

FINANCIAL RISK MANAGEMENT

Interest Rate Swap Futures

More security. More flexibility.



High interest rate volatility and increased counterparty risk have asset and liability managers focused on hedging instruments to complement or to serve as alternatives to OTC products. Low interest rates and a surge in corporate debt issuance have increased focus on anticipatory hedging.

Interest Rate Swap futures are highly effective tools that financial risk managers can use to hedge a wide variety of interest rate exposures, such as:

- Financing cost risk – in advance of a public or private debt issuance, either at a fixed interest rate or a to-be-swapped floating rate
- Rate risk from the future execution of an interest rate hedge, whether or not related to a new debt issue
- Fixed income portfolio valuation risks
- Risks arising from variable annuity portfolios and other insurance products

And, with Interest Rate Swap futures, financial risk managers sidestep many of the challenges that may be associated with OTC derivatives in the current market environment.

**A unique combination
of events.**

**An ideal opportunity
for financial risk
managers.**

Issuers and investors are **considering the current environment** ...

Issuers and investors who employ interest rate hedge programs using over-the-counter (OTC) derivatives such as spot or forward-starting swaps are considering alternatives to these traditional strategies for several reasons:

Counterparty Credit Risk

With financial sector uncertainty near all-time highs, market participants are seeking to reduce counterparty credit risk, and are seeking alternative liquidity providers plus the benefits of central counterparty clearing.

Execution/Unwind Costs

Variable and uncertain credit fees charged by OTC derivative dealer banks can significantly raise the cost and reduce the value of your hedge position, both at execution and settlement.

Valuation Concerns

Uncertain valuation of OTC instruments for financial reporting purposes is an increasingly challenging issue, especially if the company intends to carry the hedge across financial reporting dates.

And are **taking a second look** at Interest Rate Swap futures.

Interest Rate Swap futures offer strategic and administrative advantages for issuers and investors:

For Corporate Treasurers

Swap futures make effective anticipatory hedges when issuing either fixed-rate debt or floating-rate debt that is expected (or required) to be swapped into a fixed rate.

For Bank Treasuries, Insurers and Financial Services Companies

Swap futures are excellent tools for duration management and asset/liability gap management.

For Portfolio Managers

For fixed-income portfolios, Swap futures deliver a clear and reliable means of mark-to-market hedging.

EXHIBIT 1: Example – Hedging Interest Costs with Swap Futures

The sale of Swap futures contracts establishes a hedge position resulting in a gain to the issuer if swap rates rise (and a loss if swap rates fall). The hedge is designed to offset the rise or fall in the issuer's financing costs, in present value terms, which are attributable to a change in market swap rates (often the pricing benchmark for the debt issue) from the time the hedge is established to the time the hedge is closed out.



For more information, please see the *Interest Rate Swap Futures Reference Guide* from CME Group, available online from the CME Group Interest Rate Resource Center at www.cmegroup.com/ircenter.

Key **advantages** of Swap futures

While both Swap futures and OTC swaps for short-term risk management share common attributes such as cash settlement, similar accounting treatment and often margin and collateral requirements, **several key advantages** to Swap futures provide distinct benefits.

The Swap Futures Advantage

CME Clearing

With Swap futures, CME Clearing acts as the buyer to every seller and the seller to every buyer, guaranteeing each transaction and substantially mitigating counterparty credit risk. In over 150 years, no CME Clearing member firm has ever defaulted, nor has any CME Clearing customer ever lost funds due to counterparty failure.

Simplified Accounting

Swap futures are deemed to be Level 1 transactions for accounting purposes. No credit valuation adjustment (CVA) is necessary, making financial reporting less cumbersome. Please consult with your accounting advisor regarding financial reporting for Swap futures.

Ease of Documentation

Swap futures require neither an ISDA Master Agreement nor a Credit Support Annex (CSA), therefore simplifying documentation.

