

Special Executive Report

S-5982

October 18, 2011

Change of Performance Bond Method from “Collateralization Mark-to-Market” to “Cash Mark-to-Market” for Cleared OTC USD/CLP Spot, Forward and Swap Transactions, Effective Monday, October 31, 2011

As you were notified in CME Group Special Executive Reports, S-5713, dated Friday, April 15, 2011 and in S-5761, dated Monday, May 16, 2011, CME has begun offering clearing services for non-deliverable forward (NDF) over-the-counter (OTC) U.S. dollar/Chilean peso spot, forward and swap transactions. Effective Monday, October 31, 2011, CME will change from a “collateralization mark-to-market” to “cash mark-to-market” performance bond method for these products. This Special Executive Report includes the description supporting the implementation of the new performance bond administration procedures, which are summarized as follows.

Performance Bonds & Daily Cash Mark-to-Market - Based upon client input and demand, CME is changing the Cleared OTC U.S. Dollar / Chilean Peso (USD/CLP) Spot, Forward and Swap Transactions product (Chapter 274H) performance bond (margin) regime from a “collateralization mark-to-market” to a “cash mark-to-market” method (there is no open interest to date). This change is consistent with the new margining system described in CME Special Executive Report (SER), S-5954, dated Tuesday, September 27, 2011, where CME announced the planned rollout of 26 new foreign exchange (FX) pairs for OTC cash settlement CME WM/Reuters spot, forward and swap transactions, and 11 new FX pairs for traditional OTC cash settlement non-deliverable forward (NDF) transactions. In that SER, CME noted it would be changing the Cleared OTC USD/CLP products currently listed from “collateralization mark-to-market” to “cash mark-to-market,” analogous to the 37 new products proposed. This is a change in operational procedures only; there are no CME Rulebook changes needed.

CME Clearing has deployed the SPAN system to establish performance bond or “margin” requirements for OTC USD/CLP spot, forwards and swaps. Initial performance bond requirements are established at levels that are consistent with observed levels of volatility in the particular currency pairing and generally aligned with initial margin levels applied to current CME FX futures and option contracts, where applicable, which is not the current case with the cleared OTC USD/CLP products, where there is no USD/CLP futures contract. These risk components of the clearing system are unchanged with implementation of “cash mark-to-market” rather than “collateralization mark-to-market.” However, please note the administration of the new margin regime will require a daily mark-to-market (MTM) on a cash basis, similar to traded FX futures. Variation margins may be satisfied with the posting of appropriate amounts of collateral, where CME Clearing collects and pays in cash between the counterparties each day.

CME Clearing will accept as collateral cash or any other instruments currently designated as approved collateral for posting for performance bonds. In order to calculate variation requirements, settlement prices are established for each contract and for each delivery date referencing data collected from a variety of market sources. Appendix 1 is a detailed description of the “cash mark-to-market” method of performance bond administration. The difference between current “collateralization mark-to-market” and “cash mark-to-market” is explained.

If you have any questions, please contact either Craig LeVeille (email: Craig.LeVeille@cmegroup.com or ph. 312-454-5301 or Steve Youngren (email: Steve.Youngren@cmegroup.com or ph: 312-930-4583).

Appendix 1

CME Introducing Forwards with Cash Mark-To-Market

In accordance with customer demand CME will begin clearing privately-negotiated transactions in forwards with cash mark-to-market.

Currently, all forwards cleared by CME have a collateralized mark-to-market. Each day, for each open forward trade, mark-to-market is calculated, from original trade price to the current end-of-day settlement price. These amounts are netted together and “collateralized”. In other words, if a negative number (a loss), they increase the initial margin (performance bond) requirement, thereby increasing the amount of collateral that must be posted to meet that margin requirement. If a positive number (a gain), they decrease the initial margin requirement.

With cash mark-to-market, the mark-to-market value for the previous clearing business date is subtracted from the mark-to-market amount for the current clearing date. These amounts are netted down and become part of the total banked cash flow for the currency in which they are denominated. It's a very simple change.

There is one additional feature for FX forwards, and in particular for non-deliverable forwards (NDF's) – forwards where one currency of the pair is not bankable. We call this a forward where the cash mark-to-market is flipped, or inverted.

Take for example a forward on the exchange rate between the US Dollar (USD) and the Chilean Peso (CLP). The quantity is specified in USD, and the price is quoted as a specified amount of CLP per one USD. Normally, the mark-to-market amount would be denominated in CLP, also referred to as the contra currency. But with the flipped mark-to-market, the amount is converted to USD by dividing by today's end-of-day settlement price for the contract.

