The Morning Email: TERM TEDS & Dirty TEDS

Table of Contents

Pg1 Overview and hedges

Pg2 Dirty TED: ZT vs Eurodollar Contracts

Pg3 Dirty TED: ZF vs Eurodollar Contracts

Pg4 Dirty TED: ZN vs Eurodollar Contracts

Pg5 TERM TED: 2y vs Eurodollar Contracts

Pg6 TERM TED: 5y vs Eurodollar Contracts

Pg7 TERM TED: 10y vs Eurodollar Contracts

Pg8 Dirty TED Curve

Pg9 TED Curve

NEW

Pg10 2y Basis TED Curve

Pg11 5y Basis TED Curve

Pg12 10y Basis TED Curve

NEW

Also new, correlation matrixes for all contracts.

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

	F.I. Futures and Cash			
	Last Decimal	Last 32	Last Yield*	**MDuration
ZT	101.8438	101.270	4.882	1.73
ZF	104.5313	104.170	4.808	3.77
ZN	106.5938	106.190	4.834	5.72
Blank				
2y	100.016	100.0050	4.867	1.81
5y	98.641	98.2050	4.810	4.34
10y	97.141	97.0450	4.861	7.89

*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	19	0.051	JUN	White Pack
EDAU07	94.685	5.315	110	0.301	SEP	
EDAZ07	94.760	5.240	201	0.550	DEC	
EDAH08	94.845	5.155	292	0.799	MAR	
EDAM08	94.905	5.095	383	1.049	JUN	Red Pack
EDAU08	94.930	5.070	474	1.298	SEP	
EDAZ08	94.940	5.060	565	1.547	DEC	
EDAH09	94.945	5.055	656	1.797	MAR	
EDAM09	94.925	5.075	747	2.046	JUN	Green Pack
EDAU09	94.895	5.105	838	2.295	SEP	
EDAZ09	94.850	5.150	929	2.545	DEC	
EDAH10	94.830	5.170	1020	2.794	MAR	

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.
jgoulding@ghco.com

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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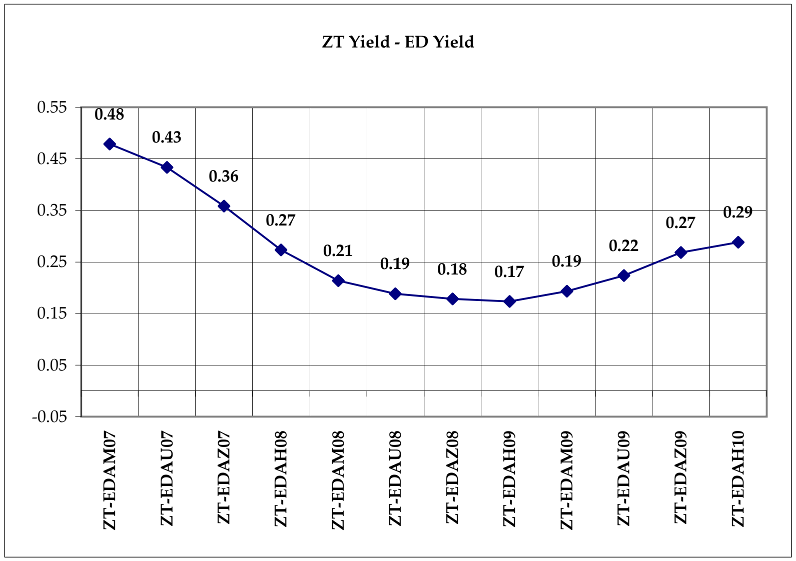
Dirty TED: ZT vs Eurodollar Contracts

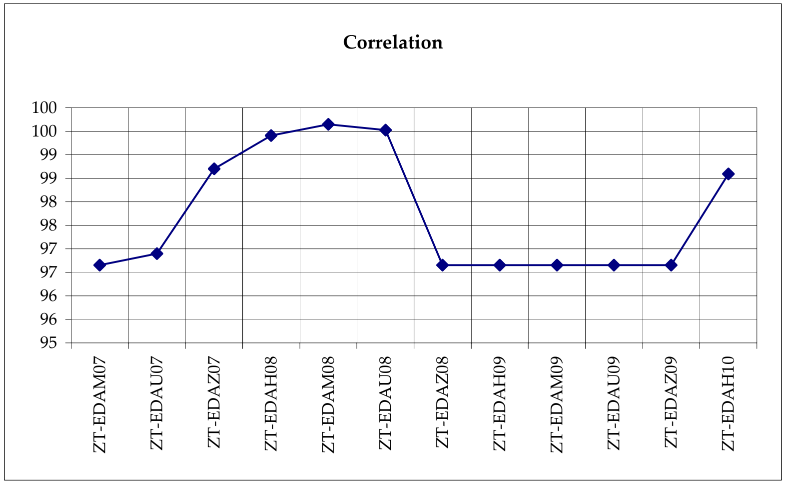
	ZT			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	7.204	0.48	ZT-EDAM07	96.652
EDAU07	7.159	0.43	ZT-EDAU07	96.895
EDAZ07	7.084	0.36	ZT-EDAZ07	98.698
EDAH08	6.999	0.27	ZT-EDAH08	99.408
EDAM08	6.939	0.21	ZT-EDAM08	99.643
EDAU08	6.914	0.19	ZT-EDAU08	99.524
EDAZ08	6.904	0.18	ZT-EDAZ08	96.652
EDAH09	6.899	0.17	ZT-EDAH09	96.652
EDAM09	6.919	0.19	ZT-EDAM09	96.652
EDAU09	6.949	0.22	ZT-EDAU09	96.652
EDAZ09	6.994	0.27	ZT-EDAZ09	96.652
EDAH10	7.014	0.29	ZT-EDAH10	98.595

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



	GE Duration as Fraction of year	ZT Duration	Spread Duration	
EDAM07	0.051	1.73	1.67	ZT-EDAM07
EDAU07	0.301	1.73	1.43	ZT-EDAU07
EDAZ07	0.550	1.73	1.18	ZT-EDAZ07
EDAH08	0.799	1.73	0.93	ZT-EDAH08
EDAM08	1.049	1.73	0.68	ZT-EDAM08
EDAU08	1.298	1.73	0.43	ZT-EDAU08
EDAZ08	1.547	1.73	0.18	ZT-EDAZ08
EDAH09	1.797	1.73	(0.07)	ZT-EDAH09
EDAM09	2.046	1.73	(0.32)	ZT-EDAM09
EDAU09	2.295	1.73	(0.57)	ZT-EDAU09
EDAZ09	2.545	1.73	(0.82)	ZT-EDAZ09
EDAH10	2.794	1.73	(1.07)	ZT-EDAH10

