



## The Morning Email: Treasuries

### Table of Contents

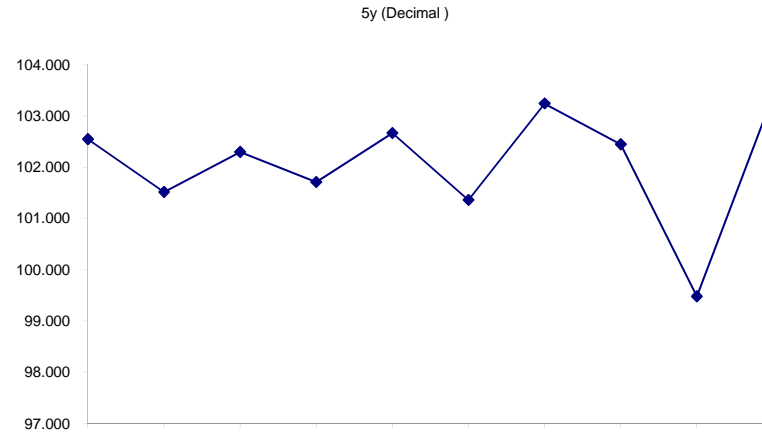
- Pg 1** Important Econ Releases, Highs & Lows
  
- Pg 2** Quotes
  
- Pg 3** Duration, DV01s, CFs
  
- Pg 4** Hedge Ratio's
  
- Pg 5** Treasury Closes: 2pm CT vs this Morning
  
- Pg 6** Cash Duration Matrix
  
- Pg 7** Tic for Tic & Box for Box Matrix
  
- Pg 8** Key Money Rate, Spreads, Swaps, Packs
  
- Pg 9** Libor, Fed Funds (OIS), Repo, SONIA & EONIA Rates

Want something added? Let me know:  
[jgoulding@ghco.com](mailto: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.

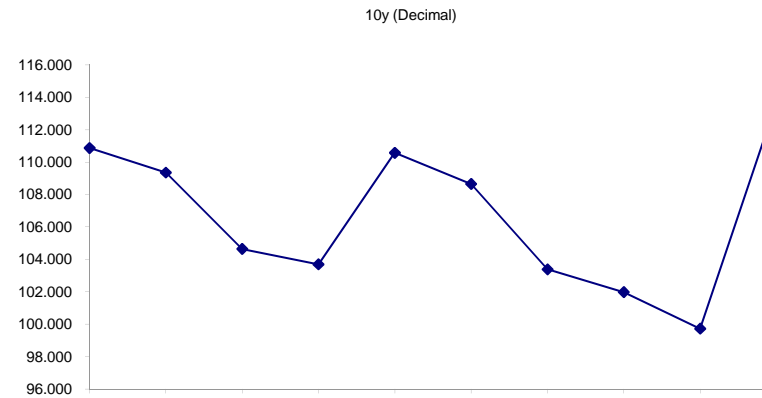
**Economic Releases (32nds)**

	5y	10y	ZNZ8	ZBZ8	Date
Non-farm High	102.1750	110.280	124.205	135.025	12/5/2008
Non-farm Low	101.1650	109.115	122.260	132.280	12/5/2008
FOMC High	103.0975	112.115	126.285	137.155	12/16/2008
FOMC Low	102.0200	110.150	124.215	135.100	12/16/2008
PPI High	102.2125	110.185	124.175	135.215	12/13/2008
PPI Low	101.1150	108.210	122.250	132.090	12/13/2008
CPI High	103.0975	112.115	121.215	137.155	12/16/2008
CPI Low	102.0200	110.150	120.210	135.100	12/16/2008
Auction Price	99.1539	99.233	0.000		
Last Trade	103.1270	113.230	130.020	139.130	12/19/2008



**Auctions - 32nds**

	2 y	3 y	5y	10y	30y
Auction Price	99.308	101.272	99.154	99.233	98.074
Auction Yield Stop	1.269	1.245	2.110	3.783	4.609
Actual Auction Date	11/24/2008	11/10/2008	11/25/2008	11/12/2008	8/7/2008



**Notes:**

- 1) Cash and futures are adjusted for roll.
- 2) Release times are from release to 2pm cdt
- 3) {Dec08 to Mch09 Futures roll: ZF = (91); ZN = (70 ); ZB = (32) [tics]}
- 4)\*CPI was same as FOMC day

