

MAC Swap Futures

A CME Deliverable Swap Future

Pricing & Analysis on Bloomberg

Contract Description (DES)

- View contract descriptions including (1) notional coupon rates, (2) current contract value and (3) price histories via DES
- Load equivalent forward starting swap in SWPM for fair value pricing and risk analysis (4)
- DES page commands:
 - 2-Year: CTPH3 <Comdty> DES <GO>
 - 5-Year: CFPH3 <Comdty> DES <GO>
 - 10-Year: CNPH3 <Comdty> DES <GO>
 - 30-Year: CBPH3 <Comdty> DES <GO>
- DSF Coupon Rate Summary

Notional Coupon Rates Announced

TENOR	MARCH 2013	JUNE 2013
2-Year	0.50%	0.50%
5-Year	1.00%	1.00%
10-Year	2.00%	2.00%
30-Year	2.75%	2.75%

CTPH3 -- -- -- -- / -- -- -- -- -- Prev --

At Vol -- Op -- Hi -- Lo -- OpenInt N.A.

CTPH3 COMB Comdty 99 Feedback Page 1/2 Futures Contract Description

1) Contract Information 2) Linked Instruments

CTPH3 Comdty USD IRS 2yr Prim Mar13 CBT-Chicago Board of Trade

3) Notes

(Primary Fixed Rate) 2 Year USD Deliverable Interest Rate Swap Futures
 In the event a (Secondary Fixed Rate) contract is listed, please see C TSA<Comdty>
 Trading Unit: An interest rate swap (IRS), cleared by CME Clearing, with notional principal equal ...

4) Contracts (CT) -- -- Mar:H -- -- Jun:M -- -- Sep:U -- -- Dec:7

5) Price Chart (GP)

6) Related Dates (EXS)

7) Swap Manager (SWPM)

8) Holidays (CDR, CR)

9) Margin Requirements

Contract Specifications

Notional 2yr 0.5% Swp

Contract Size 100,000 USD

Value of 1.0 pt \$ 1,000

Tick Size 0-00¼ (128t)

Tick Value \$ 7.81

Price 100=08

Contract Value \$ 100,187.5

Trading Hours

Exchange Local

Electronic 17:00-16:00

Pit 07:20-14:00

First Trade Mon Dec 3, 2012

Last Trade Mon Mar 18, 2013

First Delivery Mon Mar 18, 2013

Related Dates (EXS)

First Trade Mon Dec 3, 2012

Last Trade Mon Mar 18, 2013

First Delivery Mon Mar 18, 2013

Holidays (CDR, CR)

Margin Requirements

No Margin Limits

Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2012 Bloomberg Finance L.P.
 SH 637379 CST GMT-6:00 6660-2944-0 26-Nov-2012 08:20:08

Fair Value Pricing (SWPM)

From the DES page, select “Swap Manager” to view real time implied DSF pricing based on equivalent forward starting interest rate swap

1. Current par rate of forward-starting swap aligned to the Effective and Maturity dates of the DSF
2. Implied market value of the DSF based on principle value of equivalent forward starting swap¹
3. Implied DV01 and PV01³ based on sensitivity of equivalent forward-starting swap (based on Notional inputs²)
4. Re-calculate pricing and risk values to maintain real-time view of market pricing

Enter all values and hit <Go>

90 Actions 91 Products 93 Data & Settings 94 Help Swap Manager

3 Main 4 Curves 5 Cashflow 7 Details 10 Resets 11 Risk 13 Scenario 15 CVA 17 Matrix

Fixed Float Swap Cpty SWAP CNTRPARTY CCP OTC Ticker / SWAP Series Deal ID 20 Properties

31 Load 32 Save 34 Send 36 Share 37 Ticket

Leg 1 Receive Fixed Leg 2 Pay Float

Notional	100M	Leg ID		Notional	100M	Leg ID	
Currency	USD	Coupon	2.000000 %	Currency	USD	Index	US0003M
Effective	03/20/2013	Calc Basis	Money Mkt	Effective	03/20/2013	Latest Index	0.31401
Maturity	03/20/2023	Day Count	30I/360	Maturity	03/20/2023	Tenor	3 Month
Pay Freq	SemiAnnual	Unwind Cpn	2.000000 %	Reset Freq	Quarterly	Leverage	1.00000
				Pay Freq	Quarterly	Spread	0.00 bp
						Day Count	ACT/360

MV 5,494.29 Accrued 0.00 MV -2,858.35 Accrued 0.00

Premium 5.49 DV01 98.76 Premium -2.86 DV01 0.75

Market

OIS DC Stripping ON

Dscent Curve 42 Mid USD OIS Swaps Dscent Curve 42 Mid USD OIS Swaps

Fwd Curve 23 Mid USD Bloomberg Curve (I)

