



## The Morning Email: Treasuries

### Table of Contents

- Pg 1** Important Econ Releases, Highs & Lows
  
- Pg 2** Quotes
  
- Pg 3** Duration, DV01s, Curve Spreads, CF
  
- 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
  
- Pg 10** Global 10yr Spreads over US Treasuries

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.

### Important Econ Releases, Highs & Lows

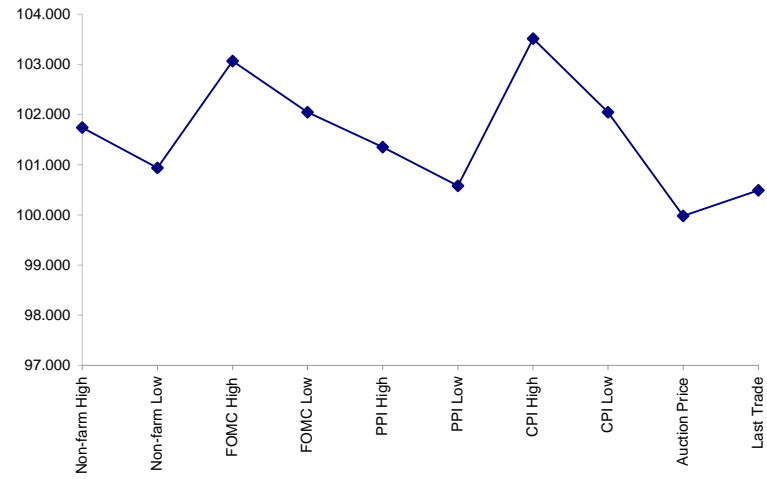
#### Economic Releases (32nds)

	5y	10y	ZNZ8	ZBZ8	Date
Non-farm High	101.2375	103.255	117.240	120.080	9/5/2008
Non-farm Low	100.3000	102.260	116.200	119.010	9/5/2008
FOMC High	103.0225	105.165	118.225	122.270	9/16/2008
FOMC Low	102.0150	104.055	117.200	121.170	9/16/2008
PPI High	101.1125	103.090	116.280	120.095	9/12/2008
PPI Low	100.1850	102.065	115.250	118.170	9/12/2008
CPI High	103.1650	106.105	119.115	123.265	9/16/2008
CPI Low	102.0150	104.055	117.200	121.170	9/16/2008
Auction Price	99.3141	99.124	na	na	
Last Trade	100.1570	100.015	112.135	114.305	10/14/2008 5:51

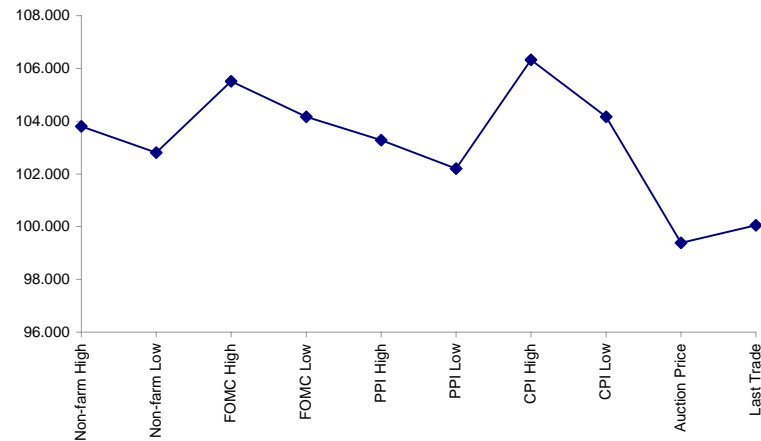
#### Auctions - 32nds

	2 y	5y	10y	30y
Auction Price	99.776	99.314	99.124	98.074
Auction Yield Stop	2.115	3.129	4.075	4.609
Actual Auction Date	9/24/2008	9/25/2008	8/6/2008	8/7/2008

5y (Decimal)



10y (Decimal)



**Notes:**

- 1) Cash and futures are adjusted for roll.
- 2) Release times are from release to 2pm cdt
- 3) {Dec08 to Mch08 Futures roll: ZF = ( ); ZN = ( ); ZB = ( ) [tics]}

