

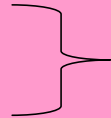
## The Morning Email: TERM TEDS & Dirty TEDS

### 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.**

		F.I. Futures and Cash			
		Last Decimal	Last 32	Last Yield*	**MDuration
Blank	ZT	102.1625	102.052	4.718	1.79
	ZF	105.4531	105.145	4.595	3.84
	ZN	107.8750	107.280	4.653	5.80
	2y	99.616	99.1970	4.696	1.87
	5y	99.569	99.1820	4.596	4.41
	10y	99.531	99.1700	4.682	7.71

\*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	94.660	5.340	45	0.123	JUN	} White Pack
	EDAU07	94.735	5.265	136	0.372	SEP	
	EDAZ07	94.885	5.115	227	0.621	DEC	
	EDAH08	95.055	4.945	318	0.871	MAR	} Red Pack
	EDAM08	95.185	4.815	409	1.120	JUN	
	EDAU08	95.240	4.760	500	1.369	SEP	
	EDAZ08	95.255	4.745	591	1.619	DEC	} Green Pack
	EDAH09	95.245	4.755	682	1.868	MAR	
	EDAM09	95.210	4.790	773	2.117	JUN	
	EDAU09	95.175	4.825	864	2.366	SEP	
	EDAZ09	95.125	4.875	955	2.616	DEC	} Green Pack
	EDAH10	95.095	4.905	1046	2.865	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](mailto:jgoulding@ghco.com)

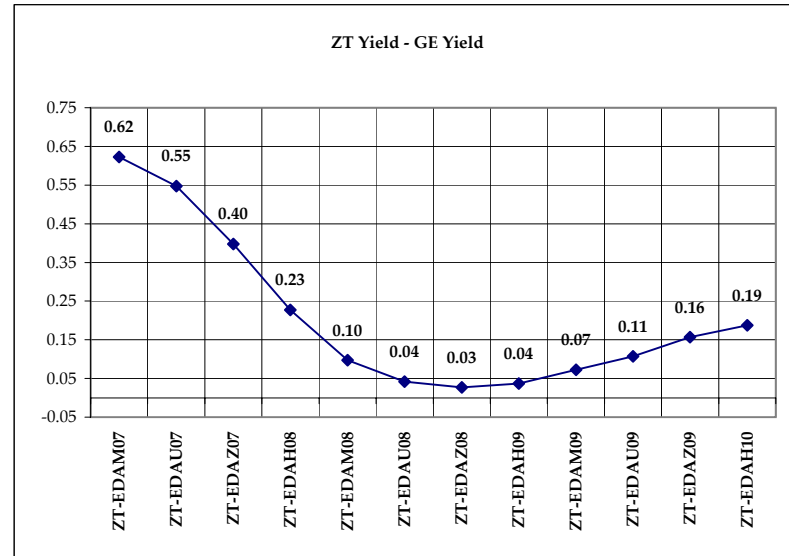
**Eurodollar Color Codes for Individual Year Strips:**

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

Dirty TED: ZT vs Eurodollar Contracts

ZT				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	7.503	0.62	ZT-EDAM07	92.813
EDAU07	7.428	0.55	ZT-EDAU07	97.759
EDAZ07	7.278	0.40	ZT-EDAZ07	97.281
EDAH08	7.108	0.23	ZT-EDAH08	97.768
EDAM08	6.978	0.10	ZT-EDAM08	98.749
EDAU08	6.923	0.04	ZT-EDAU08	99.504
EDAZ08	6.908	0.03	ZT-EDAZ08	92.813
EDAH09	6.918	0.04	ZT-EDAH09	92.813
EDAM09	6.953	0.07	ZT-EDAM09	92.813
EDAU09	6.988	0.11	ZT-EDAU09	92.813
EDAZ09	7.038	0.16	ZT-EDAZ09	92.813
EDAH10	7.068	0.19	ZT-EDAH10	84.689

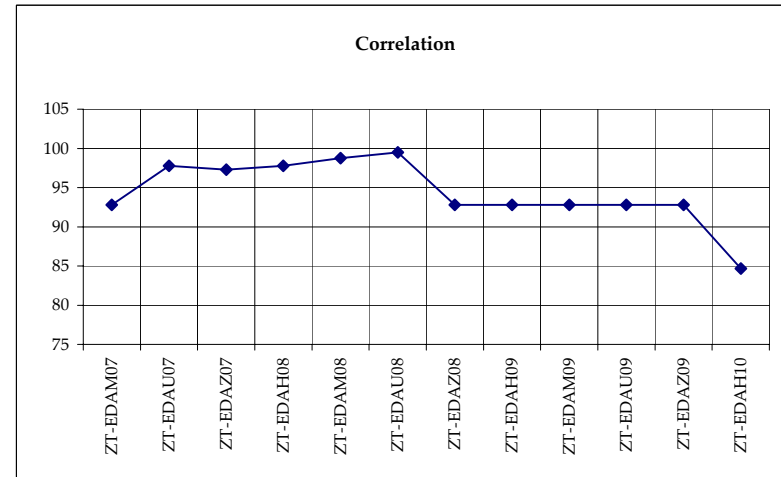
Price = Outright Decimal Price - Euro Contract Price  
 Yield = ABS(Proxy Yield - Implied Euro Contract yield)  
 \*Correlation = ED Correlation to Treasury Future over 10 days



