDAU08
EDAZ08	1.514	4.30	2.79	5y-EDAZ08
EDAH09	1.764	4.30	2.54	5y-EDAH09
EDAM09	2.013	4.30	2.29	5y-EDAM09
EDAU09	2.262	4.30	2.04	5y-EDAU09
EDAZ09	2.512	4.30	1.79	5y-EDAZ09
EDAH10	2.761	4.30	1.54	5y-EDAH10

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



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	10y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	4.07	0.24	10y-EDAM07	-69.422
EDAU07	4.06	0.23	10y-EDAU07	-82.660
EDAZ07	4.07	0.24	10y-EDAZ07	-84.319
EDAH08	4.03	0.20	10y-EDAH08	-84.732
EDAM08	4.01	0.18	10y-EDAM08	-89.453
EDAU08	4.02	0.19	10y-EDAU08	-92.751
EDAZ08	4.04	0.21	10y-EDAZ08	-69.422
EDAH09	4.07	0.24	10y-EDAH09	-69.422
EDAM09	4.11	0.28	10y-EDAM09	-69.422
EDAU09	4.16	0.33	10y-EDAU09	-69.422
EDAZ09	4.20	0.37	10y-EDAZ09	-69.422
EDAH10	4.22	0.39	10y-EDAH10	-98.456

Price = Outright Decimal Price - Euro Contract Price
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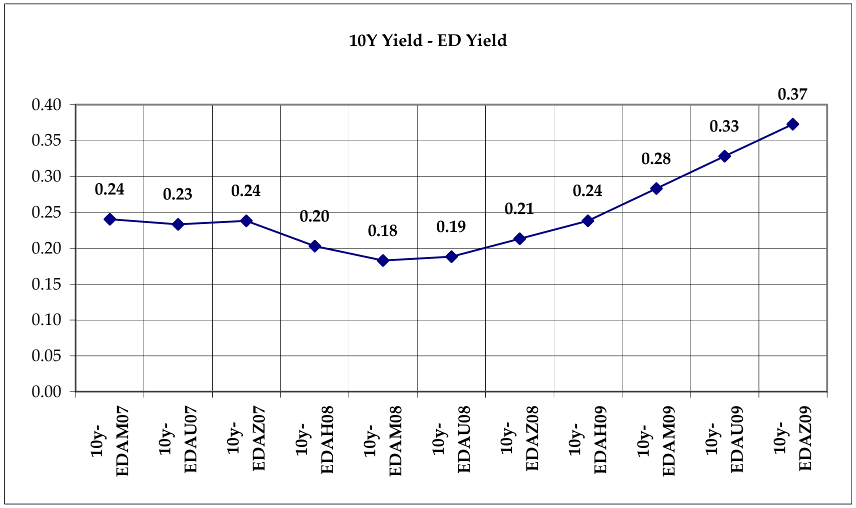
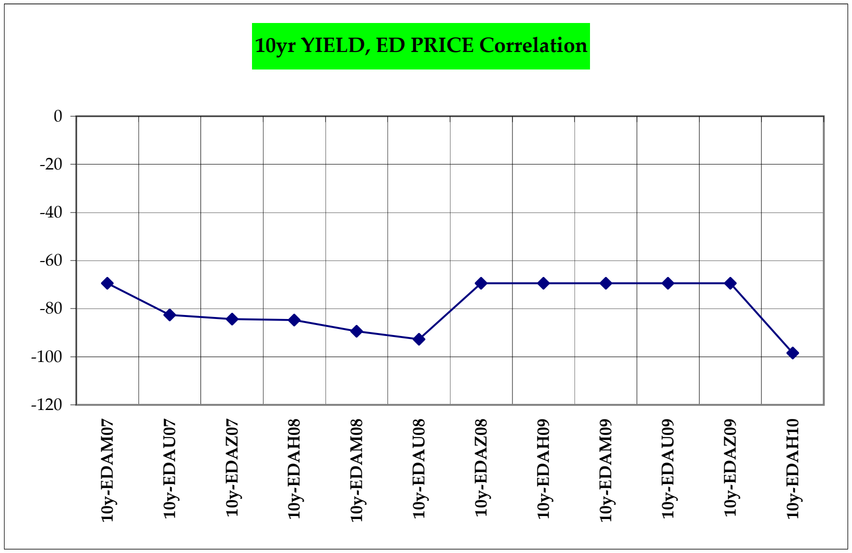


