



1/21/2009 5:56

## 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.

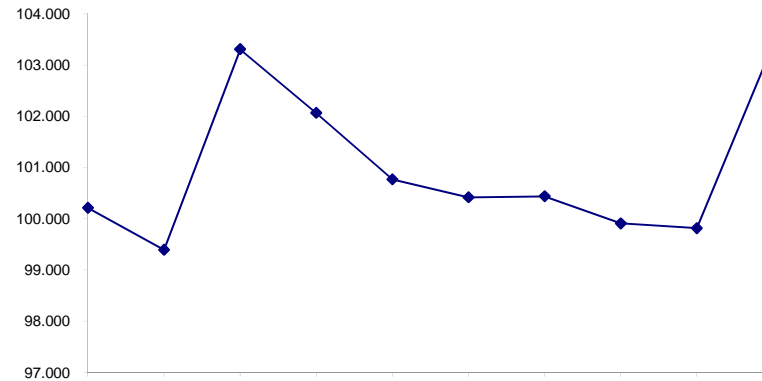
**Economic Releases (32nds)**

	5y	10y	ZNZ8	ZBZ8	Date
Non-farm High	100.0675	112.085	126.110	134.140	1/9/2009
Non-farm Low	99.1250	110.265	124.280	132.000	1/9/2009
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	100.2450	113.315	127.130	137.220	1/15/2009
PPI Low	100.1325	113.095	126.230	136.085	1/15/2009
CPI High	100.1400	113.030	126.160	136.270	1/16/2009
CPI Low	99.2900	111.235	125.130	134.015	1/16/2009
Auction Price	99.2602	99.233	0.000		
Last Trade	103.1270	113.230	130.020	139.130	1/21/2009

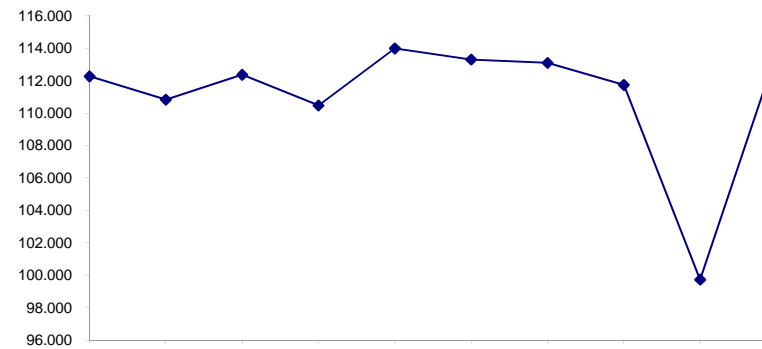
**Auctions - 32nds**

	2 y	3 y	5y	10y	30y
Auction Price	99.290	99.249	99.260	99.233	98.074
Auction Yield Stop	0.922	1.200	2.110	3.783	4.609
Actual Auction Date	12/22/2008	1/7/2009	12/23/2008	11/12/2008	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 Mch09 Futures roll: ZF = (91); ZN = (70 ); ZB = (32) [tics]}
- 4)\*CPI was same as FOMC day

## Quotes

		32 nds					
	Last	Net	High	Low	Open	Volume	Sym Name
TUAH9	109.0800	(0.017)	109.0950	109.0670	109.0900	7,343	2y Fut
FVAH9	119.2020	(0.110)	119.2700	119.1820	119.2470	15,043	5y Fut
TYAH9	125.1950	(0.210)	125.3100	125.1450	125.3100	50,714	10y Fut
USAH9	133.1100	(1.185)	134.0700	133.0500	134.0550	10,340	30y Fut
	Last	Net	High	Low	Open	Volume	Sym Name
BUS02P	100.0920	(1.500)	100.1020	100.0900	100.1000	na	2y Cash
BUS03P	100.0400	(1.500)	100.0570	100.0320	100.0320	na	3y Cash
BUS05P	99.2720	(8.200)	100.0100	99.2620	100.0070	na	5y Cash
BUS10P	111.1600	(14.500)	111.2600	111.1400	111.2600	na	10y Cash
BUS30P	128.1650	(103.000)	129.0000	128.0750	129.0000	na	30y Cash
	Last	Net	High	Low	Open	Volume	Sym Name
BUS02Y	0.720	3.600	0.728	0.704	0.717	na	2y Yield
BUS03Y	1.077	3.200	1.125	1.037	1.067	na	3y Yield
BUS05Y	1.533	5.400	1.541	1.487	1.485	na	5y Yield
BUS10Y	2.422	5.200	2.435	2.383	2.380	na	10y Yield
BUS30Y	3.031	4.800	3.182	2.966	2.982	na	30y Yield