Flexible Market Access

Swap futures positions are held in the customer's account at a futures commission merchant (FCM) that acts as an agent for the customer. Customers have flexibility to choose among several FCMs for either the initial execution or the ultimate closeout of a Swap futures position or positions. Often, the customer's relationship banks have FCM affiliates, providing convenient access. Visit www.cmegroup.com/clearing to access a list of CME Clearing member firms.

The FCM acts as agent on behalf of the customer, generally executing the company's transactions through the futures market central order book, i.e., either through the CME Globex electronic trading platform or in open outcry trading on the floor of the Exchange.

The FCM also handles the collection and payments of performance bond funds into and out of the customer's margin account. The exchange model also provides equivalent access to the futures and options markets for all participants--all dealers, all investors, all issuers, and all risk managers--regardless of size.

Transparency

At expiry, each Swap futures contract settles with reference to that day's corresponding ISDA Benchmark Rate.¹ No credit charges apply on unwind, even for early closeout.

Financial Safeguards

For any newly entered futures position, customers on each side of the transaction, and their FCMs, post initial performance bonds and daily variation margins. This unique feature of central counterparty clearing ensures the creditworthiness of both parties to the trade. Customers have the latitude to post a variety of collateral to fulfill initial performance bonds, including certain securities, and any cash that the customer posts earns interest. At www.cmegroup.com/clearing, you will also find a link to "Financial and Collateral Management," which describes the types of collateral accepted.

With Swap futures, as with the entire CME Group suite of standard futures and options contracts for financial risk management, the funds and collateral that the customer and FCM post are protected as customer segregated funds under CFTC (Commodity Futures Trading Commission) regulations, whether they are posted for initial performance bonds or for variation margin adjustments. This means that no credit charges are required for Swap futures, and it signifies a tremendous level of safety and peace of mind for risk managers.

¹ ISDA is a registered trademark, and ISDAFIX is a registered service mark, of the International Swaps and Derivatives Association, Inc. ISDA Benchmark mid-market par swap rates are collected at 11 a.m. ET by Reuters Limited and ICAP plc and published on Reuters page ISDAFIX3 and Bloomberg page ISDAFIX1. Source: Reuters Limited.