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



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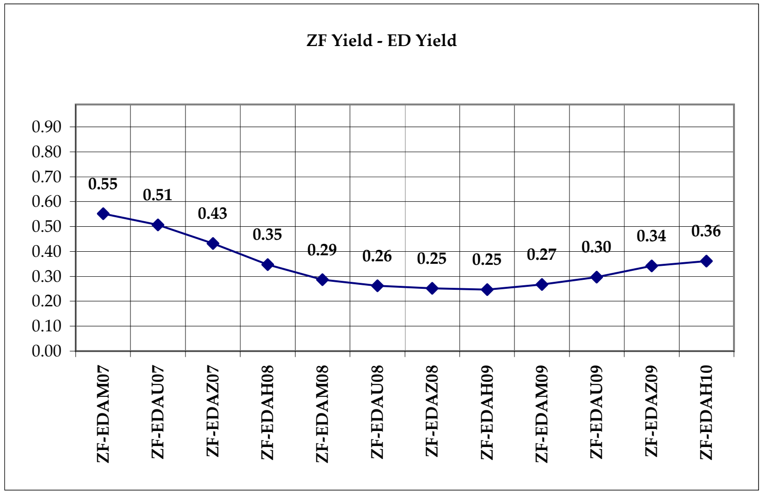
Dirty TED: ZF vs Eurodollar Contracts

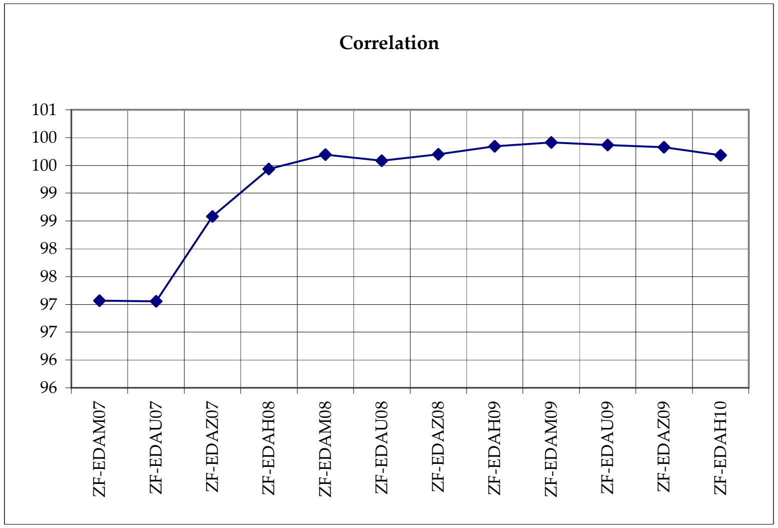
	ZF			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	9.89	0.55	ZF-EDAM07	97.068
EDAU07	9.85	0.51	ZF-EDAU07	97.057
EDAZ07	9.77	0.43	ZF-EDAZ07	98.583
EDAH08	9.69	0.35	ZF-EDAH08	99.433
EDAM08	9.63	0.29	ZF-EDAM08	99.691
EDAU08	9.60	0.26	ZF-EDAU08	99.582
EDAZ08	9.59	0.25	ZF-EDAZ08	99.700
EDAH09	9.59	0.25	ZF-EDAH09	99.841
EDAM09	9.61	0.27	ZF-EDAM09	99.911
EDAU09	9.64	0.30	ZF-EDAU09	99.869
EDAZ09	9.68	0.34	ZF-EDAZ09	99.825
EDAH10	9.70	0.36	ZF-EDAH10	99.680

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	0.051	3.77	3.72	ZF-EDAM07
EDAU07	0.301	3.77	3.47	ZF-EDAU07
EDAZ07	0.550	3.77	3.22	ZF-EDAZ07
EDAH08	0.799	3.77	2.97	ZF-EDAH08
EDAM08	1.049	3.77	2.72	ZF-EDAM08
EDAU08	1.298	3.77	2.47	ZF-EDAU08
EDAZ08	1.547	3.77	2.22	ZF-EDAZ08
EDAH09	1.797	3.77	1.97	ZF-EDAH09
EDAM09	2.046	3.77	1.73	ZF-EDAM09
EDAU09	2.295	3.77	1.48	ZF-EDAU09
EDAZ09	2.545	3.77	1.23	ZF-EDAZ09
EDAH10	2.794	3.77	0.98	ZF-EDAH10

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



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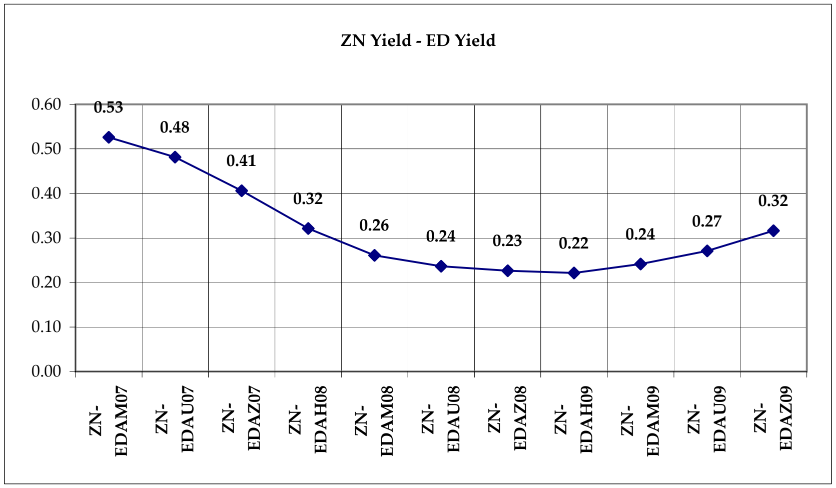
Dirty TED: ZN vs Eurodollar Contracts