	GE Duration as Fraction of year	10Y Duration	Spread Duration	
EDAM07	0.019	7.83	7.81	10y-EDAM07
EDAU07	0.268	7.83	7.56	10y-EDAU07
EDAZ07	0.517	7.83	7.31	10y-EDAZ07
EDAH08	0.766	7.83	7.06	10y-EDAH08
EDAM08	1.016	7.83	6.81	10y-EDAM08
EDAU08	1.265	7.83	6.56	10y-EDAU08
EDAZ08	1.514	7.83	6.32	10y-EDAZ08
EDAH09	1.764	7.83	6.07	10y-EDAH09
EDAM09	2.013	7.83	5.82	10y-EDAM09
EDAU09	2.262	7.83	5.57	10y-EDAU09
EDAZ09	2.512	7.83	5.32	10y-EDAZ09
EDAH10	2.761	7.83	5.07	10y-EDAH10

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



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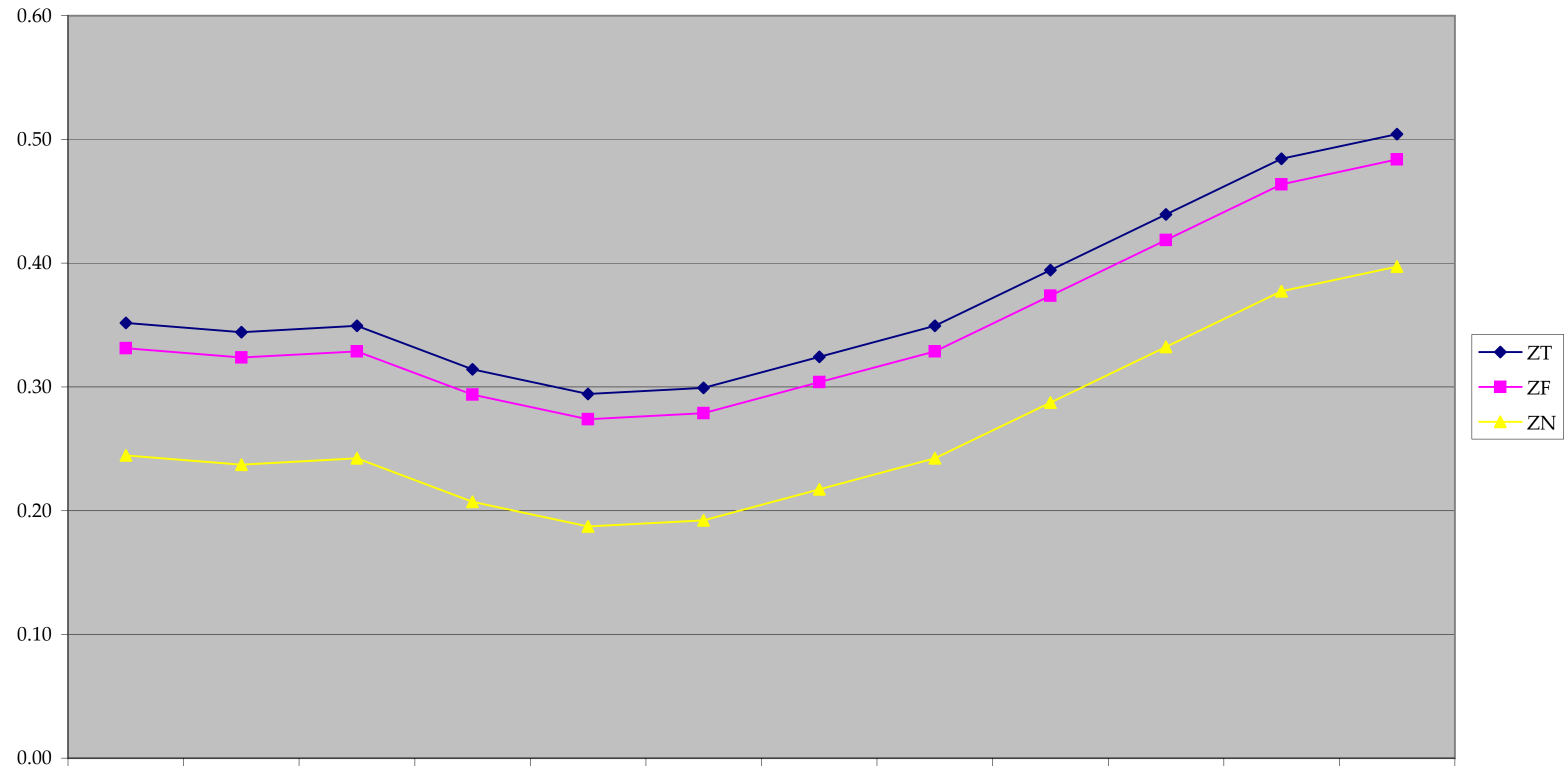
Dirty TED Curve

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.

