

6/8/05

<HELP> for explanation.

P203 Comdty CMS

VIEW **B**
 B-Basis, C-basis Chg
 H-Horizon bond price
 U-BPV
 S-CTD B.P. Spread
 P-P&L 32nds

CTD Scenario Analysis

CTD Basis **0.** 32nds Stl **6/ 8/05** Div **9/30/05**

PARALLEL YIELD SHIFTS (BP)					
	-100	-50	0	50	100
Price:	113-20+	111-15+	109-12	107-10+	105-10
Chng:	+4-16+	+2-11+	+ 08	-1-25+	-3-26
Risk:	4.35	4.26	4.16	4.07	3.98

FVU5

109-04

Issue	Price	Src	Yield	Basis	Bond price at Horizon				
1) T 3 1/2 11/15/09	99-12+	BGN	3.650	6.3	103-10	101-11	99-14	97-18	95-23
2) T 3 1/2 12/15/09	99-09+	BGN	3.670	8.9	103-09	101-09	99-11	97-14	95-18
3) T 3 5/8 01/15/10	99-26	BGN	3.669	14.5	103-27	101-26	99-26	97-28	95-31
4) T 3 1/2 02/15/10	99-08	BGN	3.675	18.5	103-12	101-10	99-09	97-10	95-13
5) T 4 03/15/10	101-13	BGN	3.675	25.0	105-17	103-13	101-10	99-09	97-10
6) T 4 04/15/10	101-12	BGN	3.687	28.6	105-18	103-13	101-09	99-07	97-07
7) T 3 7/8 05/15/10	100-27 3/4	BGN	3.681	34.3	105-05	102-31	100-26	98-23	96-22

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Search CMS <HELP> for: [REDACTED]

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INSTRUCTIONS

Once you select a futures contract, enter CMS <Go>. Additional instructions appear on the screen.

Click on a specific security or enter {menu-number} <GOVT> <Go> to display its one-security functions menu.

SHORTCUTS

Once you select a futures contract, the following shortcuts are available:

Include Private Securities Created in PRPL
Enter CMS PP <Go>.

Exclude Private Securities Created in PRPL
Enter CMS NP <Go>.

Prices in Decimal Format
Enter CMS DE <Go>.

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Germany 49 69 920410
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N159 Comdty CMS

VIEW **B**
 B-Basis, C-basis Chg
 H-Horizon bond price
 U-BPU
 S-CTD B.P. Spread
 P-PLL 32nds

CTD Scenario Analysis

Pg1 of 2

CTD Basis **0.** 32nds Stl **8/ 9/05** Div **9/30/05**

PARALLEL YIELD SHIFTS (BP)					
	-100	-50	0	14	78
Price:	126-05	119-30	114-04	112-18	105-24
Chng:	+12-07	+6-00	+ 06	-1-12	-8-06
Risk:	12.84	12.02	11.25	11.10	10.30

USU5

113-30

Issue	Price	Src	Yield	Basis	Basis at Contract Horizon (32nds)				
1) T 7 ⁷ / ₈ 02/15/21	135-17	BGN	4.638	14.7	.0	.0	.0	.0	1.1
2) T 8 ¹ / ₈ 05/15/21	138-20	BGN	4.642	15.2	2.7	1.4	.3	.0	.0
3) T 8 ¹ / ₈ 08/15/21	138-30+	BGN	4.649	18.8	11.6	7.3	3.6	2.7	.0
4) T 8 11/15/21	137-20	BGN	4.653	22.6	23.3	15.2	8.2	6.4	.2
5) T 7 ¹ / ₄ 08/15/22	130-03+	BGN	4.666	40.6	68.3	46.9	28.1	23.3	4.6
6) T 7 ⁵ / ₈ 11/15/22	134-27	BGN	4.663	43.0	71.7	49.3	29.9	24.9	5.6
7) T 7 ¹ / ₈ 02/15/23	129-05	BGN	4.670	50.6	90.9	63.0	38.6	32.3	7.7
8) T 6 ¹ / ₄ 08/15/23	118-31+	BGN	4.679	63.1	124.7	86.7	53.5	45.0	10.9
9) T 7 ¹ / ₂ 11/15/24	135-19	BGN	4.676	77.9	152.0	105.6	65.6	55.4	15.2
10) T 7 ⁵ / ₈ 02/15/25	137-16	BGN	4.675	83.5	161.6	112.7	70.6	59.9	17.6
11) T 6 ⁷ / ₈ 08/15/25	128-11	BGN	4.678	95.3	191.1	133.9	84.4	71.9	21.7
12) T 6 ³ / ₄ 08/15/26	127-19+	BGN	4.673	115.9	233.5	164.7	105.5	90.5	30.6
13) T 6 02/15/26	117-12	BGN	4.674	110.4	224.3	158.6	101.7	87.3	29.2
14) T 6 ¹ / ₂ 11/15/26	124-15	BGN	4.672	120.8	245.5	173.4	111.3	95.5	32.6
15) T 6 ⁵ / ₈ 02/15/27	126-11+	BGN	4.670	126.2	254.9	180.3	116.2	99.9	35.1
16) T 6 ³ / ₈ 08/15/27	123-11	BGN	4.667	136.6	276.7	196.2	127.2	109.7	39.9

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Doesn't this equate to the question "If TY moved to such & such price, where would the yld be?"

