CME Group

Cleared OTC Swaps on Commodity Indexes

JULY 2014

CLEARED OTC SWAPS ON COMMODITY INDEXES

In response to continued global financial difficulties and tightened credit due to concerns over counterparty risk, CME Group has made available cleared swaps on the S&P GSCI Excess Return Commodity Index with additional commodity swap indexes expected to be available soon as well.

Unlike futures contracts that typically rely on a trading platform to generate trades, most swap contracts are matched via an intermediary such as a swap dealer. Eligible swap counterparties can trade the contracts off-exchange through their preferred execution venue, privately negotiating their price, and submit the trades to CME ClearPort for central clearing by CME Clearing.

By providing central clearing, CME provides significant risk management and potential benefits that are not available in the over-the-counter (OTC) world. Central clearing ensures market integrity by mitigating counterparty default risk through interposing the clearing house as the counterparty to each trade. If a trade is defaulted upon, the default is contained between the defaulting party and the clearing house, protecting the opposite party to the trade. Further, central clearing offers multilateral offsetting of gross market risk down to lower levels of net market risk.

COMMODITY INDEX FUNDS

Commodities as an asset class have become a standard part of diversified financial portfolios. The potential benefits of adding exposure to commodities in a portfolio include low correlations with equities and bonds, expected positive returns over time, and inflation hedging opportunities, which make exposure to this asset class attractive to investors.

Capturing the benefits of commodity exposure has been a challenge in the past as the traditional methods of obtaining exposure through investing in physical commodities, commodity-related equities or managed futures accounts may not fully reflect the returns of the commodity market. Commodity indexes are another way to reflect the price movements of commodities. An advantage of commodity exposure that tracks a broad index is that commodities are not highly correlated with each other and index returns should be less volatile than the returns on an individual commodity. These indexes have been designed to track the futures prices of products representing energy, agricultural and metals products with a transparent, rule-based system for choosing and weighting the products. The engineering of investment funding vehicles that track commodity futures indexes has provided investors with the means for gaining exposure to commodities that offers better potential to capture the full benefits of the asset class. Commodity index funds simply buy and hold the index, much like the large number of funds based on equity indexes such as the S&P 500.

Commodity indexes can be calculated in several ways that reflect spot prices, current futures prices, as well as excess returns that include any price changes due to moving futures contracts forward as they approach expiration or total returns that further include adjustments for fully collateralized positions.

Two prominent commodity indexes on which CME Group offers futures are the S&P GSCI and the Bloomberg Commodity Index. The S&P GSCI is composed of 24 individual products with an approximate weighting of 75 percent energy, 15 percent agriculture and 10 percent metals. The Bloomberg Commodity Index contains 22 commodities and is weighted approximately 35 percent energy, 35 percent agriculture and 30 percent metals. CME Group also offers futures contracts on the S&P GSCI-Excess Return, which has a different calculation. The Commodity Futures Trading Commission (CFTC) has estimated that assets under management via commodity indexes were valued at $160-200 billion.

SWAP OPERATIONS

A swap is an agreement between parties to exchange cash flows over a period of time. A swap on a commodity index might involve a pension fund seeking buy side exposure in commodities that is matched with a dealer willing to offer the exposure. The dealer will sell a swap contract linked to a commodity index that will ensure that the pension fund's investment will match the return on the commodity index. Periodic payments (usually quarterly) will be made to account for any change in the index versus the agreed-on fixed price. In entering the swap, the dealer is effectively short the index and manages the risk by establishing long positions in the futures contracts that are included in the index. Both the dealer and the fund bear a risk that the counterparty may not honor its commitment to pay. For the dealer, this risk can be significant because it may enter into swaps with many opposite parties. Further, entering an opposite OTC swap transaction with a different counterparty does not typically offset the swap, leaving the dealer exposed to credit risk.