GE Duration as

	Fraction of year	ZT Duration	Spread Duration	
EDAM07	0.123	1.79	1.67	ZT-EDAM07
EDAU07	0.372	1.79	1.42	ZT-EDAU07
EDAZ07	0.621	1.79	1.17	ZT-EDAZ07
EDAH08	0.871	1.79	0.92	ZT-EDAH08
EDAM08	1.120	1.79	0.67	ZT-EDAM08
EDAU08	1.369	1.79	0.42	ZT-EDAU08
EDAZ08	1.619	1.79	0.17	ZT-EDAZ08
EDAH09	1.868	1.79	(0.08)	ZT-EDAH09
EDAM09	2.117	1.79	(0.33)	ZT-EDAM09
EDAU09	2.366	1.79	(0.58)	ZT-EDAU09
EDAZ09	2.616	1.79	(0.82)	ZT-EDAZ09
EDAH10	2.865	1.79	(1.07)	ZT-EDAH10

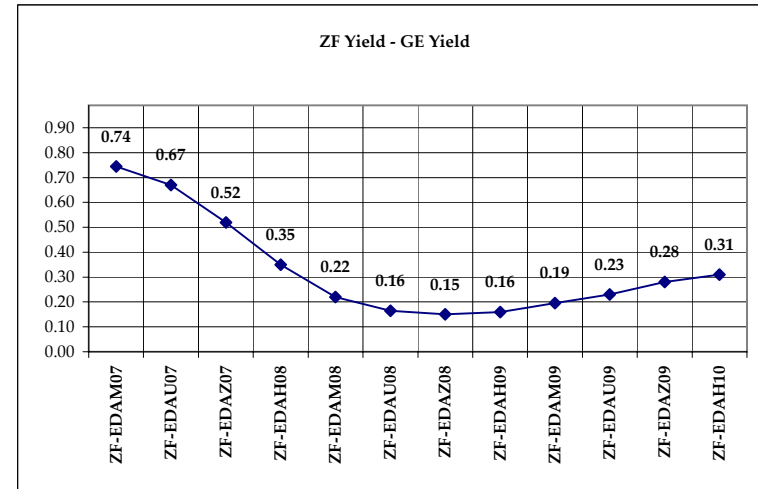
The farther away from 0 the spread duration is the riskier the trade.



Dirty TED: ZF vs Eurodollar Contracts

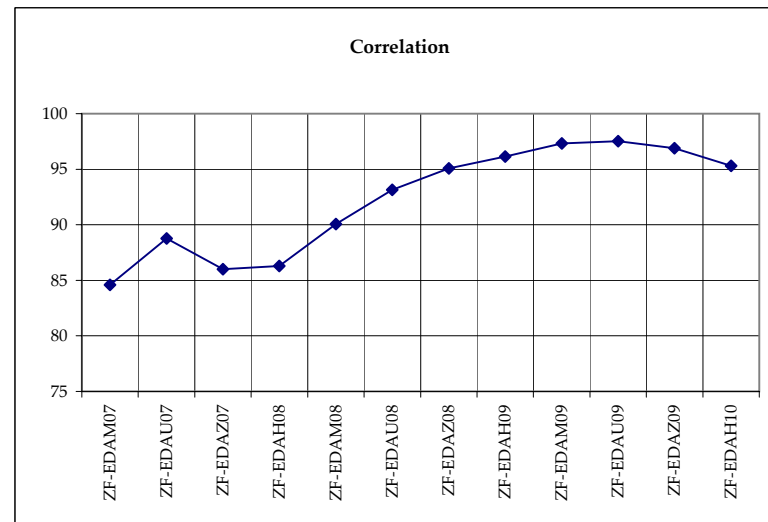
ZF				
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	10.79	0.74	ZF-EDAM07	84.580
EDAU07	10.72	0.67	ZF-EDAU07	88.757
EDAZ07	10.57	0.52	ZF-EDAZ07	85.999
EDAH08	10.40	0.35	ZF-EDAH08	86.296
EDAM08	10.27	0.22	ZF-EDAM08	90.055
EDAU08	10.21	0.16	ZF-EDAU08	93.144
EDAZ08	10.20	0.15	ZF-EDAZ08	95.071
EDAH09	10.21	0.16	ZF-EDAH09	96.142
EDAM09	10.24	0.19	ZF-EDAM09	97.328
EDAU09	10.28	0.23	ZF-EDAU09	97.519
EDAZ09	10.33	0.28	ZF-EDAZ09	96.885
EDAH10	10.36	0.31	ZF-EDAH10	95.317

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	0.123	3.84	3.72	ZF-EDAM07
EDAU07	0.372	3.84	3.47	ZF-EDAU07
EDAZ07	0.621	3.84	3.22	ZF-EDAZ07
EDAH08	0.871	3.84	2.97	ZF-EDAH08
EDAM08	1.120	3.84	2.72	ZF-EDAM08
EDAU08	1.369	3.84	2.47	ZF-EDAU08
EDAZ08	1.619	3.84	2.22	ZF-EDAZ08
EDAH09	1.868	3.84	1.97	ZF-EDAH09
EDAM09	2.117	3.84	1.72	ZF-EDAM09
EDAU09	2.366	3.84	1.47	ZF-EDAU09
EDAZ09	2.616	3.84	1.23	ZF-EDAZ09
EDAH10	2.865	3.84	0.98	ZF-EDAH10

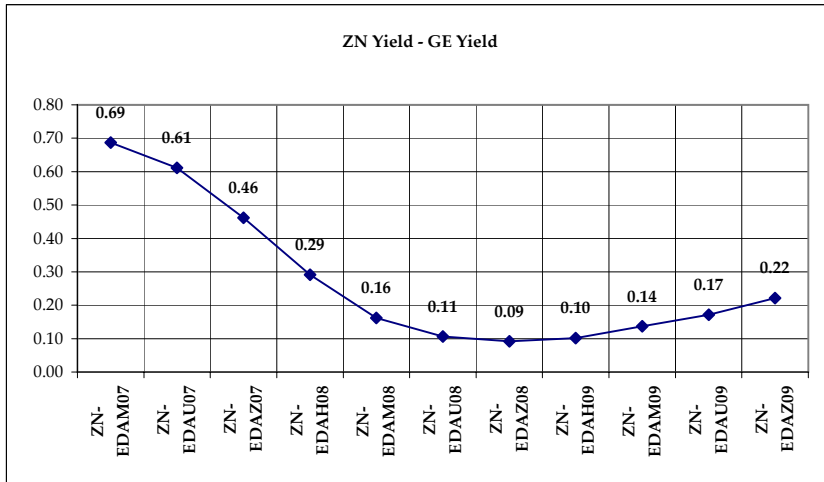
The farther away from 0 the spread duration is the riskier the trade.