## Quotes

		32 nds					
	Last	Net	High	Low	Open	Volume	Sym Name
TUAZ8	106.220	0.020	106.245	106.170	106.187	23,214	2y Fut
FVAZ8	111.205	0.042	111.265	111.075	111.127	39,037	5y Fut
TYAZ8	112.135	0.055	112.205	112.000	112.065	73,751	10y Fut
USAZ8	114.305	(0.03)	115.135	114.140	114.265	17,084	30y Fut
	Last	Net	High	Low	Open	Volume	Sym Name
BUS02P	100.070	(0.157)	100.100	100.030	100.045	na	2y Cash
BUS05P	100.145	(1.042)	100.235	100.077	100.100	na	5y Cash
BUS10P	100.010	(0.310)	100.100	99.110	99.200	na	10y Cash
BUS30P	103.120	(2.300)	104.190	103.050	104.160	na	30y Cash
	Last	Net	High	Low	Open	Volume	Sym Name
BUS02Y	1.882	0.296	1.903	1.578	1.61	na	2y Yield
BUS05Y	3.002	0.247	3.079	2.75	2.764	na	5y Yield
BUS10Y	3.992	0.118	4.093	3.87	3.88	na	10y Yield
BUS30Y	4.283	0.156	4.316	4.127	4.13	na	30y Yield

	M Duration	DV01 32	DV01 \$	DV01 Box	CF	
30y	16.20	5.40	\$1,687	10.80	n/a	30y
10y	8.01	2.58	\$807	5.16	n/a	10y
5y	4.56	1.48	\$464	5.94	n/a	5y
2y	1.91	0.61	\$192	2.45	n/a	2y
ZB	10.37	4.01	\$125	4.01	0.7943	ZB
ZN	6.17	2.26	\$70	4.51	0.8568	ZN
ZF	4.08	1.51	\$47	3.02	0.8826	ZF
ZT	1.91	0.66	\$21	2.63	0.9344	ZT

Yield Curve Spreads

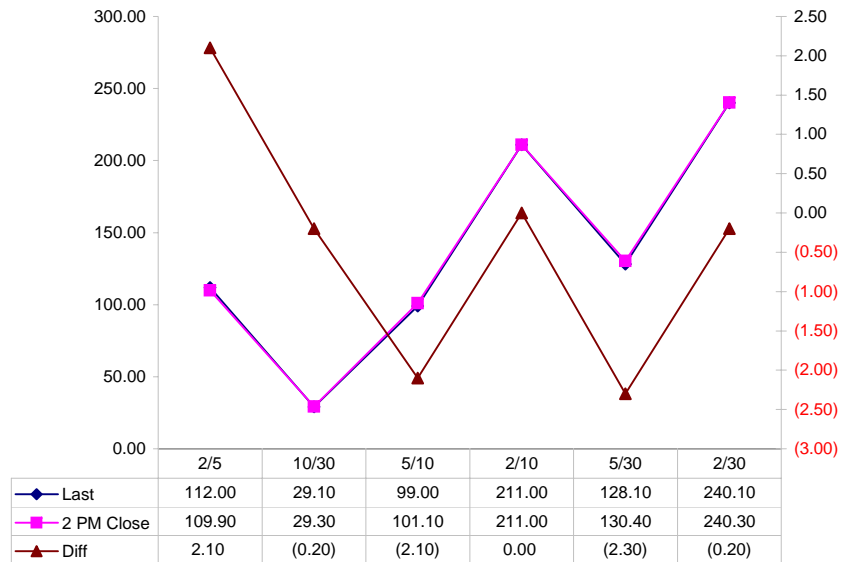
	Last	2pm close	Diff
2/5	112.00	109.90	2.10
10/30	29.10	29.30	(0.20)
5/10	99.00	101.10	(2.10)
2/10	211.00	211.00	0.00
5/30	128.10	130.40	(2.30)
2/30	240.10	240.30	(0.20)

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

Example, If ZN moves 1~basis point, then, it's moved 2.38 tics (Today, 06/25/08, the value in the box is 2.38).

Since ZN trades in half tics, then, 4.80 boxes = 1 basis point in ZN. (Again, today, 08/07/08, the value in the box is 4.80). 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.

