

19 November 2003

Chris Francis
(44) 207 995 4445
chris_francis@ml.com
Atish Kakodkar
(44) 20 7995 8542
Barnaby Martin
(44) 20 7995 0458
Jón G. Jónsson
(44) 20 7995 3948

Derivatives

CDS Physical Settlement

Basic Mechanics & Regional Nuances

Global

What Happens When the Deal Goes South?

Since the adoption of the 2003 ISDA Definitions, one frequently recurring area of investor questioning is how CDS are settled following a Credit Event.

This is one of the respects in which US market conventions differ from Europe and Asia.

Without attempting to reproduce exhaustively the 2003 Definitions, this report summarises some of key points.

When the Credit Event clock starts ticking

We summarise:

- The various notices that have to be served
- The settlement timetable
- Buy-in procedures
- How North America differs from the rest of the world

CLN-friendly European and Asian market conventions

The alternating buy-in cycle that now occurs if the buyer cannot deliver the bond on time could look a bit like a never ending game of ping-pong.

For the most part this probably doesn't matter. For CLNs however, this lack of closure could be fatal. So the heavily CLN-penetrated markets of Europe and Asia now impose a 60 business day limit¹ on buy-in table tennis.

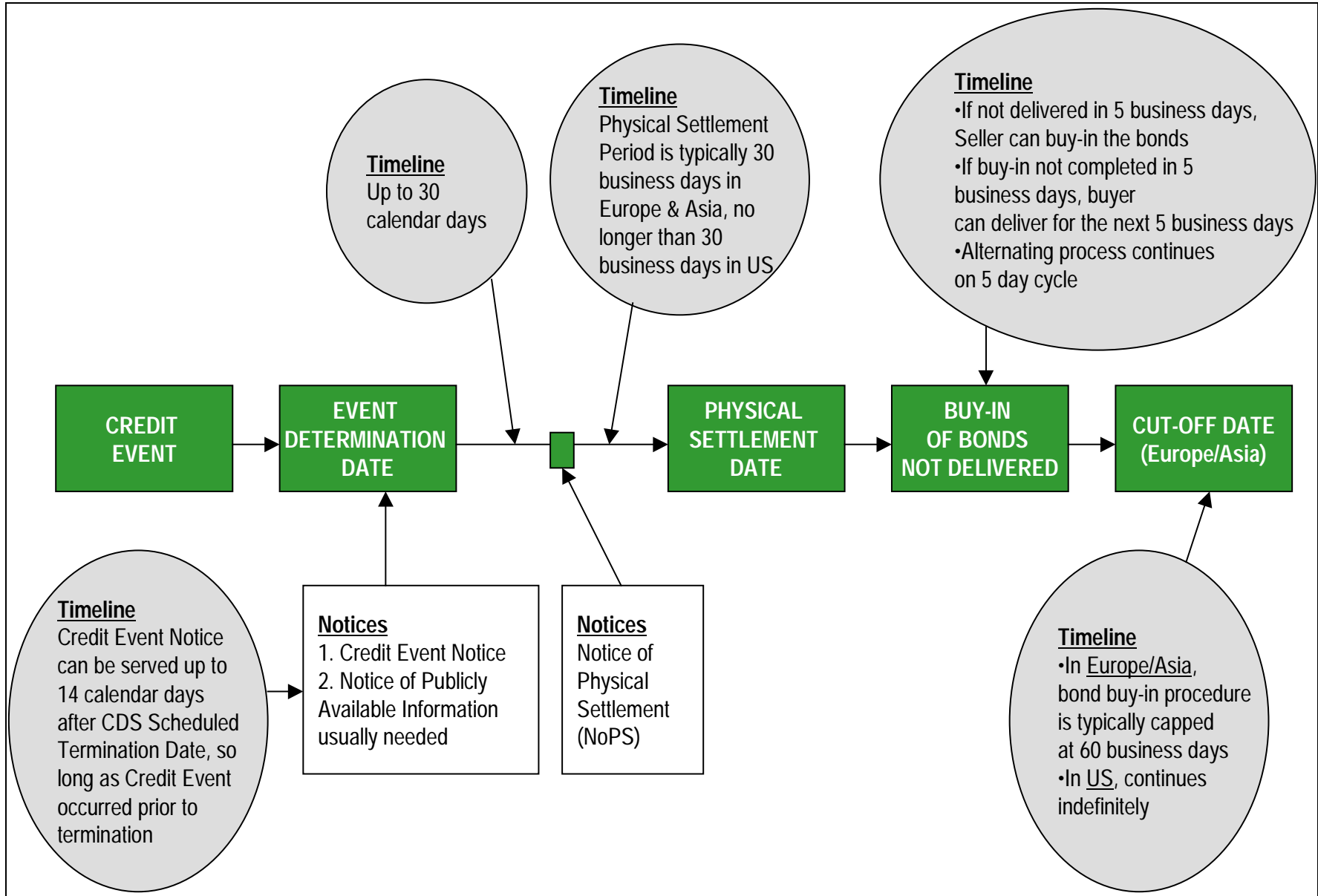
Refer to important disclosures on page 6.