		32 nds					
	Last	Net	High	Low	Open	Volume	Sym Name
TUAH9	108.2420	(0.002)	108.2570	108.2250	108.2520	2,162	2y Fut
FVAH9	119.3020	(0.032)	120.0400	119.2870	120.0170	5,829	5y Fut
TYAH9	127.2250	(0.095)	128.0750	127.2200	127.3100	22,312	10y Fut
USAH9	141.0300	(0.140)	141.1300	140.2500	141.0350	4,076	30y Fut
	Last	Net	High	Low	Open	Volume	Sym Name
BUS02P	101.0320	(0.500)	101.0370	101.0200	101.0300	na	2y Cash
BUS03P	100.1750	(1.500)	100.2020	100.1620	100.1800	na	3y Cash
BUS05P	103.1650	(1.700)	103.1900	103.1250	103.1450	na	5y Cash
BUS10P	115.0100	(0.500)	115.0400	114.2450	114.2600	na	10y Cash
BUS30P	140.1200	(24.000)	140.1600	139.2650	140.1200	na	30y Cash
	Last	Net	High	Low	Open	Volume	Sym Name
BUS02Y	0.680	0.600	0.705	0.648	0.690	na	2y Yield
BUS03Y	0.954	(3.500)	1.090	0.753	0.873	na	3y Yield
BUS05Y	1.265	1.600	1.382	1.196	1.301	na	5y Yield
BUS10Y	2.061	0.000	2.129	2.016	2.076	na	10y Yield
BUS30Y	2.542	2.900	2.568	2.514	2.516	na	30y Yield

	M Duration	DV01 32	DV01 \$	DV01 Box	CF	
<b>30y</b>	18.36	8.52	\$2,664	17.05	n/a	<b>30y</b>
<b>10y</b>	8.37	3.19	\$997	6.38	n/a	<b>10y</b>
<b>5y</b>	4.70	1.59	\$497	6.36	n/a	<b>5y</b>
<b>3y</b>	2.82	0.94	\$295	3.77	n/a	<b>3y</b>
<b>2y</b>	1.91	0.63	\$196	2.51	n/a	<b>2y</b>
<b>ZB</b>	10.87	5.28	\$165	5.28	0.7950	<b>ZB</b>
<b>ZN</b>	6.85	2.98	\$93	5.97	0.8357	<b>ZN</b>
<b>ZF</b>	4.14	1.67	\$52	3.34	0.8392	<b>ZF</b>
<b>ZT</b>	1.92	0.71	\$22	2.84	0.9152	<b>ZT</b>

DV01 32, said differently, is "how many TICS are in a basis point?".

Example, If **ZN** moves 1~basis point, then, it's moved 2.51 tics (Today, 12/01/08, the value in the box is 2.51).

Since ZN trades in half tics, then, 5.03 boxes = 1 basis point in ZN. (Again, today, 12/01/08, the value in the box is 5.03). Of course the values will be different as you look at this. But, they won't be that much different. So, I think you can get the idea I'm trying to get across.

#### Notes

CF = Conversion Factor

MDuration = Modified Macaulay Duration

MDuration & DV01s for Futures are based on proxy issue (CTD)

DV01 Box = Dollar Value of 1 basis point move per Box

## US Financial Futures

	ZB	ZN	ZF	ZT
ZB		1.771	3.161	3.853
ZN	0.565		1.785	2.176
ZF	0.316	0.560		1.219
ZT	0.260	0.460	0.820	

## US Treasuries vs US Financial Futures

	2y	3y	5y	10y
ZB	1.19	1.80	3.01	6.04
ZN	2.10	3.19	5.33	10.70
ZF	3.75	5.70	9.51	19.10
ZT	4.58	6.94	11.60	23.28

## US Treasuries

	2y	3y	5y	10y
2y		1.517	2.534	5.087
3y	0.592		1.686	3.386
5y	0.395	0.599		2.008
10y	0.197	0.298	0.498	

Note: If you are looking at a matrix with Eurex products then those ratios are pulled from Bloomberg and are static. Meaning, I only update them once in a while but always on rolls. I calculate the other matrixes, with US products, everyday