	M Duration	DV01 32	DV01 \$	DV01 Box	CF	
<b>30y</b>	17.73	7.57	\$2,366	15.14	n/a	<b>30y</b>
<b>10y</b>	8.24	3.06	\$956	6.12	n/a	<b>10y</b>
<b>5y</b>	4.61	1.55	\$483	6.18	n/a	<b>5y</b>
<b>3y</b>	2.73	0.91	\$284	3.64	n/a	<b>3y</b>
<b>2y</b>	1.83	0.66	\$205	2.62	n/a	<b>2y</b>
<b>ZB</b>	10.57	4.83	\$151	4.83	0.7950	<b>ZB</b>
<b>ZN</b>	6.24	2.74	\$86	5.49	0.8357	<b>ZN</b>
<b>ZF</b>	4.05	1.62	\$51	3.24	0.8164	<b>ZF</b>
<b>ZT</b>	1.92	0.68	\$21	2.72	0.916	<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		1.760	2.981	3.556
ZN	0.568		1.693	2.020
ZF	0.335	0.591		1.193
ZT	0.281	0.495	0.838	

## US Treasuries vs US Financial Futures

	2y	3y	5y	10y
ZB	1.36	1.91	3.20	6.33
ZN	2.39	3.36	5.63	11.15
ZF	4.05	5.69	9.54	18.88
ZT	4.83	6.79	11.38	22.52

## US Treasuries

	2y	3y	5y	10y
2y		1.406	2.485	4.662
3y	0.421		1.699	3.363
5y	0.425	0.597		1.979
10y	0.215	0.302	0.505	

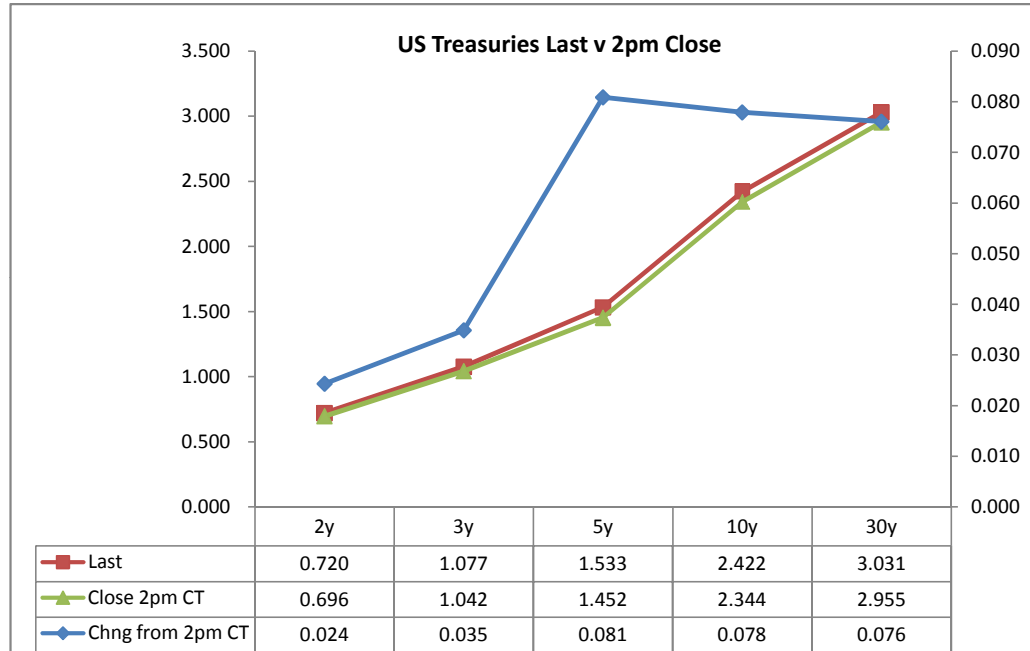
Note: If you are looking at a matrix with Eurex products then those ratios are pulled from Bloomberg and are static. Meaning, I only update them once in a while but always on rolls. I calculate the other matrixes, with US products, everyday