Why do some of these rates?

<HELP> for explanation.

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VIEW B-Basis, C-basis Chg
H-Horizon bond price
U-BPV
S-CTD B.P. Spread
P-PL 32nds

CTD Scenario Analysis

CTD Basis 0.32nds Stl 5/24/05 Div 6/30/05

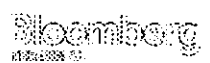
PARALLEL YIELD SHIFTS (BP)				
-100	-50	0	50	100
Price: 118-21	115-10+	112-03	108-31+	105-31
Chng: +8-19+	+3-09	+ 01+	-3-02	-6-02+
Risk: 6.78	6.56	6.34	6.14	5.94

TYMS

112-01+

Issue	Price	Src	Yield	Basis	\$	Contract BPW (@ Horizon)				
1) T 4 7/8 02/15/12	105-15	BGN	3.941	3.9	67.82	65.59	63.44	61.37	59.37	
2) T 4 3/8 08/15/12	102-30	BGN	3.904	37.6	74.21	71.60	69.09	66.67	64.35	
3) T 4 1/4 08/15/13	101-06	BGN	4.078	46.5	84.09	80.77	77.60	74.56	71.65	
4) T 3 7/8 02/15/13	99-08	BGN	3.988	45.1	80.26	77.25	74.37	71.60	68.94	
5) T 4 11/15/12	100-15+	BGN	3.924	47.0	77.60	74.78	72.07	69.46	66.96	
6) T 4 1/4 11/15/13	101-02+	BGN	4.098	53.1	86.58	83.07	79.72	76.52	73.45	
7) T 3 5/8 05/15/13	97-15	BGN	3.999	55.5	83.59	80.36	77.27	74.30	71.46	
8) T 4 3/4 05/15/14	104-19+	BGN	4.130	63.9	90.07	86.26	82.62	79.15	75.84	
9) T 4 02/15/14	99-07	BGN	4.107	61.7	89.91	86.17	82.59	79.18	75.91	
10) T 4 1/4 08/15/14	100-26	BGN	4.142	71.8	94.10	89.99	86.09	82.36	78.81	
11) T 4 1/4 11/15/14	100-21+	BGN	4.163	76.7	96.51	92.21	88.11	84.21	80.49	
12) T 4 02/15/15	98-22	BGN	4.165	85.9	100.0	95.45	91.10	86.96	83.02	
13) T 4 1/8 05/15/15	99-28+	BGN	4.138	102.2	102.4	97.65	93.10	88.79	84.68	

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VIEW **B**-Basis, C-basis Chg
H-Horizon bond price
V-BPV
S-CTD B.P. Spread
P-P&L 32nds

CTD Scenario Analysis Pg1 of 2

CTD Basis **0.** 32nds Stl **5/24/05** Div **6/30/05**

PARALLEL YIELD SHIFTS (BP)					
	-100	-50	0	50	100
Price:	127-29	121-24	116-00	110-19	105-11
Chng:	+11-30	+5-25	+ 01	-5-12	-10-20
Risk:	12.70	11.90	11.16	10.47	11.19

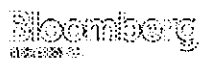
USM5

115-31

Issue	Price	Src	Yield	Basis	Contract	BPV	(@ Horizon)
1) T 8 ³ / ₈ 08/15/20	147-15	BGN	4.430	7.9	127.0	119.0	111.6
2) T 7 ⁷ / ₈ 02/15/21	138-11	BGN	4.457	20.2	133.4	124.7	116.6
3) T 8 ¹ / ₈ 05/15/21	141-17	BGN	4.462	22.4	134.2	125.4	117.2
4) T 8 ¹ / ₈ 08/15/21	141-20+	BGN	4.468	25.7	135.9	126.8	118.5
5) T 8 11/15/21	140-25+	BGN	4.474	31.5	138.1	128.8	120.2
6) T 7 ⁵ / ₈ 11/15/22	137-17+	BGN	4.499	40.5	146.4	136.0	126.5
7) T 7 ¹ / ₄ 08/15/22	132-26	BGN	4.493	48.8	146.5	136.1	126.6
8) T 7 ¹ / ₈ 02/15/23	131-22+	BGN	4.508	54.8	150.4	139.5	129.6
9) T 6 ¹ / ₄ 08/15/23	121-09+	BGN	4.522	69.2	158.7	146.8	135.9
10) T 7 ¹ / ₂ 11/15/24	138-10+	BGN	4.519	85.7	160.7	148.3	136.9
11) T 7 ⁵ / ₈ 02/15/25	140-08+	BGN	4.519	89.9	161.8	149.2	137.7
12) T 6 ⁷ / ₈ 08/15/25	130-28	BGN	4.528	101.8	169.2	155.6	143.3
13) T 6 ³ / ₄ 08/15/26	130-01	BGN	4.532	120.1	176.9	162.1	148.7
14) T 6 02/15/26	119-18+	BGN	4.533	115.5	178.6	163.7	150.3
15) T 6 ¹ / ₂ 11/15/26	126-27+	BGN	4.531	127.7	180.3	165.1	151.3
16) T 6 ⁵ / ₈ 02/15/27	128-25	BGN	4.529	132.0	181.3	165.8	151.9