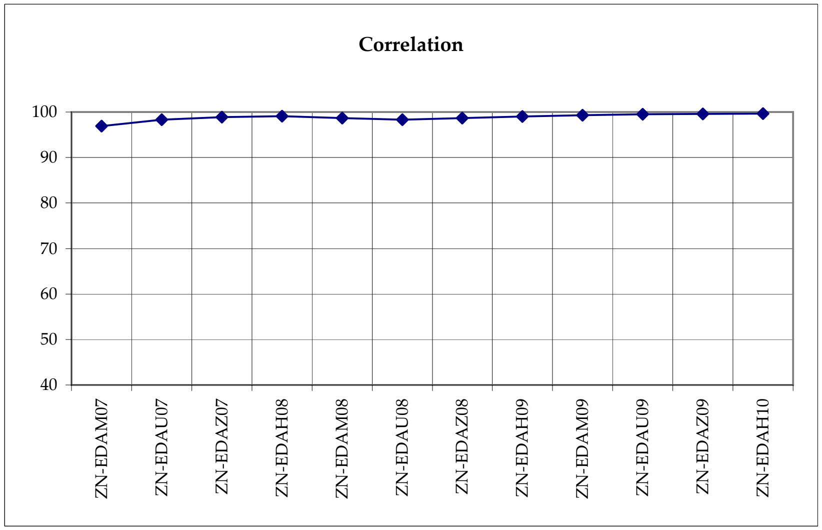
	ZN			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	11.95	0.53	ZN-EDAM07	96.92
EDAU07	11.91	0.48	ZN-EDAU07	98.31
EDAZ07	11.83	0.41	ZN-EDAZ07	98.87
EDAH08	11.75	0.32	ZN-EDAH08	99.07
EDAM08	11.69	0.26	ZN-EDAM08	98.67
EDAU08	11.66	0.24	ZN-EDAU08	98.34
EDAZ08	11.65	0.23	ZN-EDAZ08	98.65
EDAH09	11.65	0.22	ZN-EDAH09	99.03
EDAM09	11.67	0.24	ZN-EDAM09	99.28
EDAU09	11.70	0.27	ZN-EDAU09	99.49
EDAZ09	11.74	0.32	ZN-EDAZ09	99.58
EDAH10	11.76	0.34	ZN-EDAH10	99.68

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	0.051	5.72	5.67	ZN-EDAM07
EDAU07	0.301	5.72	5.42	ZN-EDAU07
EDAZ07	0.550	5.72	5.17	ZN-EDAZ07
EDAH08	0.799	5.72	4.92	ZN-EDAH08
EDAM08	1.049	5.72	4.67	ZN-EDAM08
EDAU08	1.298	5.72	4.42	ZN-EDAU08
EDAZ08	1.547	5.72	4.17	ZN-EDAZ08
EDAH09	1.797	5.72	3.92	ZN-EDAH09
EDAM09	2.046	5.72	3.67	ZN-EDAM09
EDAU09	2.295	5.72	3.42	ZN-EDAU09
EDAZ09	2.545	5.72	3.18	ZN-EDAZ09
EDAH10	2.794	5.72	2.93	ZN-EDAH10

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



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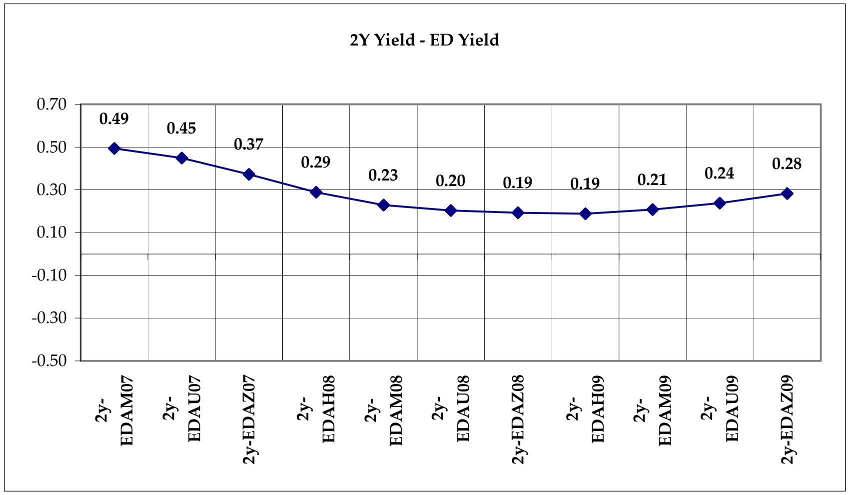
TERM TED: 2y vs Eurodollar Contracts

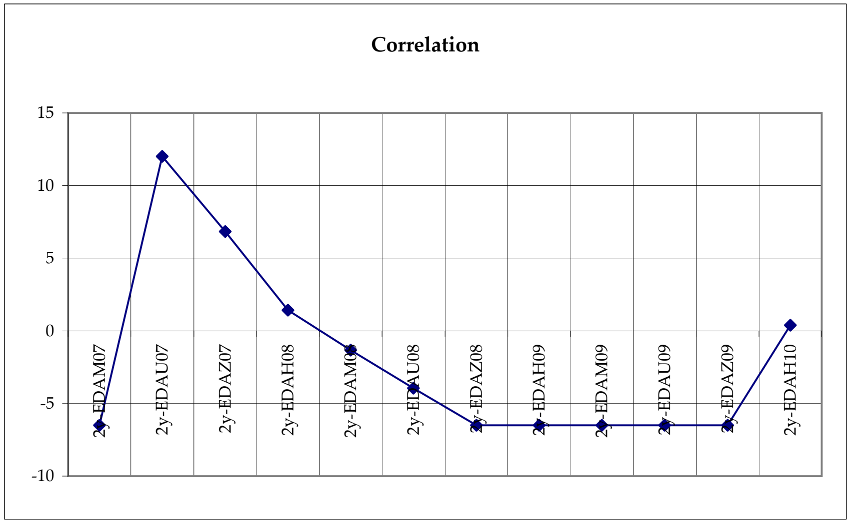
	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	5.38	0.49	2y-EDAM07	-6.505
EDAU07	5.33	0.45	2y-EDAU07	12.001
EDAZ07	5.26	0.37	2y-EDAZ07	6.841
EDAH08	5.17	0.29	2y-EDAH08	1.419
EDAM08	5.11	0.23	2y-EDAM08	-1.323
EDAU08	5.09	0.20	2y-EDAU08	-3.950
EDAZ08	5.08	0.19	2y-EDAZ08	-6.505
EDAH09	5.07	0.19	2y-EDAH09	-6.505
EDAM09	5.09	0.21	2y-EDAM09	-6.505
EDAU09	5.12	0.24	2y-EDAU09	-6.505
EDAZ09	5.17	0.28	2y-EDAZ09	-6.505
EDAH10	5.19	0.30	2y-EDAH10	0.388