Treasury Closes: 2pm CT vs this Morning

	Cpn	Mty	Close 32	Close	Last	Chng from 2pm	Basis		Cash Roll	Futures Roll	Close 32	Last	
							Close	Last					
2y	0.875	12/31/10	100.1100	0.696	0.720	0.024	6.83	6.86			109.1000	109.0800	TUAH9
3y	1.125	1/15/12	100.0775	1.042	1.077	0.035							
5y	1.500	12/31/13	100.0725	1.452	1.533	0.081	72.89	69.86			119.3125	119.2020	FVAH9
10y	3.750	11/15/18	112.0850	2.344	2.422	0.078	215.85	208.90			126.0850	125.195	TYAH9
30y	4.500	5/15/38	130.0500	2.955	3.031	0.076	732.59	720.23			134.2950	133.110	USAH9

Curve Spreads			
	Close bps		Chng from 2pm Cls
	Last bps	2pm Cls	
2/3	34.6	35.7	1.1
2/5	75.6	81.3	5.7
3/5	41.0	45.6	4.6
2/10	164.8	170.2	5.4
3/10	130.2	134.5	4.3
5/10	89.2	88.9	(0.3)
2/30	225.9	231.1	5.2
3/30	191.3	195.4	4.1
5/30	150.3	149.8	(0.5)
10/30	61.1	60.9	(0.2)

O/N News:



	Last	Chng on Day
Emini SP	814.75	8.75
Crude Oil	41.22	0.38
Gold	859.30	4.10
EURUSD	129.33	0.31
USDJPY	89.86	0.09

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	42%	100%		
10	23%	56%	100%	0%
30	11%	26%	47%	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	\$194			
5	\$201	\$483		
10	\$223	\$534	\$956	
30	\$256	\$615	\$1,100	\$2,366

**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	\$194			
5	(\$7)	\$483		
10	(\$28)	(\$51)	\$956	
30	(\$62)	(\$132)	(\$144)	\$2,366

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	-3.4%	0.0%		
10	-12.7%	-9.6%	0.0%	
30	-24.1%	-21.4%	-13.1%	0.0%

## Tic for Tic Matrix

	2y	5y	10y	30y
ZT	0.92	2.29	4.54	11.23
ZF	0.38	0.95	1.89	4.67
ZN	0.23	0.56	1.11	2.76
ZB	0.13	0.32	0.63	1.57

	2y	5y	10y	30y
2y		2.48	4.92	12.17
5y	0.40		1.98	4.90
10y	0.20	0.51		2.47
30y	0.08	0.20	0.40	

	ZT	ZF	ZN	ZB
ZT		2.40	4.07	7.16
ZF	0.42		1.69	2.98
ZN	0.25	0.59		1.76
ZB	0.14	0.34	0.57	

## Box for Box Matrix

	2y	5y	10y	30y
ZT	0.92	2.29	9.07	22.46
ZF	0.38	0.95	3.78	9.34
ZN	0.45	1.13	1.11	2.76
ZB	0.52	0.64	1.27	1.57

	2y	5y	10y	30y
2y		2.48	2.46	6.08
5y	0.40		0.49	2.45
10y	0.41	2.02		2.47
30y	0.16	0.41	0.40	

	ZT	ZF	ZN	ZB
ZT		2.40	8.14	14.33
ZF	0.42		1.69	5.96
ZN	0.12	0.59		1.76
ZB	0.07	0.17	0.57	



	Libor\$ <sup>1</sup>	Repo Rt <sup>6</sup>
0/N	0.188	0.240
1week	0.259	0.150
2week	0.301	0.150

	Libor\$ <sup>1</sup>	Tbill	CP <sup>2</sup>
1M	0.356	0.048	0.400
3M	1.125	0.134	0.900
6M	1.559	0.304	1.490

	TSY	Swp	Swp Rate <sup>5</sup>	ED Pks <sup>3</sup>	TSY - ED Pk <sup>4</sup>
2y	0.720	63.50	1.36	1.817	1.097
5y	1.533	53.75	2.07	2.725	1.192
10y	2.422	11.00	2.53	#VALUE!	#VALUE!