Curve Date 11/14/2012 Valuation 11/16/2012

Par Cpn	1.723040	Calculate	Premium	3	PV01	95.17
Principal	2,635.94	Unwind Annuity	0.000000		DV01	99.50
Accrued	0.00	Unwind PV	0.00			
Market Value	2,635.94	Premium	2,635.94		Gamma (1bp)	0.09

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¹ Calculate equivalent implied price value as $100 + [\text{Principle}/1000]$ for approximate decimalized price

² Note: 100M = \$100,000 notional (equivalent to 1 DSF contract)
100MM = \$100,000,000 notional

³ PV01 is change in market value from bumping the coupon rate by 1bp while DV01 is the change in market value for a 1bp parallel shift of the yield curve

Hedge Ratio Analysis (FIHR)

Hedging a Cash Security

- Perform hedge ratio analysis to view futures hedge ratios between a cash security and CME futures contracts
- (1) Select a cash security to view hedge ratio to DSF and other futures via FIHR
 - Example: `GT10 <GOVT> FIHR <GO>`
- By default, a list of hedge ratios relative to CME futures contracts will be displayed
 - (2) Add additional futures contracts such as the CME Deliverable Swap Future
 - (3) View futures hedge ratio values for the cash security against listed futures contracts

<HELP> for explanation.

1 T 1 5/8 11/15/22 Govt 99 Feedback Fixed Income Hedge Ratios

100-03 1/2 / 100-03+ 1.614/1.613 BGN @ 11:10 95 Buy 96 Sell 97 Settings

Trade Date 11/30/12 Workout Date 11/15/22 Workout Price 100,000

Settle Date 12/03/12 Par Amount 10 MM (10,000,000 USD) Yield Beta 1.00

Cash Future

Show Deferred Contracts Edit Proxy Securities

Security	Price	Hdg Ratio	# Fut	Proxy Security	C Factor	FRisk	C
T 1 5/8 11/15/22	100-03 1/2						9.164
11) ED22 90DAY EURO\$ FUTR Dec12	99.6863	36.66	367				0.25
12) TUH3 US 2YR NOTE (CBT) Mar13	110-07+	4.06	203	T 2 5/8 12/31/14	0.9447		2.26
13) FVH3 US 5YR NOTE (CBT) Mar13	124-21 3/4	1.66	166	T 0 5/8 05/31/17	0.8044		5.52
14) TYH3 US 10YR NOTE (CBT) Mar13	133-20	1.08	108	T 3 3/8 11/15/19	0.8604		8.47
15) USH3 US LONG BOND(CBT) Mar13	150-03+	0.52	52	T 5 1/2 08/15/28	0.9504		17.46
WNH3 US ULTRA BOND(CBT) Mar13	166-03	0.33	33	T 4 1/2 05/15/38	0.8070		27.92
*CNP3 USD IRS 10yr Prim Mar13	0-00	0.93	93	10yr 2% Swp			9.85
<Add Security Here>							

2

3

* Securities added by user

Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2012 Bloomberg Finance L.P.
 SN 637379 EST GMT-5:00 6722-5156-0 30-Nov-2012 11:11:11

Hedge Ratio Analysis (FIHR)

Hedging a Swap

- Perform hedge ratio analysis between an OTC swap and a set of futures contracts
- (1) Select a swap that is created in your portfolio and view hedge ratios relative to DSF and other futures
- By default, a list of hedge ratios relative to CME futures contracts will be displayed
 - (2) Add additional futures contracts such as the CME Deliverable Swap Future
 - (3) View futures hedge ratio values for the swap against the futures contracts

<HELP> for explanation.
Cancel: Screen not saved

USSW10 BGN Curncy 99 Feedback Fixed Income Hedge Ratios
1.685/1.693 0.000/0.000 Bloomberg @ 09:28 99 Buy 96 Sell 97 Settings

Trade Date 11/26/12 Par Coupon 1.689000
Maturity Date 11/28/22 Notional 10 MM (10,000,000 USD)

1 Cash 2 Future Edit Proxy Securities

Security	Price	Hdg Ratio	# Fut	Proxy Security	C Factor	FRisk
USSW10 BGN Curncy						9.722
11) EDZ2 90DAY EURO\$ FUTR Dec12	99.6763	38.89	389			0.25
12) TUZ2 US 2YR NOTE (CBT) Dec12	110-06 ³ / ₄	4.86	243	T 2 ³ / ₈ 09/30/14	0.9406	2.00
13) FVZ2 US 5YR NOTE (CBT) Dec12	124-17+	1.87	187	T 0 ⁷ / ₈ 02/28/17	0.8135	5.21
14) TYZ2 US 10YR NOTE (CBT) Dec12	133-19+	1.20	120	T 3 ⁵ / ₈ 08/15/19	0.8737	8.11
15) USZ2 US LONG BOND(CBT) Dec12	150-26+	0.56	56	T 5 ¹ / ₂ 08/15/28	0.9500	17.43
16) WNZ2 US ULTRA BOND(CBT) Dec12	167-09	0.35	35	T 4 ¹ / ₂ 05/15/38	0.8061	28.02
17) *CNP3 USD IRS 10yr Prim Mar13	0-00	0.99	99			9.82
<Add Security Here>						