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	2Y Duration	Spread Duration	
EDAM07	0.051	1.81	1.76	2y-EDAM07
EDAU07	0.301	1.81	1.51	2y-EDAU07
EDAZ07	0.550	1.81	1.26	2y-EDAZ07
EDAH08	0.799	1.81	1.01	2y-EDAH08
EDAM08	1.049	1.81	0.76	2y-EDAM08
EDAU08	1.298	1.81	0.51	2y-EDAU08
EDAZ08	1.547	1.81	0.26	2y-EDAZ08
EDAH09	1.797	1.81	0.01	2y-EDAH09
EDAM09	2.046	1.81	(0.24)	2y-EDAM09
EDAU09	2.295	1.81	(0.49)	2y-EDAU09
EDAZ09	2.545	1.81	(0.74)	2y-EDAZ09
EDAH10	2.794	1.81	(0.99)	2y-EDAH10

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



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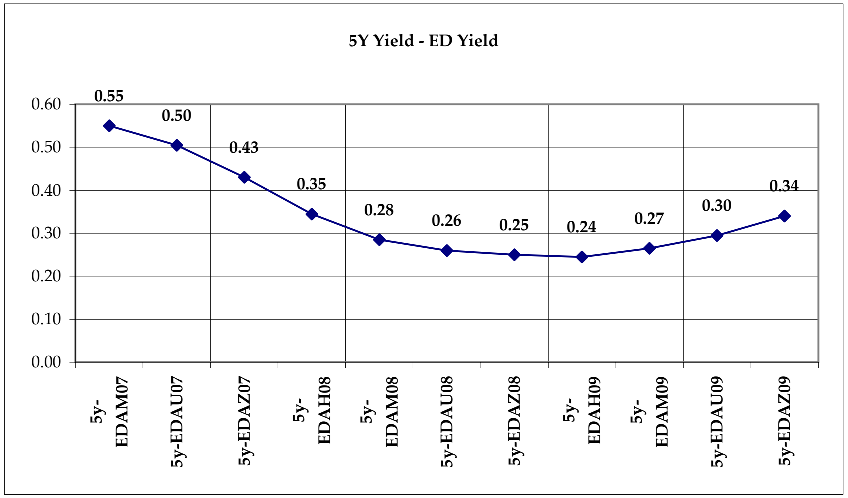
TERM TED: 5y vs Eurodollar Contracts

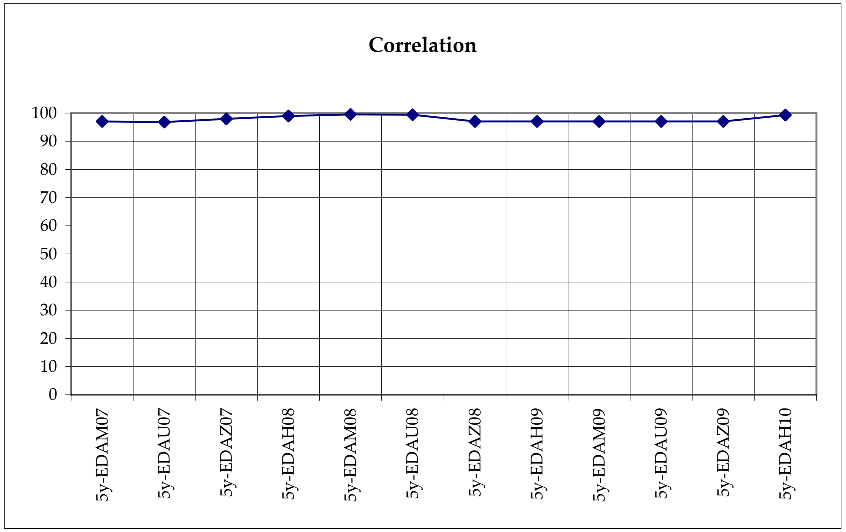
	5y			
	Spread Price	**Spread Yield**	**Spread Name**	**Correlation* (percent)**
EDAM07	4.00	0.55	5y-EDAM07	97.002
EDAU07	3.96	0.50	5y-EDAU07	96.780
EDAZ07	3.88	0.43	5y-EDAZ07	97.911
EDAH08	3.80	0.35	5y-EDAH08	98.936
EDAM08	3.74	0.28	5y-EDAM08	99.493
EDAU08	3.71	0.26	5y-EDAU08	99.457
EDAZ08	3.70	0.25	5y-EDAZ08	97.002
EDAH09	3.70	0.24	5y-EDAH09	97.002
EDAM09	3.72	0.27	5y-EDAM09	97.002
EDAU09	3.75	0.30	5y-EDAU09	97.002
EDAZ09	3.79	0.34	5y-EDAZ09	97.002
EDAH10	3.81	0.36	5y-EDAH10	99.264

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	**5Y Duration**	**Spread Duration**	
EDAM07	0.051	4.34	4.29	5y-EDAM07
EDAU07	0.301	4.34	4.04	5y-EDAU07
EDAZ07	0.550	4.34	3.79	5y-EDAZ07
EDAH08	0.799	4.34	3.54	5y-EDAH08
EDAM08	1.049	4.34	3.29	5y-EDAM08
EDAU08	1.298	4.34	3.04	5y-EDAU08
EDAZ08	1.547	4.34	2.79	5y-EDAZ08
EDAH09	1.797	4.34	2.54	5y-EDAH09
EDAM09	2.046	4.34	2.29	5y-EDAM09
EDAU09	2.295	4.34	2.05	5y-EDAU09
EDAZ09	2.545	4.34	1.80	5y-EDAZ09
EDAH10	2.794	4.34	1.55	5y-EDAH10