matching again why?

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HELP FOR **CTD SCENARIO ANALYSIS**

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CMS performs cheapest-to-deliver (CTD) horizon analysis for conversion-factor bond futures contracts, such as those listed on the CBT, LIFFE, Matif, TSE, etc. You can use CMS to calculate CTD issues under various parallel yield shift scenarios on the contract delivery date.

- 1) Instructions
- 2) Shortcuts
- 3) Description of Display
- 4) References
- 5) BLOOMBERG® MARKETS Articles

TO ACCESS: {ticker symbol} <CMDTY> CMS <Go>
USA <CMDTY> CMS <Go>

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View Box Code
Enter CMS (VIEW box code) <Go>.

NOTE: You can combine the shortcuts.

DESCRIPTION OF DISPLAY

VIEW: You can determine the cheapest-to-deliver according to the following:

- (B) Basis: The basis at contract horizon, in 32nds (if applicable).
- (C) basis Chg: The change in basis at contract horizon, in 32nds (if applicable).
- (H) Horizon
bond price: The price of the bond for each yield shift scenario.
- (V) BPV: The contract's basis point value (BPV) for each of the cheapest-to-deliver bonds at the horizon date.
- (S) CTD B.P. Spread: The basis point spread between each issue and the cheapest-to-deliver issue.

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(P) P&L 32nds/Points: *LONG Basis*
The results from a basis trade arbitrage of long-cash bonds and short futures (weighted by the conversion factor), includes financing the cash position at the indicated repo rate. Appears in 32nds where appropriate, otherwise the P&L appears as percentage points of par (i.e., the same units as the price).

CTD Basis: Applies to whichever issue becomes the cheapest-to-deliver. The default value is zero and indicates full convergence at the horizon date. However, you can enter your own convergence premium value if your scenario horizon date occurs before the final delivery date.

Stl: The settlement date, which is the date the securities must be paid for and delivered to complete the transaction.

Div: The delivery date, which is the last date the futures contract can be delivered.

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WITH (#) PRIVATE

SECURITIES?: Appears only when you have private securities that match the exchange's deliverability rules. 'Y' indicates that private securities for the selected bond future are included in the list of deliverable bonds. For more information on private security creation, see PRPL <HELP>.

The futures contract and the price appear below the "WITH (#) PRIVATE SECURITIES?" field.

PARALLEL YIELD
SHIFTS (BP)

The number of basis points to shift the yield curve to calculate the cheapest-to-deliver issue.

Price: The converted forward price for each yield shift scenario.

Chng: The price change for each yield shift scenario.

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Risk: The futures contract's risk for each yield shift scenario. Risk is a measurement used by Bloomberg to indicate price sensitivity given shifts in interest rates. Risk is 100 times the price value of a basis point change in yield, and is calculated as the cheapest-to-deliver issue at the horizon date divided by its conversion factor.

A list of all the deliverable-grade bonds and private securities (if applicable) eligible to be delivered into the futures contract appears in the cheapest-to-deliver order. The following fields appear for each security:

Issue: The ticker symbol, coupon, and maturity of the security.

Price: The last available market price for each issue.

Src: The pricing source for the cash bonds. To change your pricing source, enter FMPS <Go> (Security Pricing Classes).

Yield: The last available market yield for each issue which is the rate of return paid if the security is held to its workout date. The calculation is based on the coupon rate, length of time to maturity, and market price. It assumes that coupon interest paid over the life of the security is reinvested at the same rate.

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Basis: The bond price minus the delivery price, expressed in decimal or number of 32nds, depending on the individual contract. It represents the gross basis. For conversion factor futures, the delivery price equals the futures price times the conversion factor. For yield-based futures, the delivery price equals the issue's price on the delivery date using the future's yield.

The right side of the screen displays the results of the cheapest-to-deliver analysis for each yield shift scenario, based on the VIEW type you select in the top left corner of the screen. The cheapest-to-deliver bond is boxed and highlighted in white.

REFERENCES

The Treasury Bond Basis, Burghardt, Lane, and Papa, 1989, Probus Publishing Company, Chicago, Illinois. (Specifically, the "Basis" view ("B") is the same as a chart on page 48 of this book.)

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