CME Group

Advisory Notice
Clearing House

11-203

TO: Clearing Member Firms

FROM: CME Clearing

DATE: June 16, 2011

SUBJECT: **CDS Price Alignment Interest and Holiday Accrual Changes**

This advisory describes two upcoming changes for CME's cleared credit default swaps contracts:

- To modify holiday processing for coupon accruals, so that there are no new accruals on days that are banking holidays for the currency in which the CDS contract is denominated

- To convert Price Alignment Interest (PAI) processing for CDS contracts, from a monthly to a daily process

The target date for implementing these changes is **October 2011**. The purpose is to better align processing with industry-standard practices.

In addition to describing these two processing changes, information is provided below to clarify the different aspects of holiday calendar processing for CME's cleared USD-denominated Standard North American Corporate (SNAC) products.

Converting coupon accruals to skip bank holidays

Currently, accrued coupon amounts are always calculated through the current clearing business date, even if this date is a bank holiday in the currency in which the CDS contract is denominated.

With this change, the accrued coupon amounts would be held constant at their values from the previous day.

For example, let's consider two CDS contracts, one denominated in USD and another in EUR, and a week in which Wednesday July 4 is US Independence Day, a bank holiday for USD but a business day for EUR:

- On Tuesday July 3: accrued coupon covers the period from the start of the current coupon period, up to and including today Tuesday July 3, for both the USD and EUR-denominated contracts.

- On Wednesday July 4: accrued coupon for the EUR-denominated contract covers the period up to and including today July 4 – but accrued coupon for the USD-denominated contract is held constant at the period through Tuesday July 3.

- On Thursday July 5: accrued coupon for both contracts would cover the period up to and including Thursday July 5.

In other words: for the EUR-denominated contract, we're accruing one additional day of coupon for each day. But for the USD-denominated contract, we're skipping the accrual on the USD bank holiday, and making it up the day thereafter.

Note that this change has no effect on the quarterly coupon days. For example, for CME's SNAC (Standard North American Corporate) CDS contracts, the quarterly coupon days are still adjusted according to the combined USD and London banking calendars.

Converting PAI from monthly to daily processing

With this change, price alignment processing will adhere to the following principles:

- It will be assessed only on banking business days for the currency in which the CDS contract is denominated, using the appropriate overnight rate determined on the morning of that business day.

- The mark to market and accrued coupon balance on which PAI is assessed, will be from end-of-day on the immediately previous clearing business day.

- It will cover the number of calendar days, from the current banking business day to the next banking business day.

So in effect, the daily price alignment interest:

- Is for the net settlement variation amount realized at the bank this morning
- And covers the period until the next opportunity for banking settlement variation.

For example, let's suppose a CDS contract denominated in USD, where Wednesday July 4 (US Independence Day) is a bank holiday for USD:

On Monday July 2:
- Use the mark-to-market and accrued coupon amounts from end-of-day on Friday June 29.
- Use the OIS rate determined on the morning of today, Monday July 2.
- Calculate PAI on one calendar day – from today Monday July 2 to tomorrow Tuesday July 3.

On Tuesday July 3:
- Use the mark-to-market and accrued coupon amounts from end-of-day on Monday July 2.
- Use the OIS rate determined on the morning of today, Tuesday July 3.
- Calculate PAI on two calendar days – from today Tuesday July 3 to Thursday July 5.

On Wednesday July 4:
- Price alignment interest is zero.

On Thursday July 5:
- Use the mark-to-market and accrued coupon amounts from end-of-day on Wednesday July 4 (which will be the same as their values at end-of-day on Tuesday July 3.
- Use the OIS rate determined on the morning of today, Thursday July 5.
- Calculate PAI on one calendar day – from today Thursday July 5 to tomorrow Friday July 6.

Summary of calendar usage for CME's USD-denominated SNAC CDS contracts

The following is intended to summarize calendar usage for CME's USD-denominated "Standard North American Corporate" CDS contracts. There are four separate aspects of calendar usage:

- for adjustment of quarterly coupon dates;
- for price alignment interest and daily coupon accruals;
- for acceptance of trades for clearing; and
- for overall clearing processing.

Here's the details:

For adjustment of quarterly coupon dates: quarterly coupon dates are adjusted using the "mod following" convention, using the combination of the **New York banking** ("USNY", in effect the banking calendar for USD), and the **London banking** ("GBLO") calendars.

If the 20th of the quarterly month is not a business date in **both** the New York banking and London banking calendars, then the coupon date – the value date for the realization of the quarterly coupon – is adjusted to be the first subsequent date that **is** a business date in both calendars.

For price alignment interest and daily coupon accruals: For the purpose of variation margin processing, the "accrued coupon" component of variation margin is incremented on each business date in the **New York banking** (USD banking) calendar. The same logic is applied to the calculation of price alignment interest, which is calculated from one NY banking business date to the next. The London banking calendar is not relevant for this purpose.

For example, suppose US Independence Day, July 4, occurred on a Wednesday, and this day is a banking business day in London. For USD-denominated SNAC trades, the accrued coupon amount on Wednesday July 4, would cover the period from the first calendar date of the coupon period, only up to and including Tuesday July 3. On Wednesday July 4, the accrued coupon amount would be held constant (and there would be no price alignment interest.) On Thursday July 5, the accrued coupon amount would now increment by two calendar days, and would cover the period up to and including Thursday July 5.