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



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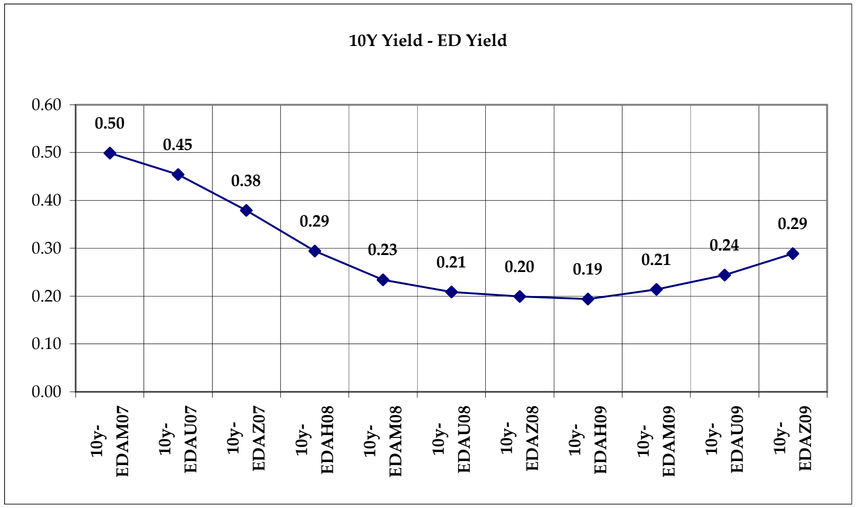
TERM TED: 10y vs Eurodollar Contracts

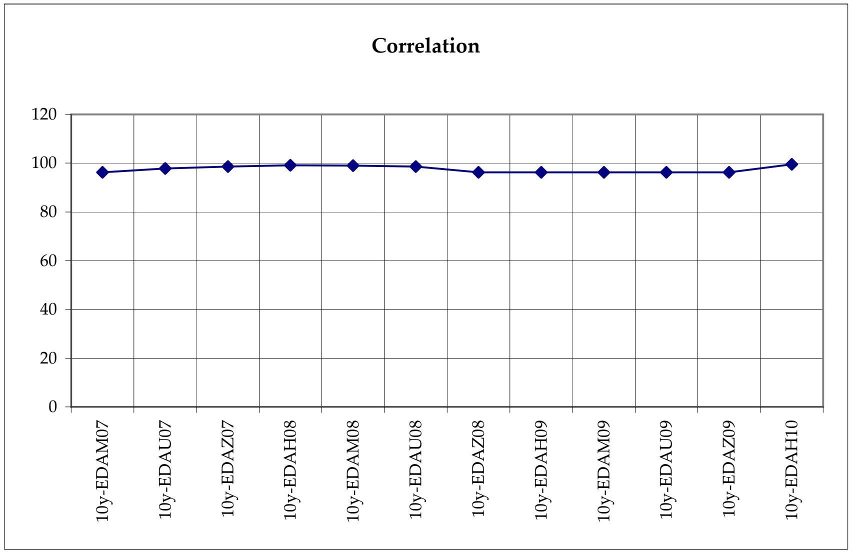
	10y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	4.00	0.50	10y-EDAM07	96.217
EDAU07	3.96	0.45	10y-EDAU07	97.835
EDAZ07	3.88	0.38	10y-EDAZ07	98.640
EDAH08	3.80	0.29	10y-EDAH08	99.064
EDAM08	3.74	0.23	10y-EDAM08	98.978
EDAU08	3.71	0.21	10y-EDAU08	98.663
EDAZ08	3.70	0.20	10y-EDAZ08	96.217
EDAH09	3.70	0.19	10y-EDAH09	96.217
EDAM09	3.72	0.21	10y-EDAM09	96.217
EDAU09	3.75	0.24	10y-EDAU09	96.217
EDAZ09	3.79	0.29	10y-EDAZ09	96.217
EDAH10	3.81	0.31	10y-EDAH10	99.582

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	10Y Duration	Spread Duration	
EDAM07	0.051	7.89	7.84	10y-EDAM07
EDAU07	0.301	7.89	7.59	10y-EDAU07
EDAZ07	0.550	7.89	7.34	10y-EDAZ07
EDAH08	0.799	7.89	7.09	10y-EDAH08
EDAM08	1.049	7.89	6.85	10y-EDAM08
EDAU08	1.298	7.89	6.60	10y-EDAU08
EDAZ08	1.547	7.89	6.35	10y-EDAZ08
EDAH09	1.797	7.89	6.10	10y-EDAH09
EDAM09	2.046	7.89	5.85	10y-EDAM09
EDAU09	2.295	7.89	5.60	10y-EDAU09
EDAZ09	2.545	7.89	5.35	10y-EDAZ09
EDAH10	2.794	7.89	5.10	10y-EDAH10

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



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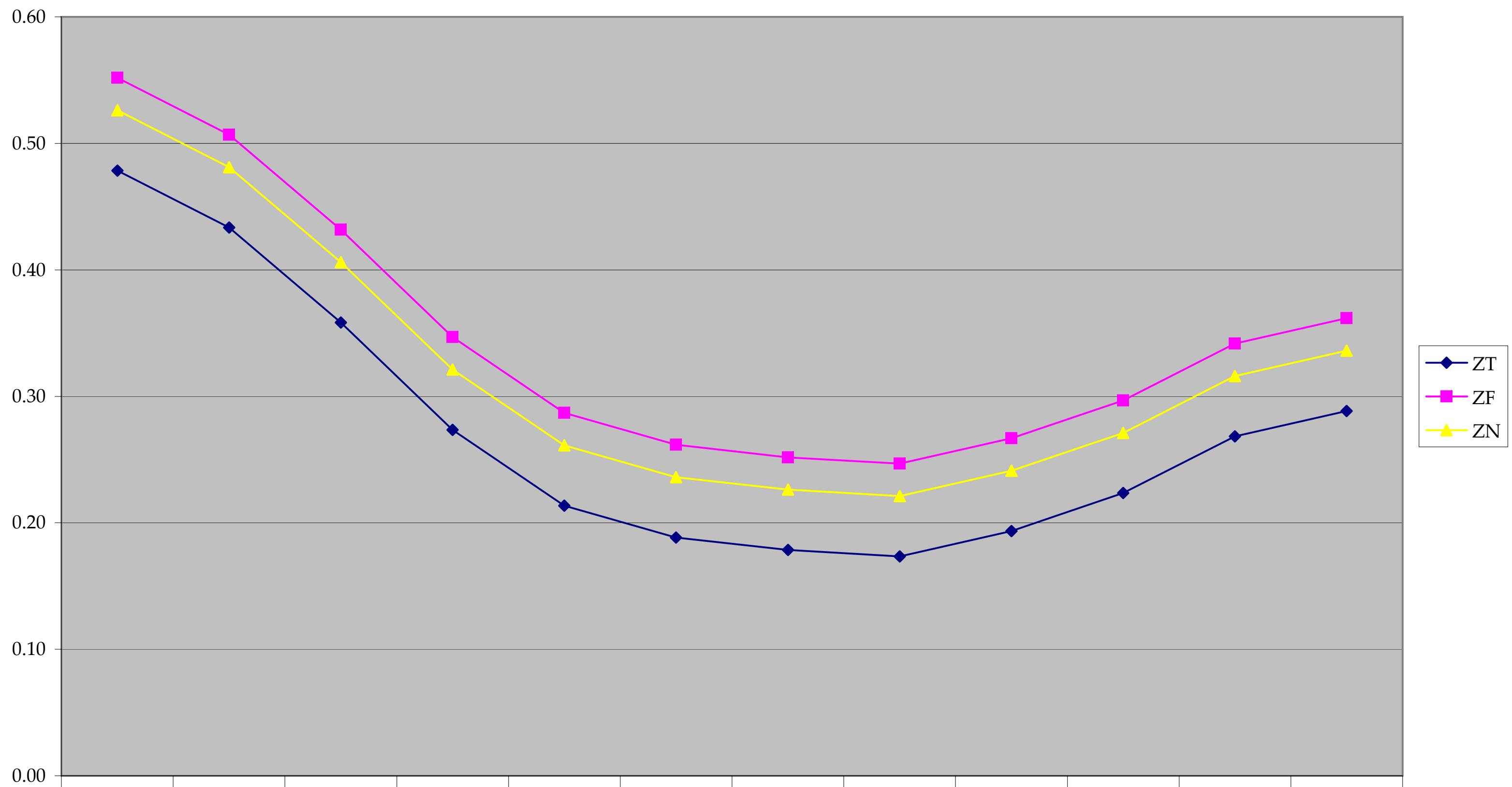
Dirty TED Curve