Curve Spreads vs 2pm close



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 / Eurex Bond

	ZB	ZN	ZF	ZT
<b>Bund (U)</b>	0.932	1.559	2.499	2.834
<b>Bobl (U)</b>	0.531	0.883	1.360	1.570
<b>Shatz (U)</b>	0.204	0.339	0.610	0.693

## US Financial Futures

	ZB	ZN	ZF	ZT
<b>ZB</b>		1.777	2.652	3.053
<b>ZN</b>	0.563		1.493	1.718
<b>ZF</b>	0.377	0.670		1.151
<b>ZT</b>	0.328	0.582	0.869	

## Eurex Bonds

	Bund (H)	Bobl (H)	Shatz (H)
<b>Bund (H)</b>		1.8	4.1
<b>Bobl (H)</b>	0.6		2.3
<b>Shatz (H)</b>	0.2	0.4	

## US Treasuries v US Financial Futures

	2y	5y	10y	30y
<b>ZB</b>	1.53	3.76	6.44	13.47
<b>ZN</b>	2.72	6.69	11.45	23.93
<b>ZF</b>	4.06	9.98	17.08	35.72
<b>ZT</b>	4.67	11.49	19.67	#NUM!

## US Treasuries v Eurex Bonds

	2y	5y	10y	30y
<b>Bund (U)</b>	1.6	3.9	7.1	14.7
<b>Bobl (U)</b>	2.9	6.9	12.6	25.9
<b>Shatz (U)</b>	6.7	16.0	29.1	59.8

## US Treasuries

	2y	5y	10y	30y
<b>2y</b>		2.459	4.209	8.801
<b>5y</b>	0.418		1.758	3.676
<b>10y</b>	0.238	0.584		2.091
<b>30y</b>	0.114	0.279	0.478	

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	2.000	9/30/10	100.1750	1.717	1.882	0.165	29.33	16.96			106.2000	106.2200	TUAZ8
5y	3.125	9/30/13	101.1350	2.816	3.002	0.186	66.15	62.61			112.1825	111.2050	FVAZ8
10y	4.000	8/15/18	101.130	3.827	3.992	0.165	132.67	119.16			113.165	112.135	TYAZ8
30y	4.500	5/15/38	106.145	4.120	4.283	0.163	446.14	393.17			116.150	114.305	USAZ8

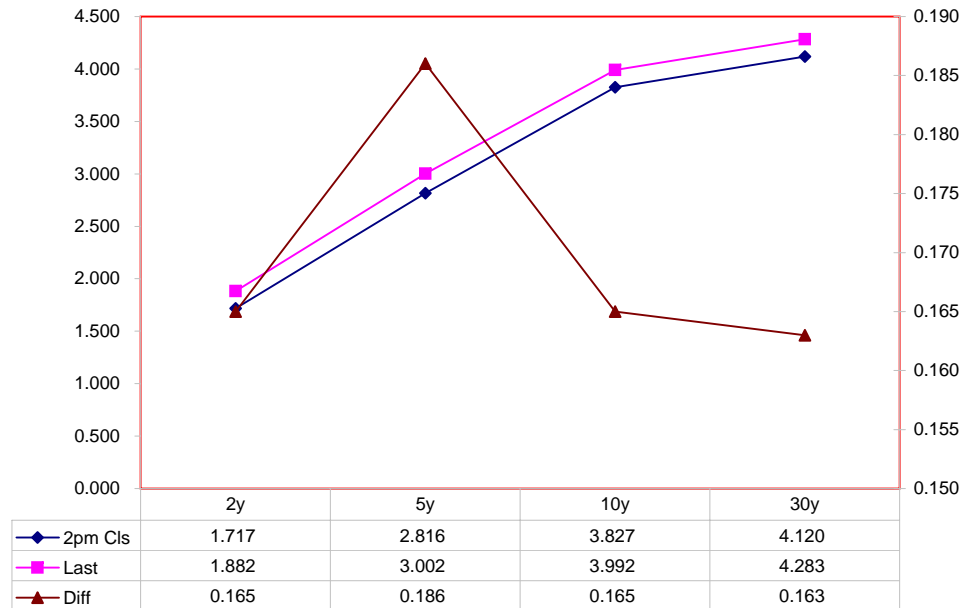
Curve Spreads

	Close bps	Last bps	Chng from
			2pm Cls
2/5	109.9	112.0	2.1
5/10	101.1	99.0	(2.1)
10/30	29.3	29.1	(0.2)
2/10	211.0	211.0	0.0
5/30	130.4	128.1	(2.3)
2/30	240.3	240.1	(0.2)

	Last	Chng on Day
Emini SP	1046.25	29.50
Crude Oil	84.04	2.85
Gold	846.80	4.30
EURUSD	137.32	1.49
USDJPY	102.61	0.57