Calculating Mark-to-Market and change in Mark-to-Market

In the normal case, the mark-to-market amount for a forward is calculated as:

- Subtract the original trade price from the end-of-day settlement price.
- Express the trade quantity as a positive number for a buy or a negative number for a sell.
- Take the product of the price difference, the trade quantity, the contract value factor, and the discount factor.
- Round normally to the normal precision of the currency in which the mark-to-market amount is denominated. (the contra currency for an FX forward)

In other words:

$$(S - T) * Q * CVF * DF$$

Where:

S is the end-of-day settlement price
T is the original trade price
Q is the trade quantity
CVF is the contract value factor
DF is the discount factor

In the inverse case, the mark-to-market amount is calculated in the exact same way, except that it includes a division by the daily settlement price:

- Subtract the original trade price from the end-of-day settlement price.
- Express the trade quantity as a positive number for a buy or a negative number for a sell.
- Take the product of the price difference, the trade quantity, the contract value factor, and the discount factor.
- Divide this result by the end-of-day settlement price.
- Round normally to the normal precision of the currency in which the mark-to-market amount is denominated. (the primary currency for an FX forward)

In other words:

$$[(S - T) * Q * CVF * DF] / S$$

In either case, the settlement variation amount to be banked is calculated by subtracting the mark-to-market amount for the previous clearing business date from the amount for the current business date.

Cash-Settled and Physically-Delivered Forwards

At maturity, forwards with cash mark-to-market can be either cash-settled or physically-delivered, exactly as for forwards with collateralized mark-to-market.

For a cash-settled forward, at contract maturity (end-of-day on the “clearing settlement date”):

- The mark-to-market amount is set to zero.
- We then calculate the settlement variation amount to be banked exactly as on any other day – by subtracting the previous day’s value for mark-to-market from the current day’s (zero) value.
- The mark-to-market amount is then calculated one final time – from original trade price to the final settlement price and banked as part of the final settlement of the contract.
- The initial margin requirement is also set to zero, exactly as for any other cash-settled forward or future.
- The next morning the cash moves at the bank, and any collateral deposited to meet the initial margin requirement may be withdrawn.

For a physically-delivered forward, at contract maturity (end-of-day on the clearing settlement date):

- The mark-to-market amount is set to zero.
- We then calculate the settlement variation amount to be banked exactly as on any other day – by subtracting the previous day’s value for mark-to-market from the current day’s (zero) value.
- The invoice amount, calculated at original trade price, is included in the total amount to be banked.
- On the value date for physical delivery, the position is removed. This causes the initial margin requirement to be set to zero, and any collateral deposited to meet it may be withdrawn.

Data formats

Exactly as before, a forward is denoted with a product type code of **FWD**, and the settlement method is denoted as either **CASH** (for cash-settled) or **DELIV** (for physically-delivered).

There are now three possible values for the “valuation method” for forwards:

- The existing value **FWD** will continue to mean that mark-to-market amounts are collateralized.
- A new value **FWDB** (“forward banked”) means a forward with cash mark-to-market.
- A second new value **FWDBI** (“forward banked inverse”) will be used for FX forwards with cash mark-to-market where the value is flipped from the contra currency to the primary currency.

Exactly as before, the **FinalSettlCcy** attribute denotes the currency in which the mark-to-market amount is denominated, and the **Ccy** attribute on **Amt** elements also specifies the currency.

Exactly as before, the **FMTM** amount type will denote mark-to-market. For forwards with cash mark-to-market, a new **IMTM** amount type – “incremental mark-to-market” – denotes the change in mark-to-market from the previous clearing business date – in other words, the settlement variation amount.

Exactly as before, the **DLV** amount type represents either the final mark-to-market amount to be banked (for cash settled contracts) or the invoice amount (for physically-delivered contracts.)

To simplify bookkeeping system processing, a new **BANK** amount element represents the total cash to be banked, and a new **COLAT** amount element represents the total amount to be collateralized. (For forwards with cash mark-to-market, the **COLAT** element will always have a value of zero.)

Margining in SPAN

There are no changes to how performance bond (initial margin) requirements are calculated in SPAN for portfolios including forwards with cash mark-to-market. Simply divide the true notional position by the equivalent position factor for the product, round the result up (away from zero) to the nearest integer, and feed the resulting “marginable positions” to SPAN, exactly as before.

Testing opportunities

Forwards with cash mark-to-market are now available for testing in CME’s “New Release” environment. For more information please contact CME Clearing at 312-207-2525.