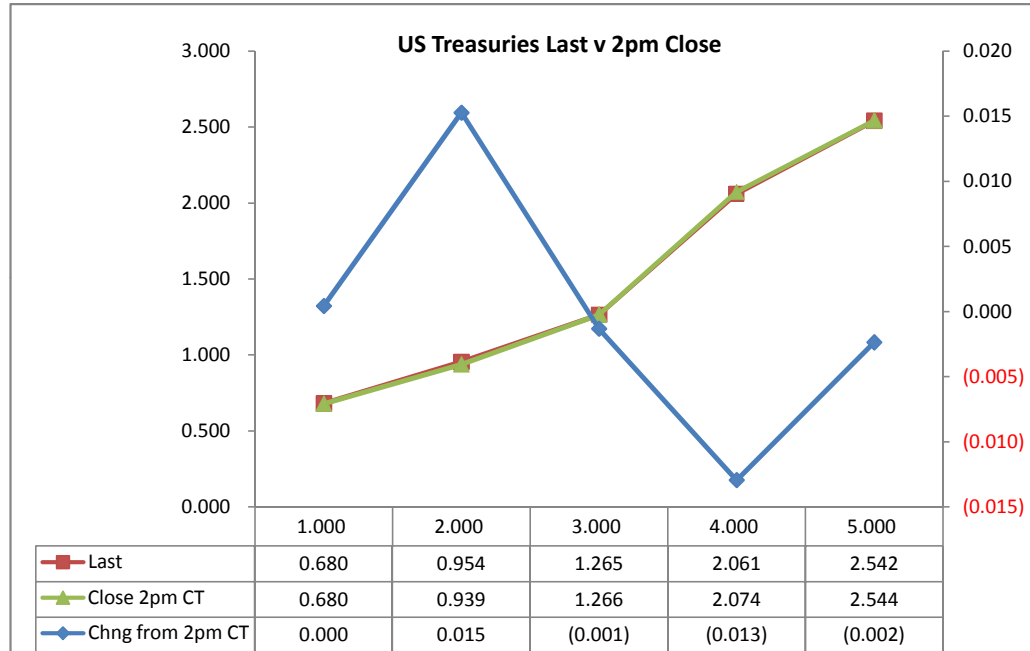
Treasury Closes: 2pm CT vs this Morning

	Cpn	Mty	Close 32	Close	Last	Chng from 2pm	Basis		Cash Roll	Futrues Roll	Close 32	Last	
							Close	Last					
2y	1.250	11/30/10	101.0325	0.680	0.680	0.000	53.33	50.12			108.2075	108.2420	TUAH9
3y	1.125	12/15/11	100.1750	0.939	0.954	0.015							
5y	2.000	11/30/13	103.1625	1.266	1.265	(0.001)	88.67	91.48			120.0125	119.3020	FVAH9
10y	3.750	11/15/18	114.3000	2.074	2.061	(0.013)	254.97	265.91			128.0000	127.225	TYAH9
30y	#N/A	5/15/38	140.1050	2.544	2.542	(0.002)	893.52	902.58			141.1250	141.030	USAH9

Curve Spreads			
	Close bps	Last bps	Chng from
			2pm Cls
2/3	25.9	27.4	1.5
2/5	58.6	58.4	(0.2)
3/5	32.7	31.0	(1.7)
2/10	139.4	138.1	(1.3)
3/10	113.5	110.7	(2.8)
5/10	80.8	79.6	(1.2)
2/30	186.4	186.1	(0.3)
3/30	160.5	158.7	(1.8)
5/30	127.8	127.7	(0.1)
10/30	47.0	48.1	1.1

O/N News:

Jim Goulding, jgoulding@ghco.com



	Last	Chng on Day
Emini SP	884.25	(8.25)
Crude Oil	41.52	(0.15)
Gold	83.20	(28.60)
EURUSD	139.59	(2.90)
USDJPY	89.37	(0.09)



The Morning Email: U.S. Treasuries

Notes:

Basis = (Cash Decimal - (Futures Decimal \* CF))\*32

MDuration for Curve Spreads:

Longer duration minus shorter duration

32 = price is quoted in 32nds

**What is this? (1):**  
 2yr cash has X% duration of 5yr cash.

**Cash Duration Matrix**

	2	5	10	30
2	100%	0%		
5	41%	100%		
10	23%	56%	100%	0%
30	10%	26%	46%	100%

**What is this? (2):**  
 - 2yr cash has DV01 of X\$.  
 - Multiply the 2yr DV01 by the percent duration to come up with what the 2yrs DV01 SHOULD be compared to the 5yr.

**Cash Matrix [DV01 x Duration]**

	2	5	10	30
2	\$196			
5	\$202	\$497		
10	\$228	\$560	\$997	
30	\$278	\$681	\$1,214	\$2,664

**What is this? (3):**  
 - Now you can see the over/under value, based on the DV01, from contract to contract. In this example we are looking at the 2yr compared to the 5yr.