Dirty TED: ZN vs Eurodollar Contracts

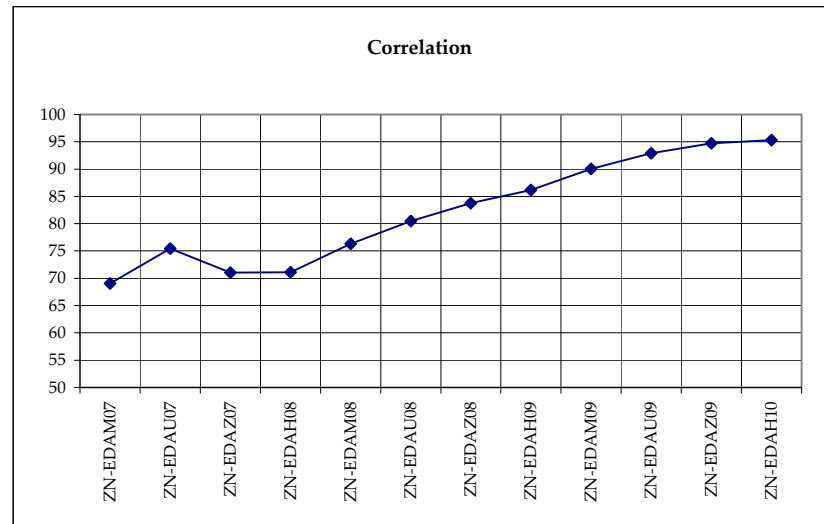
	ZN			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	13.22	0.69	ZN-EDAM07	69.04
EDAU07	13.14	0.61	ZN-EDAU07	75.43
EDAZ07	12.99	0.46	ZN-EDAZ07	71.02
EDAH08	12.82	0.29	ZN-EDAH08	71.08
EDAM08	12.69	0.16	ZN-EDAM08	76.33
EDAU08	12.64	0.11	ZN-EDAU08	80.48
EDAZ08	12.62	0.09	ZN-EDAZ08	83.77
EDAH09	12.63	0.10	ZN-EDAH09	86.18
EDAM09	12.67	0.14	ZN-EDAM09	90.04
EDAU09	12.70	0.17	ZN-EDAU09	92.90
EDAZ09	12.75	0.22	ZN-EDAZ09	94.75
EDAH10	12.78	0.25	ZN-EDAH10	95.32

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	0.123	5.80	5.67	ZN-EDAM07
EDAU07	0.372	5.80	5.42	ZN-EDAU07
EDAZ07	0.621	5.80	5.17	ZN-EDAZ07
EDAH08	0.871	5.80	4.92	ZN-EDAH08
EDAM08	1.120	5.80	4.68	ZN-EDAM08
EDAU08	1.369	5.80	4.43	ZN-EDAU08
EDAZ08	1.619	5.80	4.18	ZN-EDAZ08
EDAH09	1.868	5.80	3.93	ZN-EDAH09
EDAM09	2.117	5.80	3.68	ZN-EDAM09
EDAU09	2.366	5.80	3.43	ZN-EDAU09
EDAZ09	2.616	5.80	3.18	ZN-EDAZ09
EDAH10	2.865	5.80	2.93	ZN-EDAH10

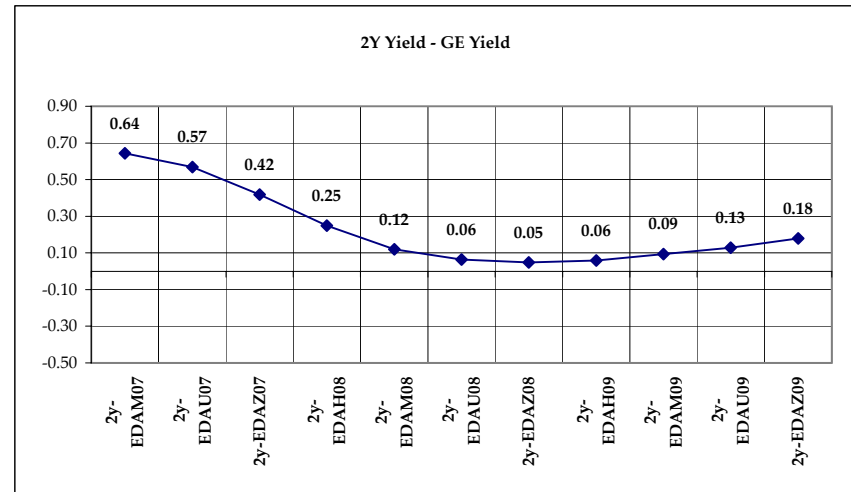
The farther away from 0 the spread duration is the riskier the trade.