For acceptance of CDS trades for clearing: these will normally follow the SIFMA US (bond market) calendar, although in particular special circumstances CDS trades could be allowed to clear with a clear date of a bond market holiday.

A good example is Good Friday, which is typically a bond market holiday but a USD banking business day. We wouldn't normally expect to receive a trade for clearing on such a day. But if we did, then a trade physically accepted for clearing at noon New York time on Good Friday (for example), would be assigned a clearing business date of the following Monday. Only in special cases, if market participants requested it, would trades submitted for clearing on Friday be allowed to have a clearing business date of that Friday, meaning that they would be margined that night and USD-denominated initial amounts would be settled on Monday morning.

For clearing processing: CME Clearing runs clearing cycles for all products according to its **clearing processing date calendar**. In this calendar, only Christmas and New Years are not business days, and only if they happen to occur on weekdays.

So on a normal US holiday, for normal USD-denominated SNAC trades:

- Trade registers and other system output **would** be provided.

- A quarterly coupon date could never occur on such a date.

- There would be no additional coupon accrual and no change in variation margin.

- There would be no price alignment interest calculated.

- No new trades would be accepted for clearing, or if they were, it would be for the following business date.

- Initial margin requirements, because they are calculated on a portfolio basis and could include offsets against CDS products denominated in other currencies, **could** change from the previous date. If the portfolio were composed solely of USD-denominated SNAC trades, the change would not be expected to be large, but equally, the requirements would be unlikely to be identical to those from the prior date.

Technical details

The changes are reflected in the following places:

- New data elements have been added to the FIXML-format **Product Reference File** and the **Settlement Price File** to drive the daily calculation of price alignment interest.

- A CSV-format **Price Alignment Interest** datafile provides a historical record, by business date, of data used to drive the price alignment interest calculation.

- The FIXML Trade Register will provide the price alignment interest data per position.

On the Product Reference File and the Settlement Price File

Data elements will be provided in the **Product Reference File** and the **Settlement Price File** to allow CDS market participants to automate processing in their systems for these new capabilities.

Whether the current clearing processing day is a banking business day for the contract's currency of denomination, will be provided in an **Attrb** element of type **112**. A value of **Y** means that today **is** a banking business day, and a value of **N** means that today **is not** a banking business day. For example:

> **<Attrb Typ="112" Val="N"/>**   // today **is not** a banking business day

No new data elements are needed for the change not to accrue additional coupon amounts on banking holidays for the currency of denomination. Rather, the modified number of days for the accrual will be represented in the existing elements which provide the number of days for the accrued coupon calculation. For example:

> **<Attrb Typ="102" Val="nn"/>** // # of Days for Accrued Coupon – Start of day position
> **<Attrb Typ="103" Val="nn"/>** // # of Days for Accrued Coupon – Trades cleared today

The previous clearing processing day – the business date from which the mark-to-market and accrued coupon amounts are taken for the purpose of calculating price alignment interest – will be provided in an **Evnt** element of type **114**. For example:

> **<Evnt EventTyp="114" Val="ccyy-mm-dd"/>** // Previous clearing business day

The next banking business day – the date to which price alignment interest should be calculated – will be provided in an **Evnt** element of type **115**. For example:

> **<Evnt EventTyp="115" Val="ccyy-mm-dd"/>** // Next banking business day

The number of days to use for the price alignment interest calculation will be provided in an **Attrb** element of type **110**. For example:

> **<Attrb Typ="110" Val="nn"/>** // # of Days for price alignment calculation

The interest rate to use for the price alignment interest calculation, will be provided in the Settlement Price File, in percent, in a **Full** element of type **z**. For example:

> **<Full Typ="z" Px="0.12345" Mkt="CMD" PxTyp="1" OpenClsSettlFlag="1"/>**
> // interest-rate is 12.345 basis points

On the Trade Register File

For each cleared position, the details of the price alignment interest calculation are provided in the Position Report **(PosRpt)** elements in the Trade Register file.

The price alignment interest amount calculated for today is provided in an **Amt** element of type **CASH** and reason code **4**. For example:

        <Amt Typ="CASH" Amt="-nn.nn" Rsn="4"/>   // today's PAI value

The mark to market amount for the previous clearing processing day can be calculated by subtracting the incremental mark to market amount (**Amt** element of type **ICMTM**) from the current day's mark to market value (**Amt** element of type **CMTM**).

Similarly, the accrued coupon amount for the previous clearing processing day can be calculated by subtracting the incremental accrued coupon amount (**Amt** element of type **IACPN**) from the current day's mark to market value (**Amt** element of type **ACPN**).

On the CSV-format Price Alignment Interest Datafile

A new **CSV-format Price Alignment Interest Rate File** will be produced daily and will be used to provide a consolidated view of all information needed to calculate PAI, for every business day for the current year-to-date. Here's a detailed description of each column and its header:

Column Header	Column
Bus_Date	The business date to which this record pertains
PAI_Type	Identifies the product set to which this record pertains – eg **USDPAI**
Banking_Day	**Y** indicates that this day is a banking business day, **N** that it isn't.
Rate_Eff_Date	Specifies the date on which the PAI interest rate was fixed
Posn_Date	Position Date – specifies the date from which the mark-to-market and accrued coupon amounts are taken
Next_Bank_Date	Specifies the next banking business date for this currency
Days	Specifies the number of calendar days to be used for the PAI calculation.

For more information: please contact Clearing Solutions at 312-648-8668.