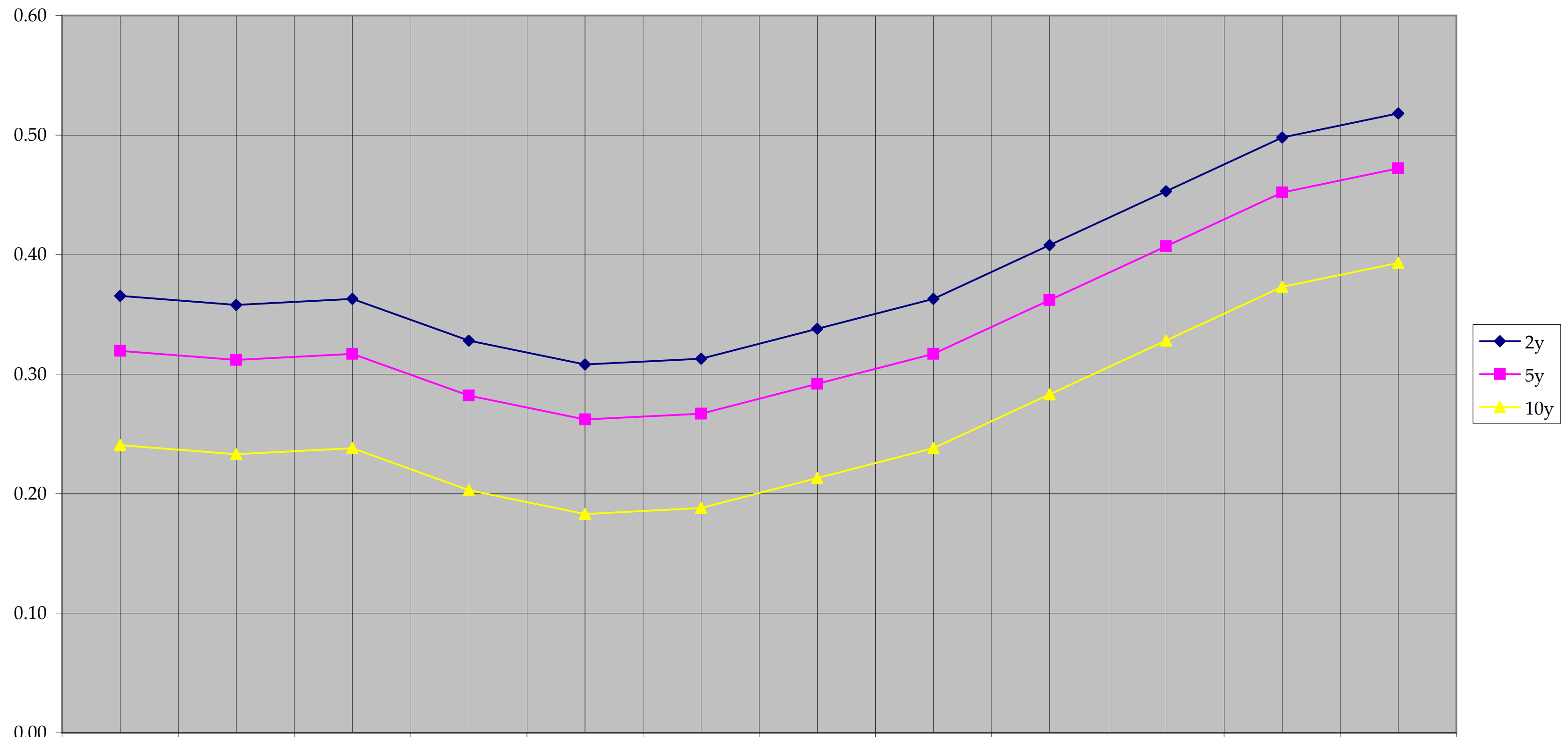


	EDAM07	EDAU07	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10
ZT	0.35	0.34	0.35	0.31	0.29	0.30	0.32	0.35	0.39	0.44	0.48	0.50
ZF	0.33	0.32	0.33	0.29	0.27	0.28	0.30	0.33	0.37	0.42	0.46	0.48
ZN	0.24	0.24	0.24	0.21	0.19	0.19	0.22	0.24	0.29	0.33	0.38	0.40