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	0.48	0.43	0.36	0.27	0.21	0.19	0.18	0.17	0.19	0.22	0.27	0.29
ZF	0.55	0.51	0.43	0.35	0.29	0.26	0.25	0.25	0.27	0.30	0.34	0.36
ZN	0.53	0.48	0.41	0.32	0.26	0.24	0.23	0.22	0.24	0.27	0.32	0.34

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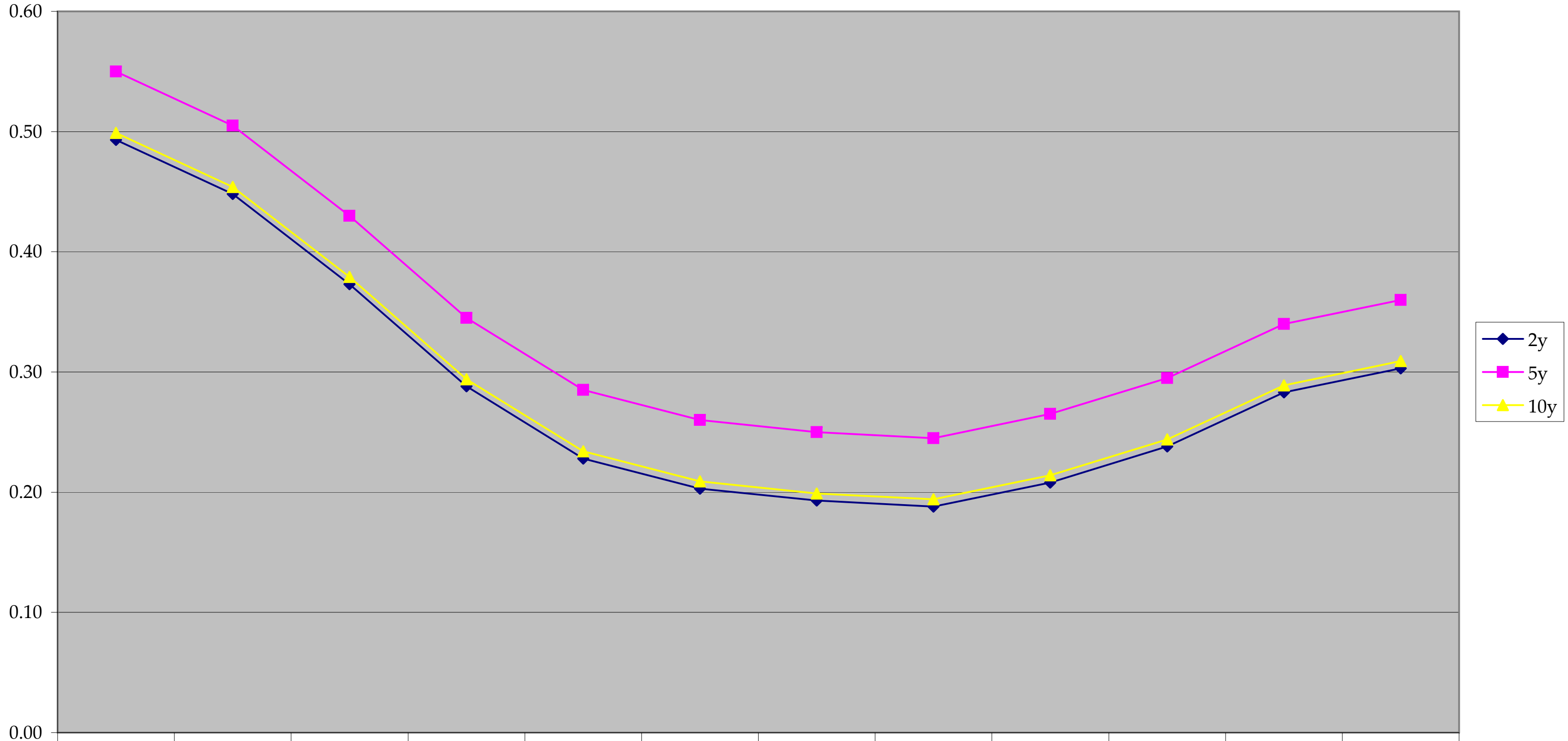
TED Curve

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	0.49	0.45	0.37	0.29	0.23	0.20	0.19	0.19	0.21	0.24	0.28	0.30
5y	0.55	0.50	0.43	0.35	0.28	0.26	0.25	0.24	0.27	0.30	0.34	0.36
10y	0.50	0.45	0.38	0.29	0.23	0.21	0.20	0.19	0.21	0.24	0.29	0.31