**Cash Matrix [DV01 over / (under) valued]**

	2	5	10	30
2	\$196			
5	(\$6)	\$497		
10	(\$32)	(\$63)	\$997	
30	(\$82)	(\$185)	(\$217)	\$2,664

Or you can look at the over/under value as a percentage instead of dollar terms.

**Cash Matrix [DV01 over / (under) as %]**

	2	5	10	30
2	0.0%			
5	-3.2%	0.0%		
10	-14.1%	-11.2%	0.0%	
30	-29.4%	-27.1%	-17.9%	0.0%

## Tic for Tic Matrix

	2y	5y	10y	30y
ZT	0.89	2.24	4.50	12.03
ZF	0.38	0.95	1.91	5.10
ZN	0.21	0.53	1.07	2.86
ZB	0.12	0.30	0.60	1.61

	2y	5y	10y	30y
2y		2.53	5.09	13.59
5y	0.39		2.01	5.36
10y	0.20	0.50		2.67
30y	0.07	0.19	0.37	

	ZT	ZF	ZN	ZB
ZT		2.36	4.21	7.45
ZF	0.42		1.79	3.16
ZN	0.24	0.56		1.77
ZB	0.13	0.32	0.56	

## Box for Box Matrix

	2y	5y	10y	30y
ZT	0.89	2.24	9.01	24.05
ZF	0.38	0.95	3.82	10.20
ZN	0.42	1.07	1.07	2.86
ZB	0.48	0.60	1.21	1.61

	2y	5y	10y	30y
2y		2.53	2.54	6.79
5y	0.39		0.50	2.68
10y	0.39	1.99		2.67
30y	0.15	0.37	0.37	

	ZT	ZF	ZN	ZB
ZT		2.36	8.42	14.90
ZF	0.42		1.79	6.32
ZN	0.12	0.56		1.77
ZB	0.07	0.16	0.56	



	Libor\$ <sup>1</sup>	Repo Rt <sup>6</sup>
0/N	0.110	#VALUE!
1week	0.260	#VALUE!
2week	0.525	#VALUE!

	Libor\$ <sup>1</sup>	Tbill	CP <sup>2</sup>
1M	0.474	0.035	1.200
3M	1.498	0.010	1.740
6M	1.845	0.144	2.320

	TSY	Swp	Swp Rate <sup>5</sup>	ED Pks <sup>3</sup>	TSY - ED Pk <sup>4</sup>
2y	0.680	84.50	1.53	1.840	1.159
5y	1.265	72.50	1.99	2.493	1.228
10y	2.061	22.25	2.28	#VALUE!	#VALUE!

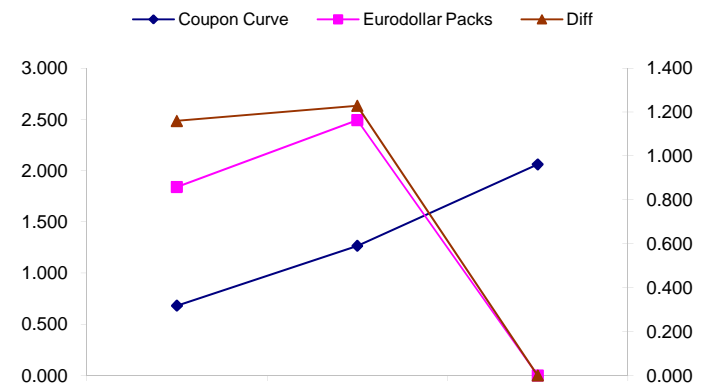
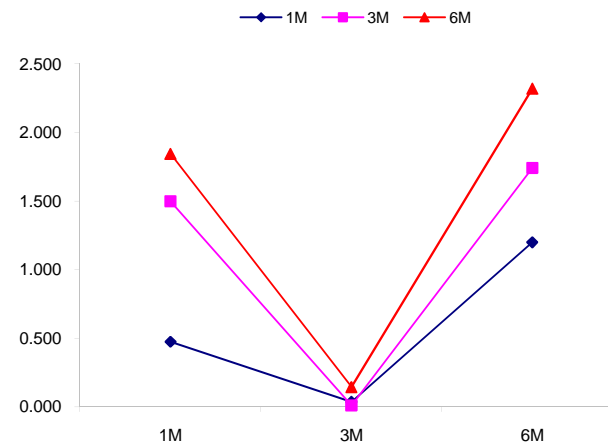
<u>2/5</u>	<u>Rd/Blu Pk</u>	<u>Diff</u>
58.4	65.3	6.9
<u>2/10</u>	<u>Rd/Gld Pk</u>	<u>Diff</u>
138.1	#VALUE!	#VALUE!
<u>5/10</u>	<u>Blu/Gld Pk</u>	<u>Diff</u>
79.6	#VALUE!	#VALUE!