TERM TED: 2y vs Eurodollar Contracts

	2y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	4.96	0.64	2y-EDAM07	80.229
EDAU07	4.88	0.57	2y-EDAU07	85.185
EDAZ07	4.73	0.42	2y-EDAZ07	82.934
EDAH08	4.56	0.25	2y-EDAH08	83.929
EDAM08	4.43	0.12	2y-EDAM08	87.327
EDAU08	4.38	0.06	2y-EDAU08	89.884
EDAZ08	4.36	0.05	2y-EDAZ08	80.229
EDAH09	4.37	0.06	2y-EDAH09	80.229
EDAM09	4.41	0.09	2y-EDAM09	80.229
EDAU09	4.44	0.13	2y-EDAU09	80.229
EDAZ09	4.49	0.18	2y-EDAZ09	80.229
EDAH10	4.52	0.21	2y-EDAH10	81.453

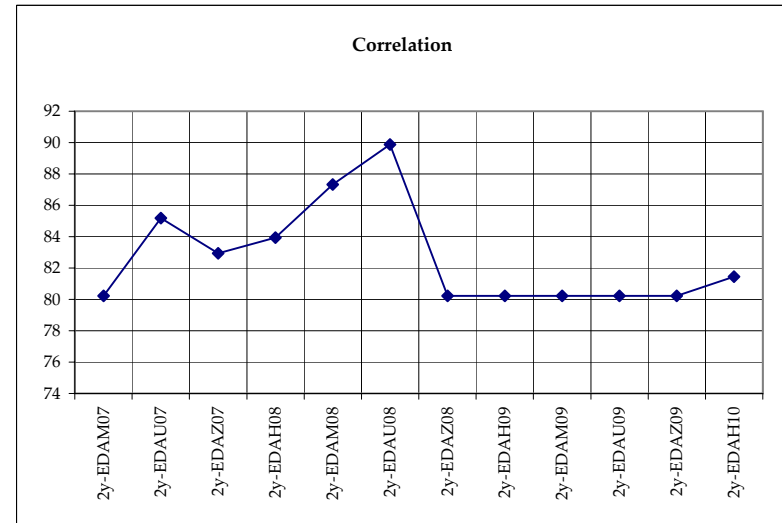
Price = Outright Decimal Price - Euro Contract Price  
 Yield = ABS(Proxy Yield - Implied Euro Contract yield)  
 \*Correlation = ED Correlation to Treasury Future over 10 days



GE Duration as Fraction of year

	2Y Duration	Spread Duration	
EDAM07	0.123	1.87	2y-EDAM07
EDAU07	0.372	1.87	2y-EDAU07
EDAZ07	0.621	1.87	2y-EDAZ07
EDAH08	0.871	1.87	2y-EDAH08
EDAM08	1.120	1.87	2y-EDAM08
EDAU08	1.369	1.87	2y-EDAU08
EDAZ08	1.619	1.87	2y-EDAZ08
EDAH09	1.868	1.87	2y-EDAH09
EDAM09	2.117	1.87	(0.25) 2y-EDAM09
EDAU09	2.366	1.87	(0.49) 2y-EDAU09
EDAZ09	2.616	1.87	(0.74) 2y-EDAZ09
EDAH10	2.865	1.87	(0.99) 2y-EDAH10

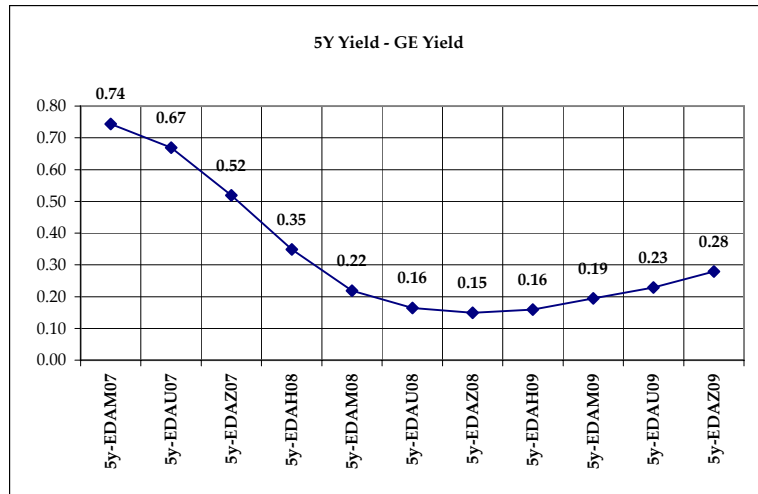
The farther away from 0 the spread duration is the riskier the trade.



TERM TED: 5y vs Eurodollar Contracts

	5y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	4.91	0.74	5y-EDAM07	69.125
EDAU07	4.83	0.67	5y-EDAU07	78.785
EDAZ07	4.68	0.52	5y-EDAZ07	74.369
EDAH08	4.51	0.35	5y-EDAH08	74.248
EDAM08	4.38	0.22	5y-EDAM08	79.184
EDAU08	4.33	0.16	5y-EDAU08	82.580
EDAZ08	4.31	0.15	5y-EDAZ08	69.125
EDAH09	4.32	0.16	5y-EDAH09	69.125
EDAM09	4.36	0.19	5y-EDAM09	69.125
EDAU09	4.39	0.23	5y-EDAU09	69.125
EDAZ09	4.44	0.28	5y-EDAZ09	69.125
EDAH10	4.47	0.31	5y-EDAH10	93.355