0

TED Curve

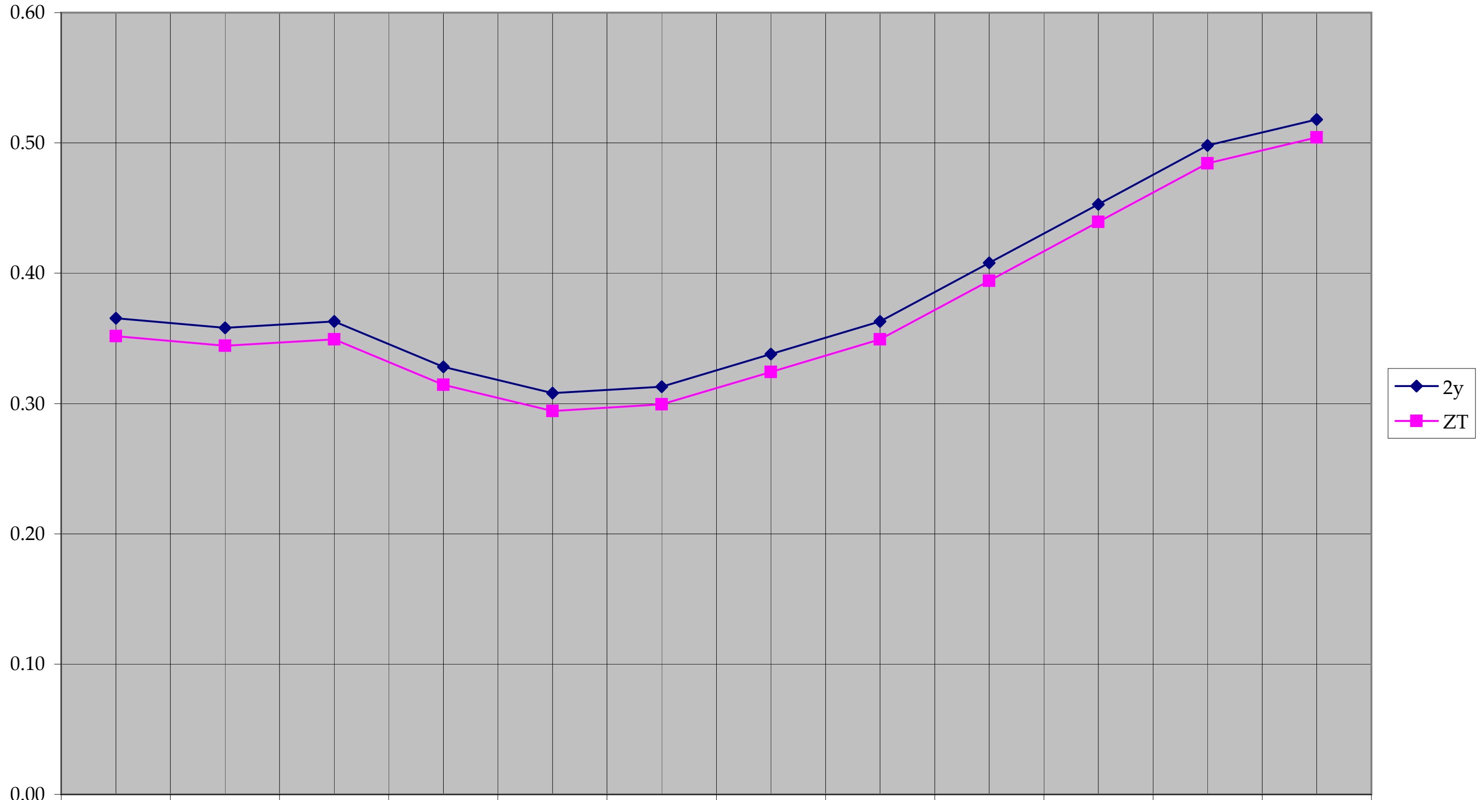
Chart values show the differences between ED contract and Treasury Cash conctract. Those values can be seen in the table at the bottom of the chart.
Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



	EDAM07	EDAU07	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10
2y	0.37	0.36	0.36	0.33	0.31	0.31	0.34	0.36	0.41	0.45	0.50	0.52
5y	0.32	0.31	0.32	0.28	0.26	0.27	0.29	0.32	0.36	0.41	0.45	0.47
10y	0.24	0.23	0.24	0.20	0.18	0.19	0.21	0.24	0.28	0.33	0.37	0.39