COMPREHENSIVE FINANCIAL SAFEGUARDS

Cleared OTC commodity index swaps offer OTC market participants the full benefits of central clearing. This includes:

- Decrease in counterparty credit risk
- Decrease in operational and legal risks that customers face in OTC trading
- Customer funds and positions are held in sequestered accounts, separate from assets of each customer's clearing firm
- Mark-to-market margining
- Capital efficiencies for offsetting positions and multilateral netting

LONG HISTORY OF SAFETY

CME Clearing daily manages billions of dollars in the process of balancing accounts and maintaining performance bonds and margins. It provides world-class central clearing for all trades and the ability for transactions to be netted against other CME Group cleared positions. The financial soundness of both parties to a transaction is guaranteed and over $8 billion in financial safeguards is ready to mitigate systemic risk. Customer funds have the benefits of segregation (either in a customer segregated account or a sequestered account), are not subject to claims of other creditors of a defaulting clearing firm, and can be transferred to another clearing firm if necessary.

CME ClearPort also helps the marketplace mitigate counterparty credit risk by processing off-exchange transactions through CME Clearing in the same manner as the CME Group's core futures contracts. CME ClearPort is a set of flexible clearing services open to OTC market participants to substantially mitigate counterparty risk and provide neutral settlement prices across asset classes.

Straight-through processing and real-time confirmations bring operational efficiencies to the trading process. International Swap Dealers Association (ISDA) documentation and ongoing credit risk management of bilateral contracts with counterparties is not required.

CME Clearing may require large trader reporting, as well as financial requirements and all appropriate position accountability requirements as part of its overall risk management policies.

Because CME ClearPort is an open clearing service for more than 700 OTC products, with hundreds of thousands of transactions cleared through it each day, market participants have the flexibility to conduct their own transactions off-exchange, negotiate their own prices and still take advantage of the benefits of central counterparty clearing, including the financial depth and security of CME Clearing.

MARK TO MARKET

After a position is cleared on our markets, it is marked to a transparent price called mark-to-market, twice daily. Any resulting profits or losses are accounted for with collections and payments made daily. This prevents the accumulation of a large debt by either party. For each position, a performance bond (margin) is required to be posted in an amount determined by CME Clearing to cover the vast majority of loss a position could suffer.

MARGIN SPREAD CREDIT

One of the key benefits of using CME Group cleared OTC swaps is the ability to reduce the amount of capital necessary to be deposited for margins when the swaps are offset with a basket of positions in the underlying component futures. In certain cases, offsets in margin liabilities are allowed across a portfolio of positions. Inter-commodity spread credits recognize circumstances where offsetting positions in price-related but separate contracts reduce overall portfolio risk. The offset reduces the amount of margin capital required on the combined position. (The current spread credits that are available for CME Group products are posted on the CME Group Web site at cmegroup.com/margin). At present, under certain conditions for qualifying accounts, CME Group can offer a 75 percent reduction from the levels that would be incurred if cleared OTC commodity index swaps and associated futures positions were margined independently.

The following example illustrates the level of reductions in margins available for combined offsetting positions in Cleared OTC S&P GSCI swaps and CME Group component futures when held in an appropriate account:

Margin on 100 S&P GSCI-ER swaps*	$240,000
Margin on underlying CME Group futures basket*	225,000
Gross Margin	465,000
Spread Credit @ 75%*	-349,000
Net Margin	$116,000

** Hedge margin levels used. Margin levels and spread credit percentages are only for purposes of example and can be changed at any time by CME Group.*

As can be seen from the example, substantial savings in capital can result from using cleared commodity index swaps provided by CME Group.

SUMMARY

Substantial benefits and efficiencies exist with cleared OTC swaps for commodity indexes. These include safeguards that minimize credit risks, reduced capital requirements and ease of access to clearing services. When those are coupled with the financial resources of CME Clearing, it is evident that CME Group provides an attractive alternative to the OTC market for users of commodity index swaps.

PM457/00/0714