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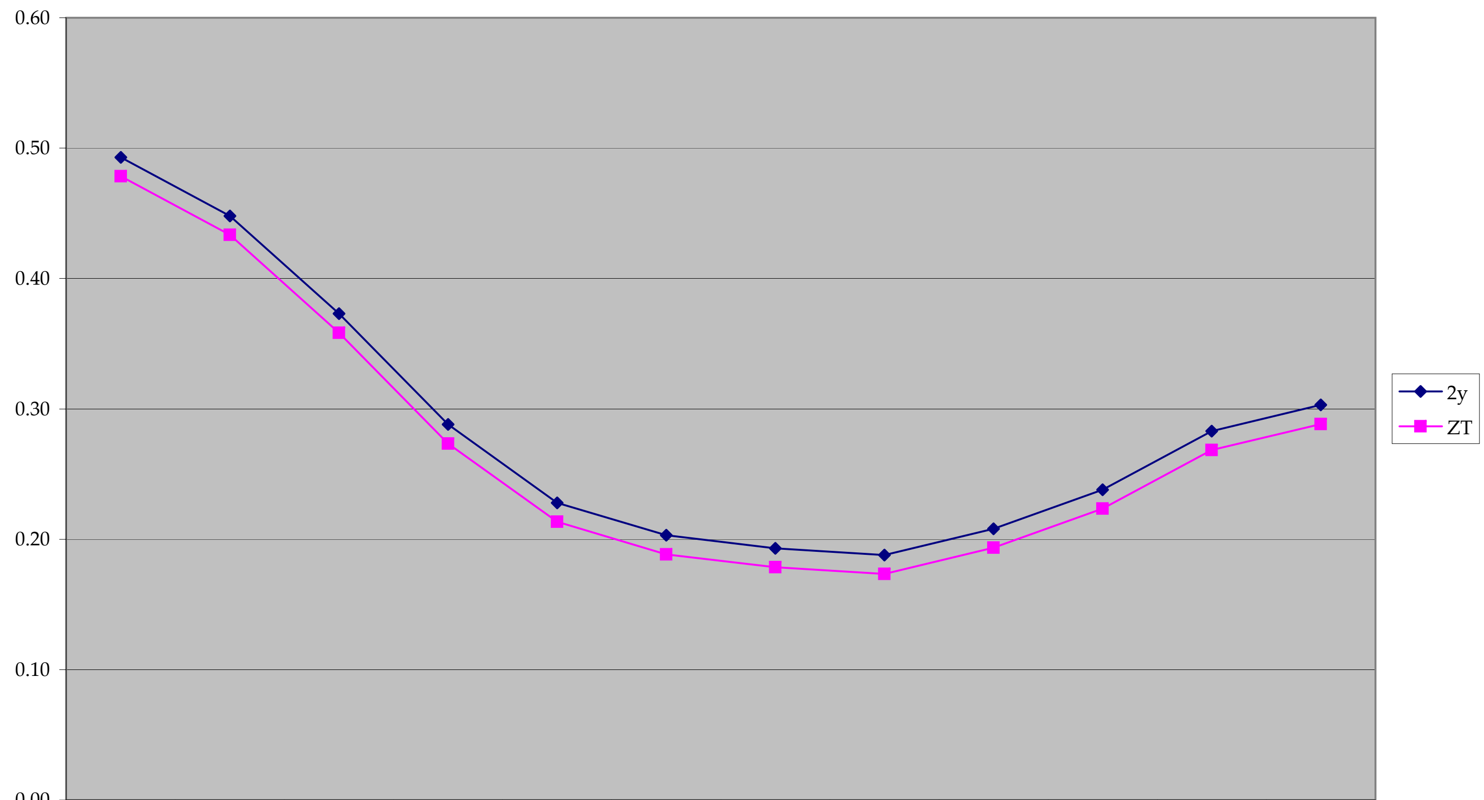
2y Basis TED Curve



	EDAM07	EDAU07	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10
2y	0.49	0.45	0.37	0.29	0.23	0.20	0.19	0.19	0.21	0.24	0.28	0.30
ZT	0.48	0.43	0.36	0.27	0.21	0.19	0.18	0.17	0.19	0.22	0.27	0.29

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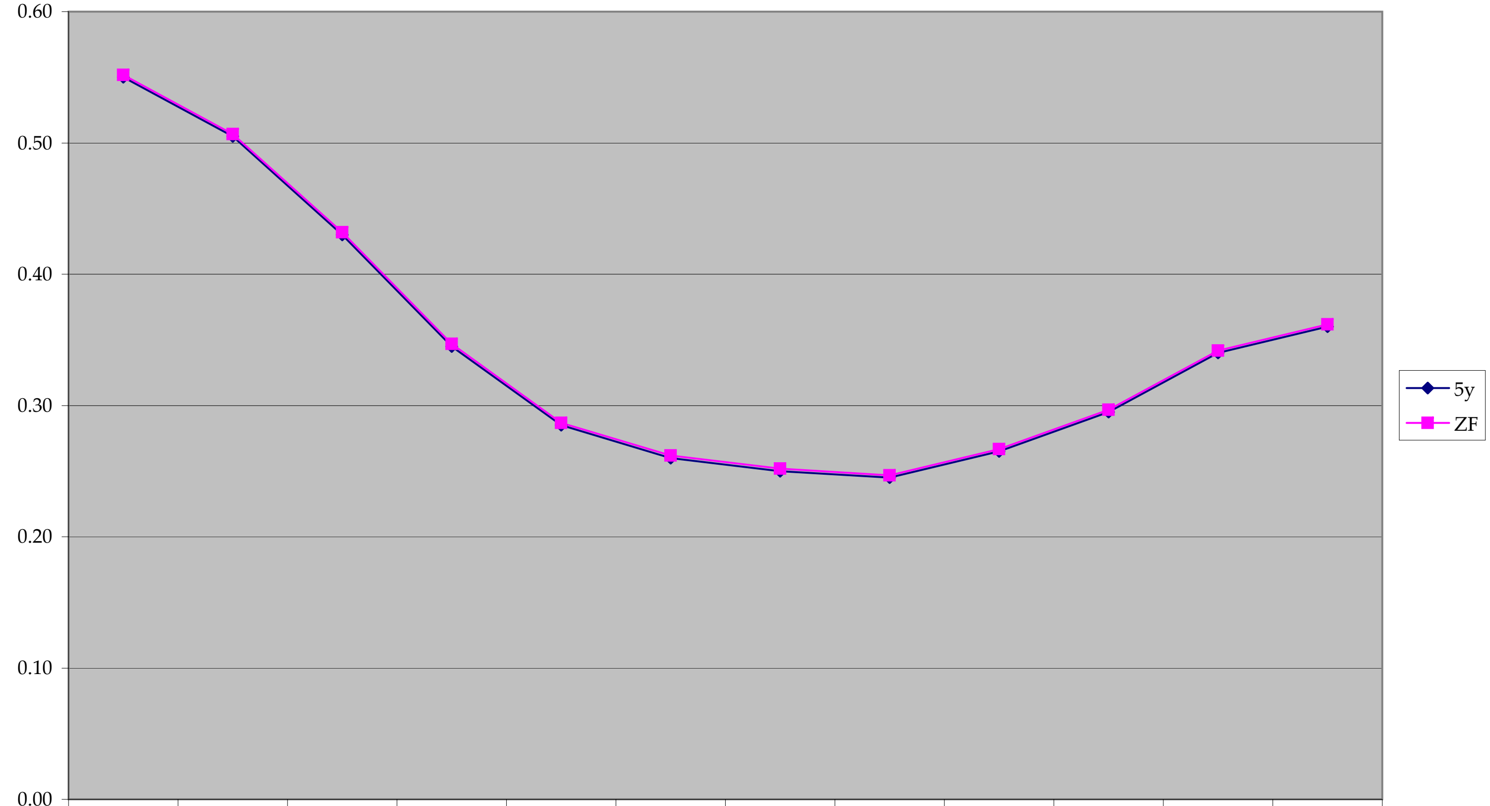
5y Basis TED Curve