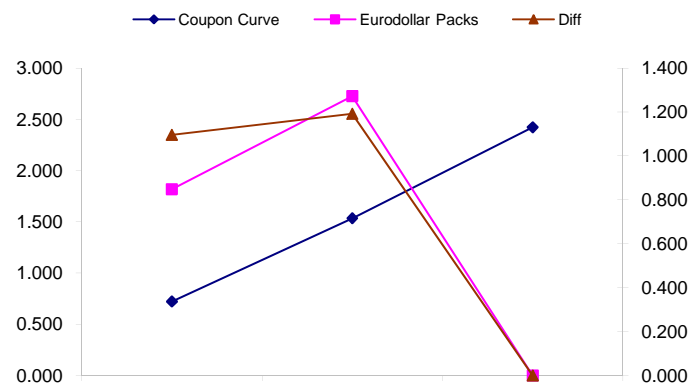
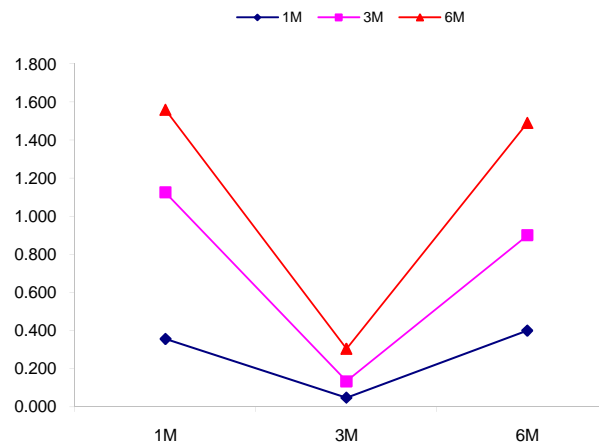
<u>2/5</u>	<u>Rd/Blu Pk</u>	<u>Diff</u>
81.3	90.8	9.6
<u>2/10</u>	<u>Rd/Gld Pk</u>	<u>Diff</u>
170.2	#VALUE!	#VALUE!
<u>5/10</u>	<u>Blu/Gld Pk</u>	<u>Diff</u>
88.9	#VALUE!	#VALUE!

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



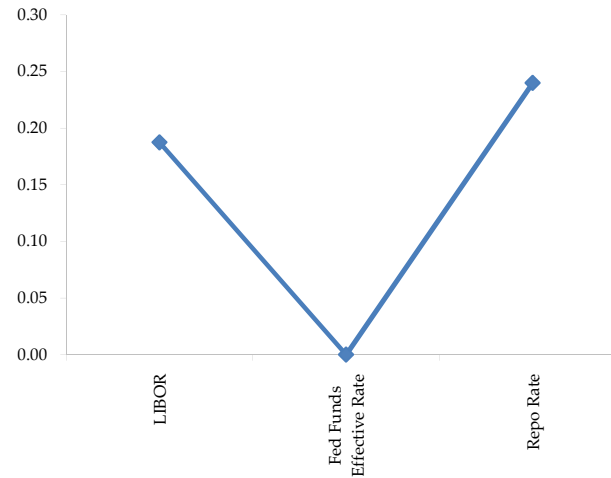
	Last	Chng	Term	Asset Type
USDLIBON	0.188	0.0463	Overnight	LIBOR
TUSFFRON	#VALUE!	#VALUE!	Overnight	Fed Funds Effective Rate
TUSRPOON	0.240	0.0000	Overnight	Repo Rate
TEONIA01M	1.367	(0.0840)	1 month	Euribor OIS Rate
TEONIA03M	1.261	(0.0550)	3 month	Euribor OIS Rate
TSONIA01M	1.022	(0.0700)	1 month	Sterling OIS Rate
TSONIA03M	0.794	(0.0710)	3 month	Sterling OIS Rate
TUSOIS01M	0.184	0.0000	1 month	USD OIS Rate
TUSOIS03M	0.193	0.0000	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.