News:

US Treasuries Last v 2pm Close



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%			
5	42%	100%		
10	24%	57%	100%	
30	12%	28%	49%	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	\$192			
5	\$198	\$471		
10	\$192	\$459	\$807	
30	\$199	\$475	\$834	\$1,687

**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				
5	(\$6)			
10	(\$1)	\$12		
30	(\$7)	(\$3)	(\$27)	

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				
5	-3.01%			
10	-0.39%	2.70%		
30	-3.67%	-0.68%	-3.29%	

## Tic for Tic Matrix

	2y	5y	10y	30y
ZT	0.93	2.30	3.93	8.22
ZF	0.41	1.00	1.71	3.57
ZN	0.27	0.67	1.14	2.39
ZB	0.15	0.38	0.64	1.35

	2y	5y	10y	30y
2y		2.46	4.21	8.80
5y	0.41		1.71	3.58
10y	0.24	0.58		2.09
30y	0.11	0.28	0.48	

	ZT	ZF	ZN	ZB
ZT		2.30	3.44	6.11
ZF	0.43		1.49	2.65
ZN	0.29	0.67		1.78
ZB	0.16	0.38	0.56	

## Box for Box Matrix

	2y	5y	10y	30y
ZT	0.93	2.30	7.87	16.45
ZF	0.41	1.00	3.42	7.14
ZN	0.54	1.34	1.14	2.39
ZB	0.61	0.75	1.29	1.35

	2y	5y	10y	30y
2y		2.46	2.10	4.40
5y	0.41		0.43	1.79
10y	0.48	2.34		2.09
30y	0.23	0.56	0.48	

	ZT	ZF	ZN	ZB
ZT		2.30	6.87	12.21
ZF	0.43		1.49	5.30
ZN	0.15	0.67		1.78
ZB	0.08	0.19	0.56	

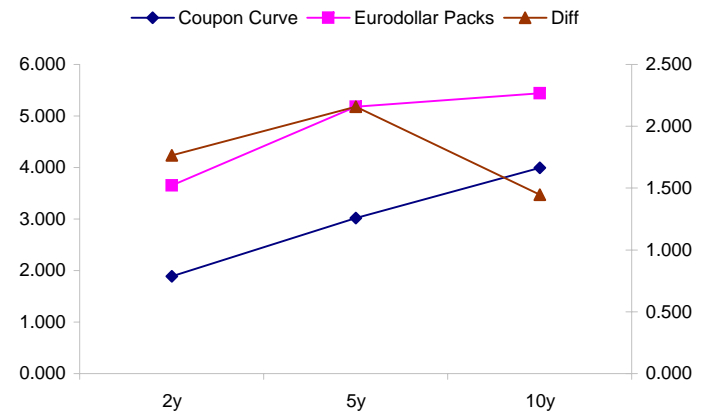
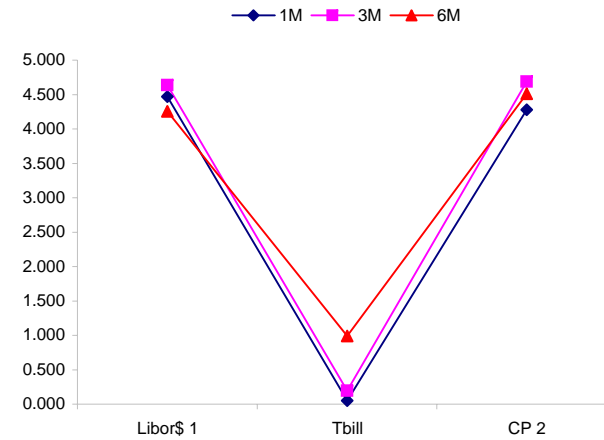
	Libor\$ <sup>1</sup>	Repo Rt <sup>6</sup>			
0/N	2.181	0.100			
1week	4.075	0.750			
2week	4.203	0.750			
	Libor\$ <sup>1</sup>	Tbill	CP <sup>2</sup>		
1M	4.469	0.053	4.280		
3M	4.635	0.195	4.690		
6M	4.255	0.993	4.510		
	TSY	Swp	Swp Rate <sup>5</sup>	ED Pks <sup>3</sup>	TSY - ED Pk <sup>4</sup>
2y	1.885	126.25	3.15	3.650	1.765
5y	3.019	107.25	4.09	5.178	2.159
10y	3.996	53.75	4.53	5.442	1.446