0

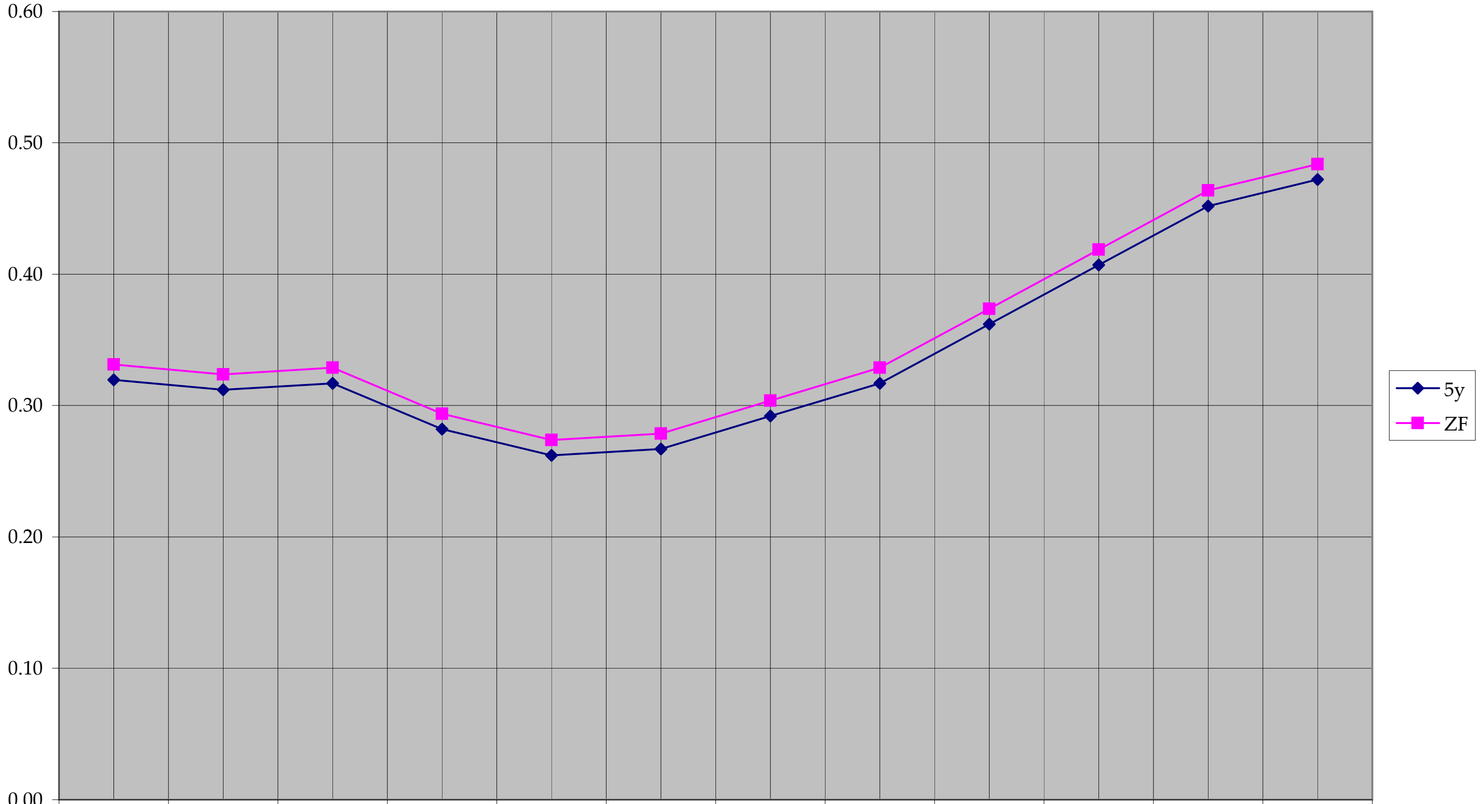
2y Basis TED Curve



	EDAM07	EDAU07	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10
2y	0.37	0.36	0.36	0.33	0.31	0.31	0.34	0.36	0.41	0.45	0.50	0.52
ZT	0.35	0.34	0.35	0.31	0.29	0.30	0.32	0.35	0.39	0.44	0.48	0.50