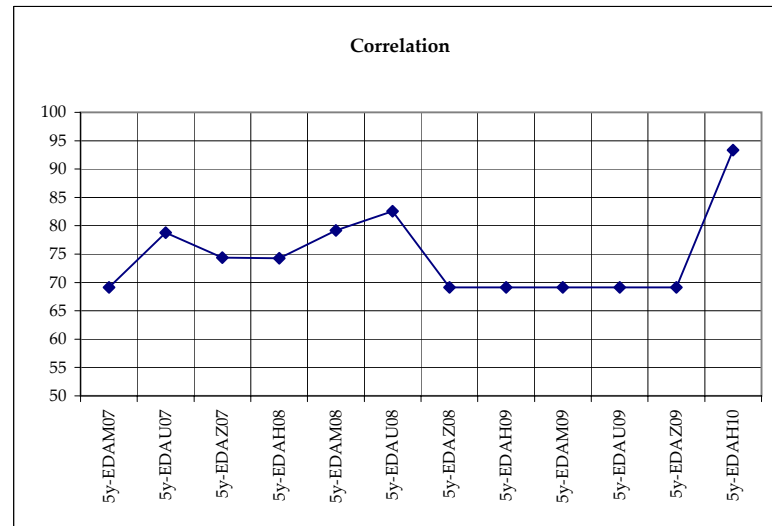
Price = Outright Decimal Price - Euro Contract Price  
 Yield = ABS(Proxy Yield - Implied Euro Contract yield)  
 \*Correlation = ED Correlation to Treasury Future over 10 days



GE Duration as Fraction of year

	5Y Duration	Spread Duration		
EDAM07	0.123	4.41	4.29	5y-EDAM07
EDAU07	0.372	4.41	4.04	5y-EDAU07
EDAZ07	0.621	4.41	3.79	5y-EDAZ07
EDAH08	0.871	4.41	3.54	5y-EDAH08
EDAM08	1.120	4.41	3.29	5y-EDAM08
EDAU08	1.369	4.41	3.04	5y-EDAU08
EDAZ08	1.619	4.41	2.79	5y-EDAZ08
EDAH09	1.868	4.41	2.54	5y-EDAH09
EDAM09	2.117	4.41	2.29	5y-EDAM09
EDAU09	2.366	4.41	2.04	5y-EDAU09
EDAZ09	2.616	4.41	1.80	5y-EDAZ09
EDAH10	2.865	4.41	1.55	5y-EDAH10

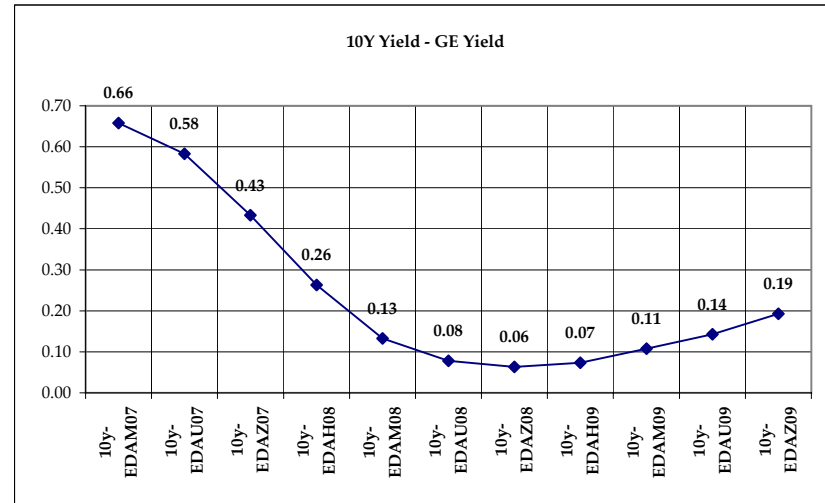
The farther away from 0 the spread duration is the riskier the trade.



**TERM TED: 10y vs Eurodollar Contracts**

	10y			
	Spread Price	Spread Yield	Spread Name	Correlation* (percent)
EDAM07	4.91	0.66	10y-EDAM07	60.155
EDAU07	4.83	0.58	10y-EDAU07	73.090
EDAZ07	4.68	0.43	10y-EDAZ07	68.252
EDAH08	4.51	0.26	10y-EDAH08	68.082
EDAM08	4.38	0.13	10y-EDAM08	73.331
EDAU08	4.33	0.08	10y-EDAU08	76.573
EDAZ08	4.31	0.06	10y-EDAZ08	60.155
EDAH09	4.32	0.07	10y-EDAH09	60.155
EDAM09	4.36	0.11	10y-EDAM09	60.155
EDAU09	4.39	0.14	10y-EDAU09	60.155
EDAZ09	4.44	0.19	10y-EDAZ09	60.155
EDAH10	4.47	0.22	10y-EDAH10	94.865

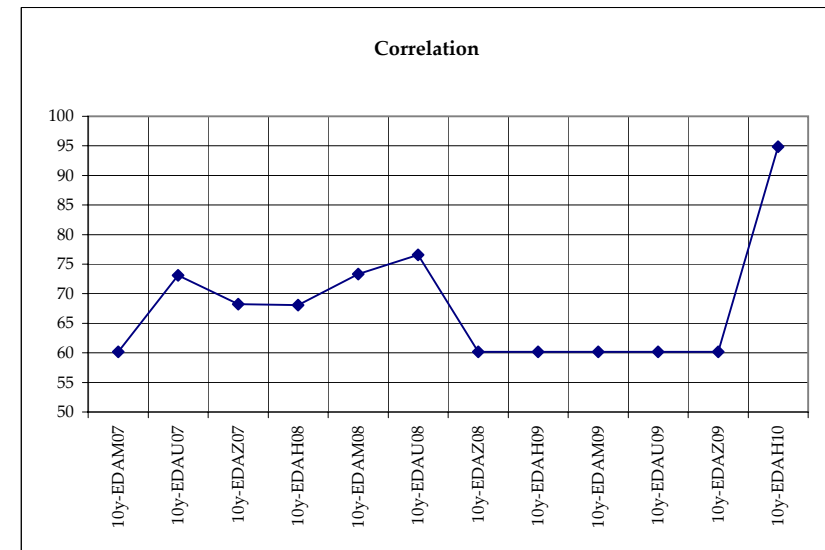
Price = Outright Decimal Price - Euro Contract Price  
 Yield = ABS(Proxy Yield - Implied Euro Contract yield)  
 \*Correlation = ED Correlation to Treasury Future over 10 days