<u>2/5</u>	<u>Rd/Blu Pk</u>	<u>Diff</u>	
113.3	152.8	39.4	Red pack / Blue pack is a 2/5 proxy
<u>2/10</u>	<u>Rd/Gld Pk</u>	<u>Diff</u>	
211.0	179.2	-31.8	Red pack / Gold pack is a 2/10 proxy
<u>5/10</u>	<u>Blu/Gld Pk</u>	<u>Diff</u>	
97.7	26.4	-71.3	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:**

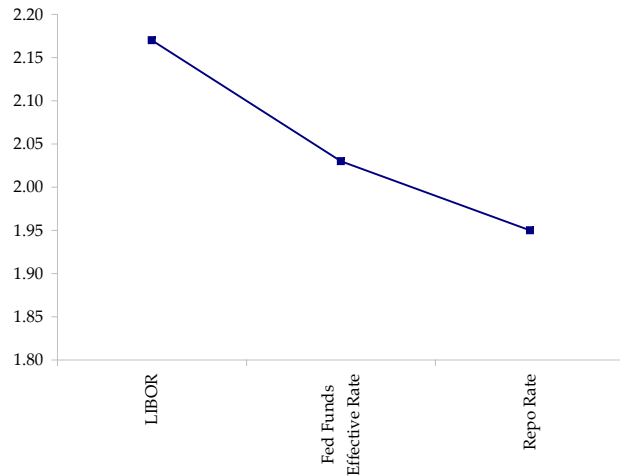
- 1) Quoted in US Dollars
- 2) CP = Commercial Paper
- 3) ED Pks are colored for pack identifications. Example, the red pack is a 2-yr proxy and is colored red.
- 4) TSY yield minus ED Pk yield
- 5) Swap divided by 100 + TSY yield gives swap rate in basis points.
- 6) Repo Rt quotes is for overnight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



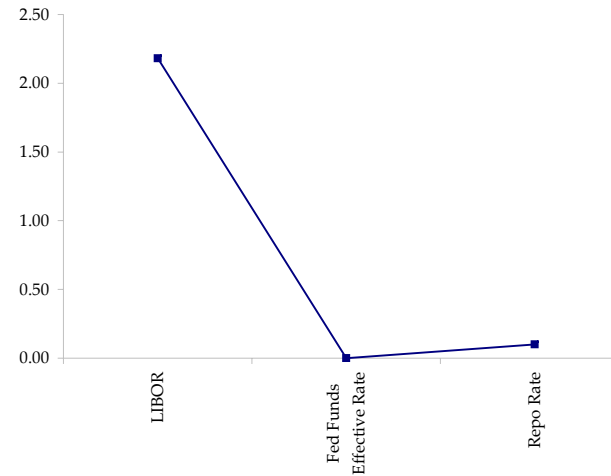
	Last	Chng	Term	Asset Type
USDLIBON	2.181	(0.2875)	Overnight	LIBOR
TUSFFRON	#VALUE!	#VALUE!	Overnight	Fed Funds Effective Rate
TUSRPOON	0.100	0.0000	Overnight	Repo Rate
TEONIA01M	3.711	0.0270	1 month	Euribor OIS Rate
TEONIA03M	3.545	0.0550	3 month	Euribor OIS Rate
TSOONIA01M	4.440	0.0140	1 month	Sterling OIS Rate
TSOONIA03M	4.207	0.0490	3 month	Sterling OIS Rate
TUSOIS01M	1.256	0.0440	1 month	USD OIS Rate
TUSOIS03M	1.229	0.0540	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.**

Global 10yr Spreads over US Treasuries

Country	8/25/2008	9/2/2008	9/8/2008	9/17/2008	9/19/2008	9/29/2008	10/8/2008	10/9/2008	10/13/2008	Last
Australia	201.6	195.3	211.6	217.1	181.6	205.3	124.9	129.9	166	124.5
France	53.2	58.9	60.8	87.6	73.6	65.4	44.3	39.9	50.5	38.1
Germany	34	40	40.7	56.7	47	36.2	15.6	10.2	23.2	13.1
Japan	-234.4	-227	-213.4	-192.4	-228.1	-213.2	-230.1	-231.3	-234	-243.7
U.K.	82.9	76.4	83	99.6	83.5	76.3	60.2	56.8	78.6	59.4

Global 10y Note spreads over US 10y