FX rates \$=1.000 €=0.000 * Securities added by user

Australia 61 2 9277 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2012 Bloomberg Finance L.P.
SN 116099 EST GMT-5:00 26-Nov-2012 09:29:22

Hedge Ratio Analysis (FIHR)

Hedging a Future

- Perform hedge ratio analysis to view futures hedge ratios relative to other futures contracts
- (1) Select a futures contract such as the DSF to view hedge ratio against other futures
 - Example: CNPH3 <CMDTY> FIHR <GO>
- By default, a list of hedge ratios relative to CME futures contracts will be displayed
 - (2) Add additional futures contracts such as the CME Deliverable Swap Future
 - (3) View futures hedge ratio values for the future against other futures contracts

<HELP> for explanation.

1 CNPH3 COMB Comdty 99 Feedback Fixed Income Hedge Ratios

Not Priced 95 Buy 96 Sell 97 Settings

Trade Date 11/26/12

Settle Date 11/27/12 Number of Contracts 100 Contract Size 100,000 USD

Cash Future

Show Deferred Contracts Edit Proxy Securities

Security	Price	Hdg Ratio	# Fut	Proxy Security	C Factor	FRisk
CNPH3 COMB Comdty	0.000					9.817
11) EDZ2 90DAY EUR0\$ FUTR Dec12	99.6763	39.27	393			0.25
12) TUZ2 US 2YR NOTE (CBT) Dec12	110-06 ³ / ₄	4.91	245	T 2 ³ / ₈ 09/30/14	0.9406	2.00
13) FVZ2 US 5YR NOTE (CBT) Dec12	124-17+	1.89	189	T 0 ⁷ / ₈ 02/28/17	0.8135	5.20
14) TYZ2 US 10YR NOTE (CBT) Dec12	133-19+	1.21	121	T 3 ⁵ / ₈ 08/15/19	0.8737	8.11
15) USZ2 US LONG BOND(CBT) Dec12	150-26+	0.56	56	T 5 ¹ / ₂ 08/15/28	0.9500	17.42
16) USZ2 US ULTRA BOND(CBT) Dec12	167-10	0.35	35	T 4 ¹ / ₂ 05/15/38	0.8061	28.01

2 <Add Security Here>

3

FX rates \$=1.000 €=0.771 * Securities added by user

Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2012 Bloomberg Finance L.P.
 SN 116099 0 26-Nov-12 9:24:17 EST GMT-5:00

Bloomberg's Recommended Settings

- Fair value calculations in SWPM are based on individually configurable pricing settings
- Bloomberg now provides a set of recommended settings to enable common pricing parameters across Bloomberg accounts
- To view your current account settings...
 - SWDF <GO>, Page Fwd to Page 2
- Select 26, "User Preference"
- To access and view recommended settings...
 - From "User Preference" in your current account settings
- Select 2, "Recommend Settings"

```

<HELP> for explanation.
<Menu> to Return
  1) Save      2) Recommended Settings      Swap Curve Defaults
Curve Defaults
  ● Pay=Ask / Receive=Bid
  ● Pay=Mid / Receive=Mid
  ● Pay=Bid / Receive=Ask
(L)ibor Fixing Option Info
  ● (L)ibor Fixing Shifts
  ● (L)ibor Fixing Constant

Cross Currency Basis Defaults
  ● Basis side matches leg side
  ● Basis side matches default curve side
  ● Basis side always at mid

Interpolation Method
  ● 1 - Piecewise linear (Simple-comp)
  ● 2 - Smooth forward/Piecewise quadratic
  ● 3 - Step-function forward
  ● 4 - Piecewise linear (Continuous-comp)

Brazilian Curve Interpolation Method
  ● 1 - Linear
  ● 2 - Exponential
  ● 3 - Natural cubic spline

 Enable OIS Discounting/Dual-Curve Stripping Info
    
```

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 SN 116099 6357-3451-3 14-Nov-12 15:08:06 EST GMT-5:00

Disclaimer

Futures trading is not suitable for all investors, and involves the risk of loss. Futures are a leveraged investment, and because only a percentage of a contract's value is required to trade, it is possible to lose more than the amount of money deposited for a futures position. Therefore, traders should only use funds that they can afford to lose without affecting their lifestyles. And only a portion of those funds should be devoted to any one trade because they cannot expect to profit on every trade.

All references to options refer to options on futures.

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