**GE Duration as Fraction of year**

	10Y Duration	Spread Duration	
EDAM07	0.123	7.71	10y-EDAM07
EDAU07	0.372	7.71	10y-EDAU07
EDAZ07	0.621	7.71	10y-EDAZ07
EDAH08	0.871	7.71	10y-EDAH08
EDAM08	1.120	7.71	10y-EDAM08
EDAU08	1.369	7.71	10y-EDAU08
EDAZ08	1.619	7.71	10y-EDAZ08
EDAH09	1.868	7.71	10y-EDAH09
EDAM09	2.117	7.71	10y-EDAM09
EDAU09	2.366	7.71	10y-EDAU09
EDAZ09	2.616	7.71	10y-EDAZ09
EDAH10	2.865	7.71	10y-EDAH10

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



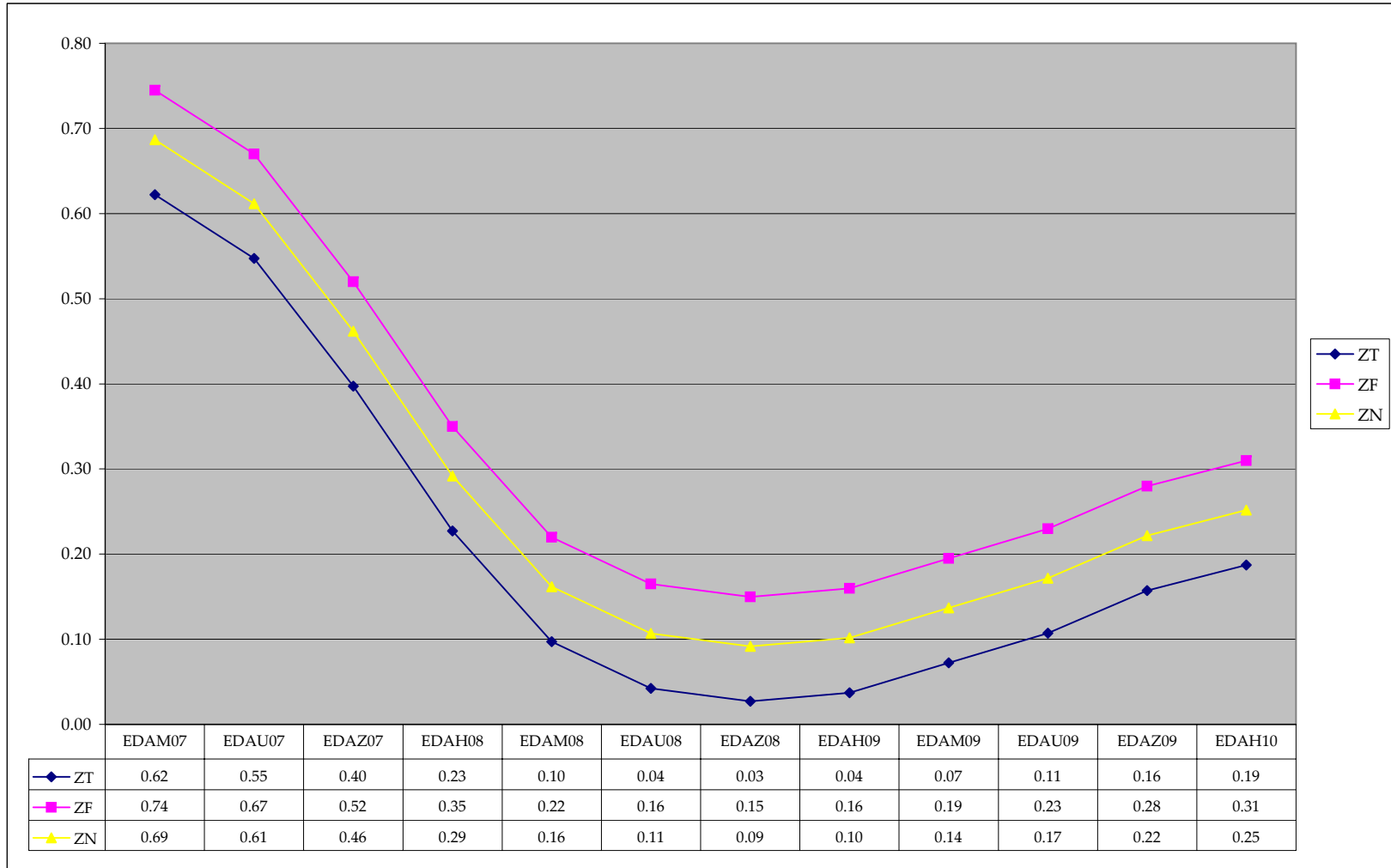
### Dirty TED Curve

5/4/2007 5:37

Page 8

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.