Red pack / Blue pack is a 2/5 proxy  
 Red pack / Gold pack is a 2/10 proxy  
 Blue pack / Gold pack is a 5/10 proxy

"Swap spreads are essentially a measure of the difference between buying a safe government bond and making a riskier loan to a bank"  
 --WSJ

**Notes:**

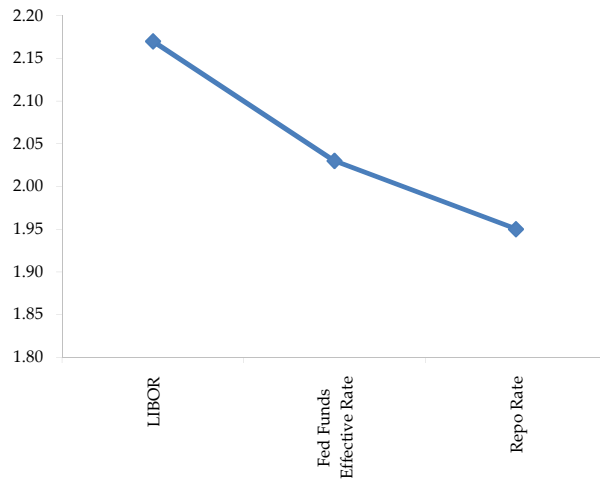
- 1) Quoted in US Dollars
- 2) CP = Commercial Paper
- 3) ED Pks are colored for pack identifications. Example, the red pack is a 2-yr proxy and is colored red.
- 4) TSY yield minus ED Pk yield
- 5) Swap divided by 100 + TSY yield gives swap rate in basis points.
- 6) Repo Rt quotes is for overnight General Collateral



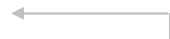
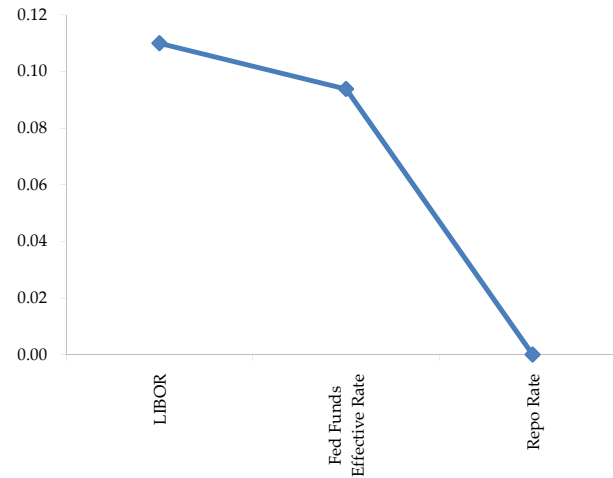
	Last	Chng	Term	Asset Type
USDLIBON	0.110	(0.0025)	Overnight	LIBOR
TUSFFRON	0.094	0.0000	Overnight	Fed Funds Effective Rate
TUSRPOON	#VALUE!	#VALUE!	Overnight	Repo Rate
TEONIA01M	2.076	0.0090	1 month	Euribor OIS Rate
TEONIA03M	1.811	(0.0780)	3 month	Euribor OIS Rate
TSONIA01M	1.543	0.0200	1 month	Sterling OIS Rate
TSONIA03M	1.270	0.0210	3 month	Sterling OIS Rate
TUSOIS01M	0.181	0.0130	1 month	USD OIS Rate
TUSOIS03M	0.192	(0.0430)	3 month	USD OIS Rate

Example, below

Overnight Rates -EXAMPLE



Overnight Rates



A 'normal' lending curve looks like the chart to the left. That is, the Libor should be a bit higher than Fed Funds Effective rate (FFER), and the FFER should be a bit higher than the Repo Rate.

The best time to view this page is on the closing email I send in the afternoon. The Fed Funds effective rate and the repo rate rarely update until after I send the morning email.