	EDAM07	EDAU07	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10
5y	0.55	0.50	0.43	0.35	0.28	0.26	0.25	0.24	0.27	0.30	0.34	0.36
ZF	0.55	0.51	0.43	0.35	0.29	0.26	0.25	0.25	0.27	0.30	0.34	0.36

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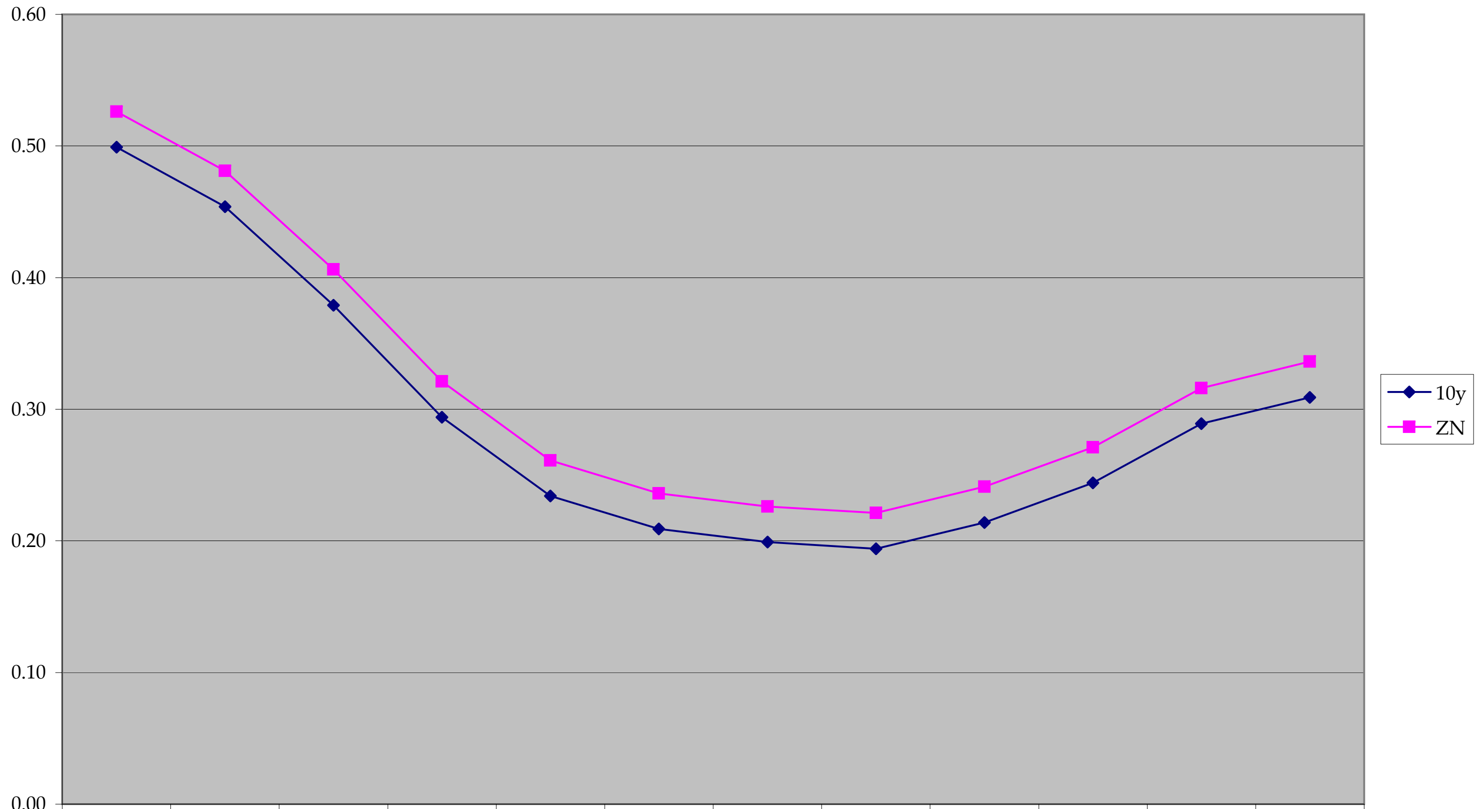
10y Basis TED Curve



	EDAM07	EDAU07	EDAZ07	EDAH08	EDAM08	EDAU08	EDAZ08	EDAH09	EDAM09	EDAU09	EDAZ09	EDAH10
10y	0.50	0.45	0.38	0.29	0.23	0.21	0.20	0.19	0.21	0.24	0.29	0.31
ZN	0.53	0.48	0.41	0.32	0.26	0.24	0.23	0.22	0.24	0.27	0.32	0.34