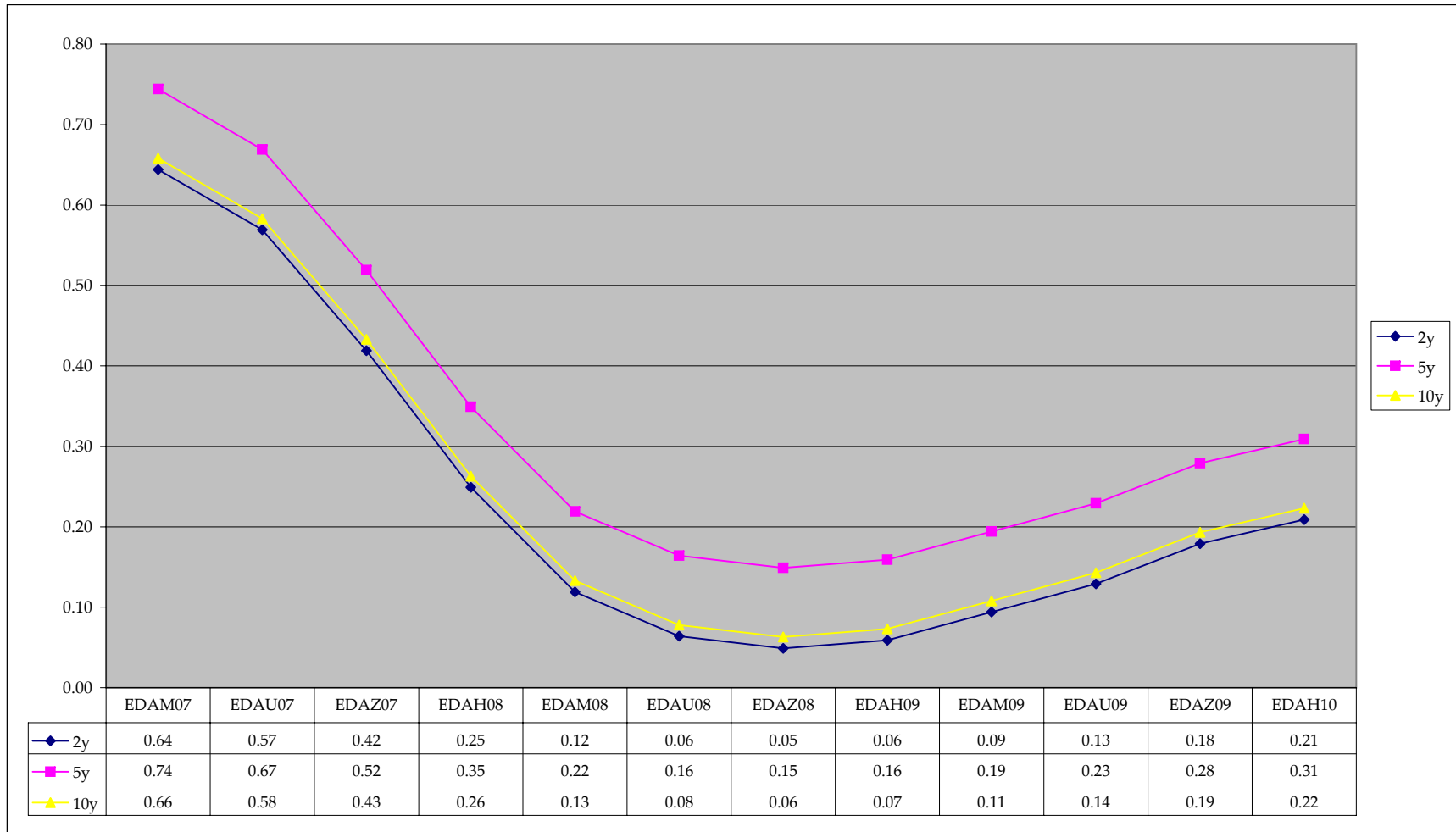


TED Curve

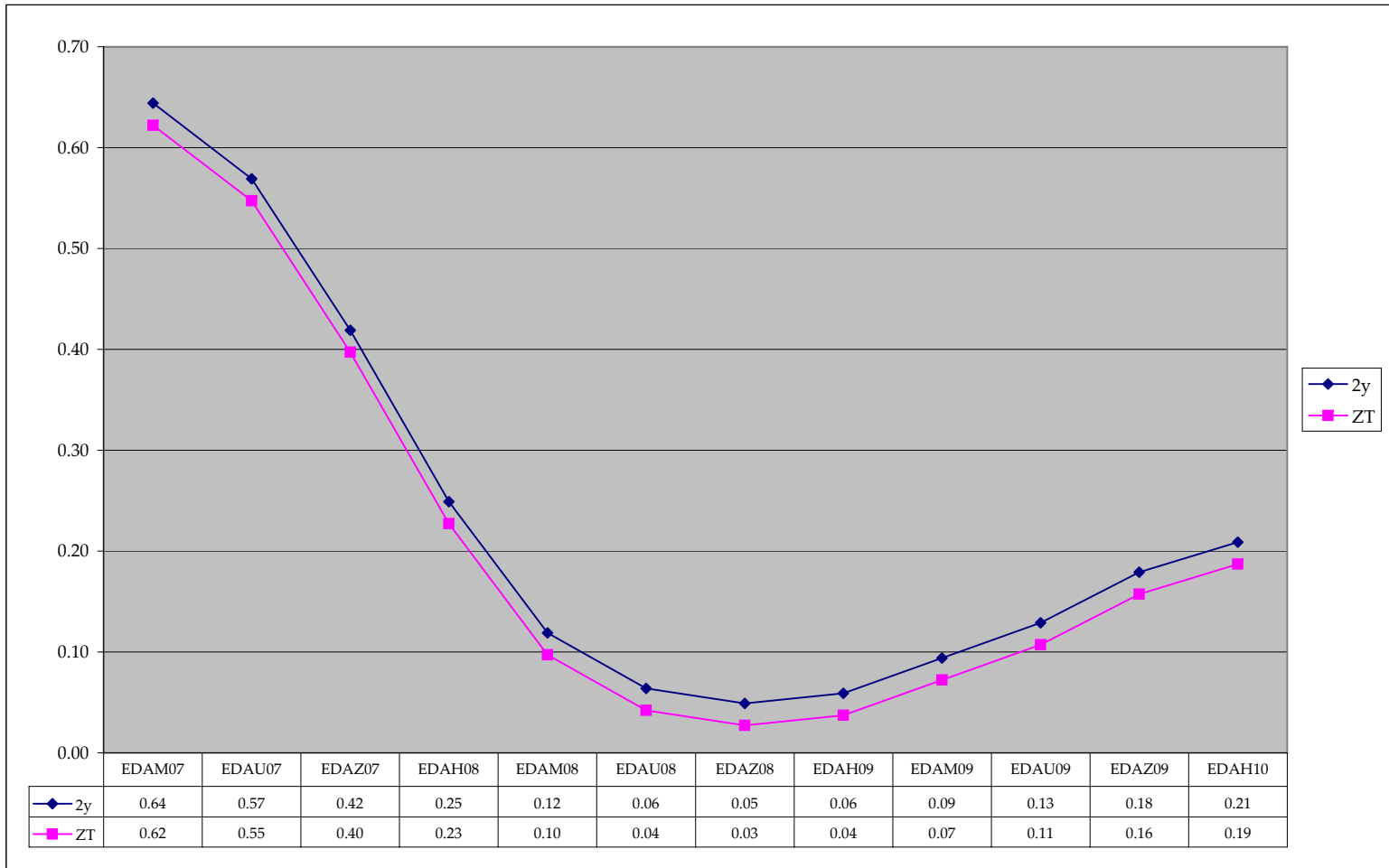
5/4/2007 5:37

Page 9

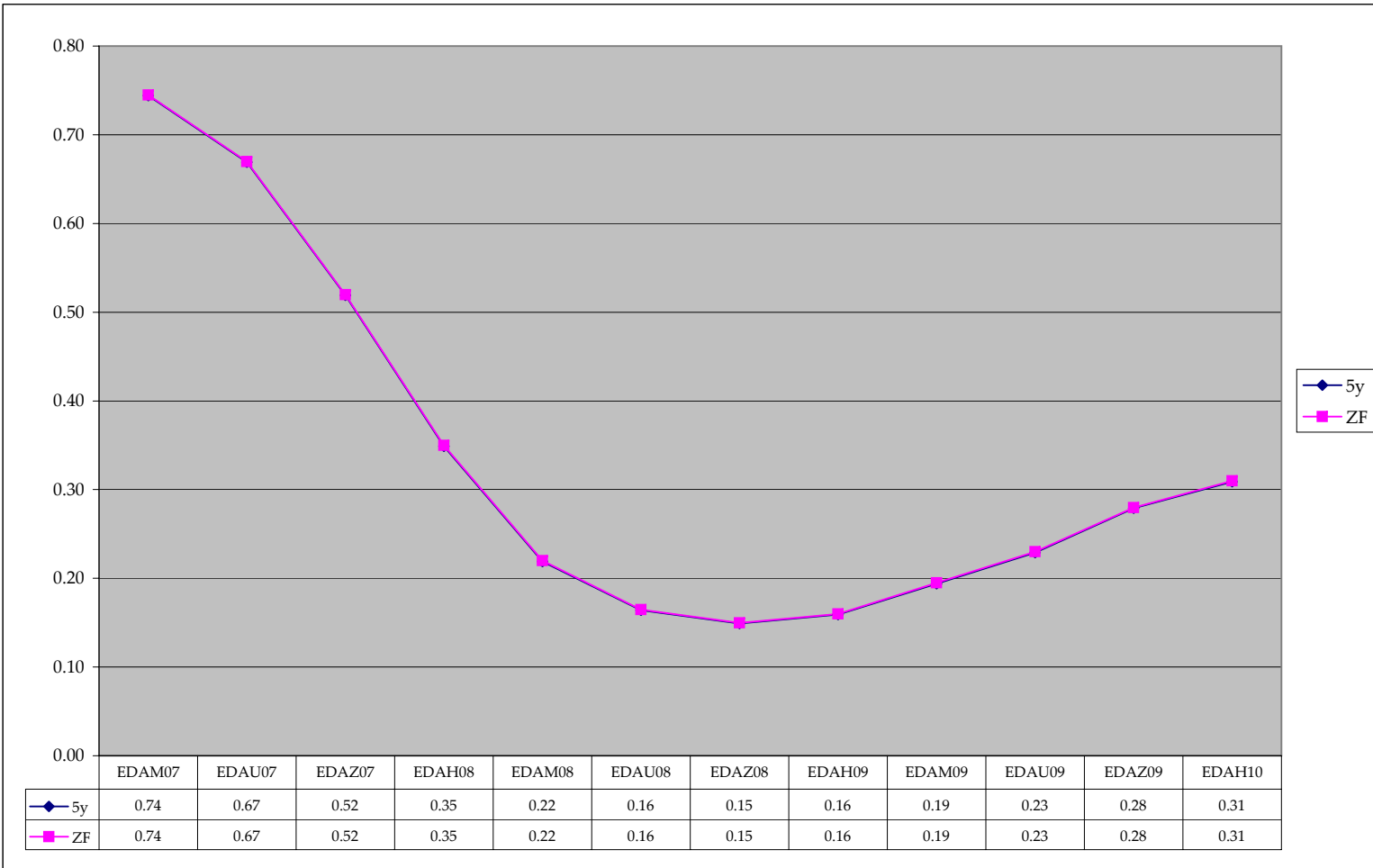
Chart values show the differences between ED contract and Treasury Cash contract. Those values can be seen in the table at the bottom of the chart. Each cash treasury is then plotted on the chart to compare differences in the durations and basis point values.



2y Basis TED Curve



5y Basis TED Curve



10y Basis TED Curve