CME Group Interest Rate Swap Futures: Contract Specifications																						
Trading Unit	The notional price of the fixed-rate side of a 5-Year, 7-Year, 10-Year, or 30-Year interest rate swap, with \$100,000 notional principal, that exchanges semiannual interest payments at a 6 percent per annum fixed rate for floating interest payments based on 3-month LIBOR. Note: Beginning with the December 2009 contract and beyond, the notional coupon rate will be 4 percent per annum.																					
Price Basis	Points (\$1,000.00) and halves of 1/32 of one point (\$15.625) of the notional principal of a swap having notional par value of \$100,000. Par is on the basis of 100 points.																					
Tick Size	One half of one thirty-second of one point (\$15.625 per contract)																					
Contract Months	The first three consecutive contracts in the March, June, September, December quarterly cycle. Note: Effective June 15, 2009, the first four consecutive quarterly contracts will be listed.																					
Last Trading Day	The second London business day before the third Wednesday of the expiration month. Trading in expiring contracts ceases at 11 a.m. ET on the last trading day.																					
Delivery Standard	The notional price of the trading unit on the last day of trading, based upon the ISDA Benchmark Rate for a 5-Year, 7-Year, 10-Year, or 30-Year U.S. dollar interest rate swap on the last day of trading, as published at approximately 11:30 a.m. ET on Reuters page ISDAFIX.																					
Delivery Method	<div>Cash settlement. The final settlement value, measured in price basis points, will be determined as</div> <table><thead><tr><th colspan="2">June 2009 and September 2009 Contracts</th><th colspan="2">December 2009 Contracts and Beyond</th></tr></thead><tbody><tr><td>5-Year</td><td>$100 * [6/r_5 + (1 - 6/r_5)*(1 + r_5/200)^{-10}]$</td><td>5-Year</td><td>$100 * [4/r_5 + (1 - 4/r_5)*(1 + r_5/200)^{-10}]$</td></tr><tr><td>7-Year</td><td>$100 * [6/r_7 + (1 - 6/r_7)*(1 + r_7/200)^{-14}]$</td><td>7-Year</td><td>$100 * [4/r_7 + (1 - 4/r_7)*(1 + r_7/200)^{-14}]$</td></tr><tr><td>10-Year</td><td>$100 * [6/r_{10} + (1 - 6/r_{10})*(1 + r_{10}/200)^{-20}]$</td><td>10-Year</td><td>$100 * [4/r_{10} + (1 - 4/r_{10})*(1 + r_{10}/200)^{-20}]$</td></tr><tr><td>30-Year</td><td>$100 * [6/r_{30} + (1 - 6/r_{30})*(1 + r_{30}/200)^{-60}]$</td><td>30-Year</td><td>$100 * [4/r_{30} + (1 - 4/r_{30})*(1 + r_{30}/200)^{-60}]$</td></tr></tbody></table> <div>r_5, r_7, r_{10} and r_{30} represent, respectively, ISDA Benchmark Rates for 5-year, 7-year, 10-year and 30-year U.S. dollar interest rate swaps on the last day of trading, expressed in percent terms. (e.g., if the ISDA Benchmark Rate were 5.25 percent, then r would be 5.25.) Contract expiration price will be the final settlement value rounded to the nearest one quarter of one thirty-second of one point.</div>		June 2009 and September 2009 Contracts		December 2009 Contracts and Beyond		5-Year	$100 * [6/r_5 + (1 - 6/r_5)*(1 + r_5/200)^{-10}]$	5-Year	$100 * [4/r_5 + (1 - 4/r_5)*(1 + r_5/200)^{-10}]$	7-Year	$100 * [6/r_7 + (1 - 6/r_7)*(1 + r_7/200)^{-14}]$	7-Year	$100 * [4/r_7 + (1 - 4/r_7)*(1 + r_7/200)^{-14}]$	10-Year	$100 * [6/r_{10} + (1 - 6/r_{10})*(1 + r_{10}/200)^{-20}]$	10-Year	$100 * [4/r_{10} + (1 - 4/r_{10})*(1 + r_{10}/200)^{-20}]$	30-Year	$100 * [6/r_{30} + (1 - 6/r_{30})*(1 + r_{30}/200)^{-60}]$	30-Year	$100 * [4/r_{30} + (1 - 4/r_{30})*(1 + r_{30}/200)^{-60}]$
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Trading Hours	<div>Open Outcry: 7:20 a.m. to 2 p.m. Central Time (CT), Monday through Friday. CME Globex: 5:30 p.m. to 4 p.m. CT, Sunday through Friday.</div> <div>5-Year, 10-Year and 30-Year futures trade both open outcry and on CME Globex. 7-Year futures trade on CME Globex only.</div>																					
Position Limits and Reportable Positions	No position limits. Reportable position threshold for 5-Year, 10-Year and 30-Year futures: 500 contracts. Reportable position threshold for 7-Year futures: 25 contracts.																					
Margins	For information on margin requirements visit or www.cmegroup.com/margin																					
Ticker Symbols	<div>5-Year CME Globex: SA Open outcry: NG</div> <div>7-Year CME Globex: 7I (7 “eye”)</div> <div>10-Year CME Globex: SR Open outcry: NI</div> <div>30-Year CME Globex: I3 (“eye” 3) Open outcry: NZ</div>																					
Bloomberg Codes	<div>5-Year DSmy<CMDTY>GO</div> <div>7-Year J7my<CMDTY>GO</div> <div>10-Year DImy<CMDTY>GO</div> <div>30-Year TIRmy<CMDTY>GO</div> <div>m=Month y=Year</div> <div>Month Codes: March = H, June = M, September = U, December = Z</div> <div>Year Codes: 2009 = 9, 2010 = 0, 2011 = 1, 2012 = 2, etc.</div> <div>Example</div> <div>June 2009 5-Year Swap: DSM9<CMDTY>GO</div>																					

If you have additional questions about Swap futures, please contact a member of the CME Group Interest Rate Products and Services team.

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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.

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