0

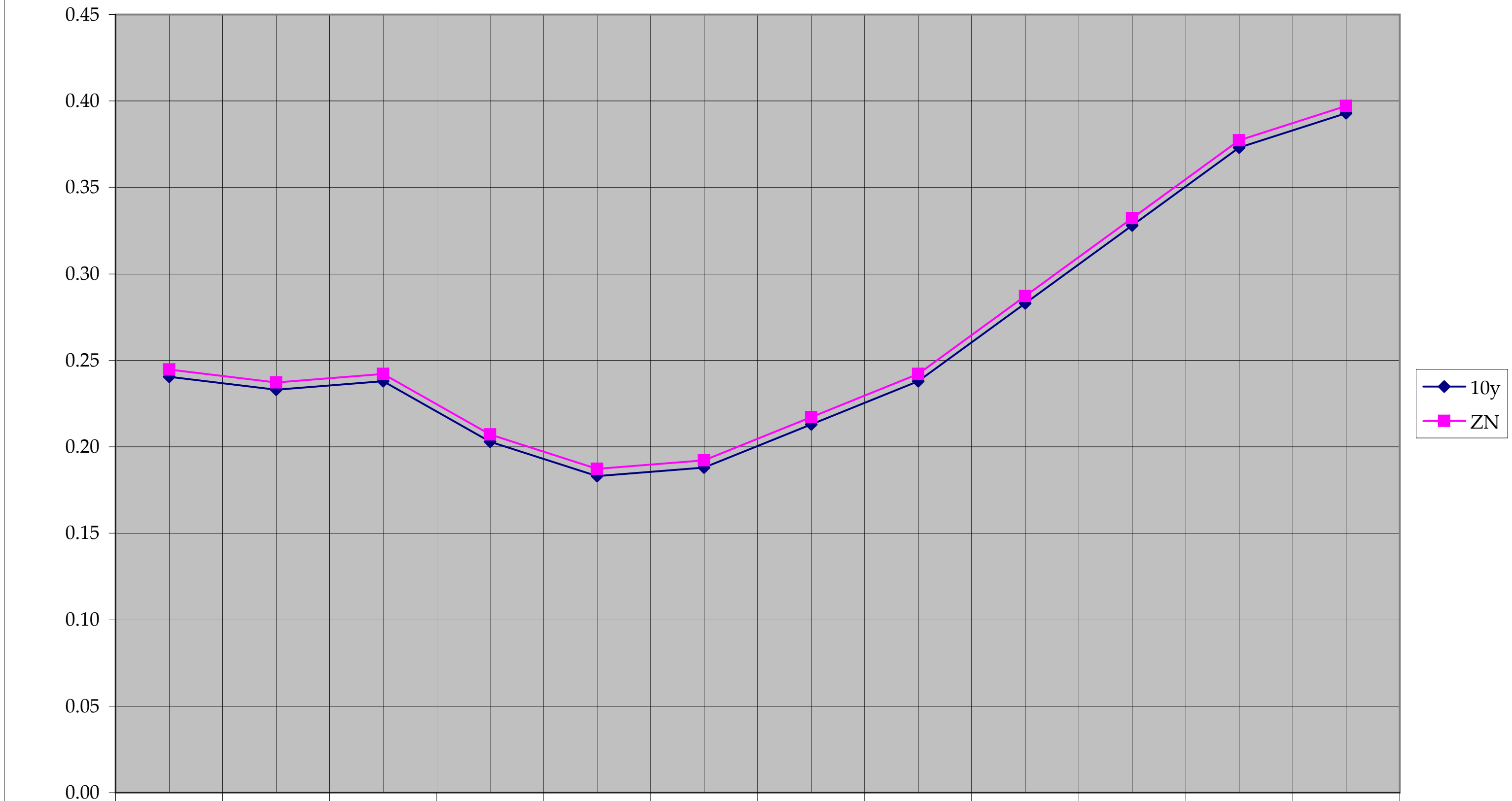
5y Basis TED Curve



	EDAM07	EDAU07	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10
5y	0.32	0.31	0.32	0.28	0.26	0.27	0.29	0.32	0.36	0.41	0.45	0.47
ZF	0.33	0.32	0.33	0.29	0.27	0.28	0.30	0.33	0.37	0.42	0.46	0.48

0

10y Basis TED Curve



	EDAM07	EDAU07	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10
10y	0.24	0.23	0.24	0.20	0.18	0.19	0.21	0.24	0.28	0.33	0.37	0.39
ZN	0.24	0.24	0.24	0.21	0.19	0.19	0.22	0.24	0.29	0.33	0.38	0.40

0