Merrill Lynch Global Securities Research & Economics Group
European Credit Research

Investors should assume that Merrill Lynch is seeking or will seek investment banking or other business relationships with the companies in this report.

¹ After the Physical Settlement Date

Chart 1: Summary of CDS Settlement Timeline



Source: Merrill Lynch

Refer to important disclosures on page 6.

Introduction to some key issues

What happens once a Credit Event comes to light?

How and when to settle

The NoPS replaced the Notice of Intended Physical Settlement (NIPS) from the 1999 Definitions.

Background

We reckon that about 25 pages in the 2003 ISDA Credit Derivatives Definitions (“the Definitions”) are devoted to CDS settlement in one way or another. In this note we summarise the basic mechanics. With such topics, law and credit analysis tend to overlap. A full legal analysis is beyond the scope of this credit research note and we would recommend that investors take legal advice on documentation issues.

That said we hope that this short note can aid the understanding in areas which provoke the questions most frequently regarding corporate transactions.

Basic Mechanics under 2003 Definitions

■ **Event Determination Date**

Once a Credit Event has occurred the first key milestone is the **Event Determination Date**. On this date the settlement clock starts ticking. Under current market conventions, this occurs when both the **Credit Event Notice** and the **Notice of Publicly Available Information** have been served.

Credit Event Notice (“CEN”)

This is an irrevocable notice of a Credit Event that has occurred between the Effective Date and Scheduled Termination Date of the contract.

This notice contains a description in reasonable detail of the facts relevant to the determination that the Credit Event has occurred. This Credit Event need not be continuing on the date that the CEN becomes effective.

The CEN can be served up to 14 calendar days after the CDS Scheduled Termination Date so long as the Credit Event itself occurred during the life of the contract.

The CEN will usually be served by the buyer. However, it is standard market practice to allow it also to be served by the seller. This allows dealers with offsetting positions to manage their risk.

Notice of Publicly Available Information

It is market convention to require that the CEN is supplemented with a Notice of Publicly Available Information. This irrevocable notice from the party who served the CEN must cite Publicly Available Information that confirms the occurrence of the Credit Event.

Publicly Available Information (“PAI”) must reasonably confirm the facts relevant to the determination of the Credit Event and can be sourced from a variety of international news media such as Bloomberg, Dow Jones, Reuters and several major international financial newspapers. The PAI can also take other forms such as releases by the Reference Entity, Trustee or bankruptcy filings.

Current market convention requires two sources of PAI (if press reports are used).

■ **Physical Settlement of the CDS**

Notice of Physical Settlement

Within 30 calendar days of the Event Determination Date, the buyer must serve a **Notice of Physical Settlement** (“NoPS”) to the seller.

The NoPS is an “irrevocable” confirmation of the buyer’s delivery plans in settlement of the CDS including a detailed description of the Deliverable Obligations.

Although the NoPS is irrevocable, the buyer can, on or prior to the Physical Settlement Date, notify the seller that it will change the bonds or loans to be delivered. Additionally, after this date, the buyer can correct errors and inconsistencies in the description of the Deliverable Obligations.

Refer to important disclosures on page 6.

Physical Settlement Period

The Physical Settlement Period is the timeframe within which Deliverable Obligations must be delivered following the issuance of the NoPS

For investment grade contracts in Europe, Asia, Japan and Australasia it is market convention for the Physical Settlement Period to be set at 30 business days. The US contracts are worded slightly differently specifying it as the longest number of business days for settlement in accordance with the then market practice of such Deliverable Obligation subject to a maximum of 30 business days.

The **Physical Settlement Date** is the last day of the Physical Settlement Period or the date on which all Deliverable Obligations have been delivered (if earlier).

Buy-In of Undelivered Bonds

Under the 2003 Definitions, if the buyer has not delivered the bonds specified in the NoPS five business days after the Physical Settlement Date, the seller has the right to close out some or all of the transaction through a buy-in of relevant bonds.

The seller must provide the buyer with at least two business day’s notice of the buy-in specifying 1) the bonds to be bought-in 2) principal amount of bonds to be bought-in and 3) date of buy-in.

The seller has five business days to execute this buy-in by attempting to get quotes from five dealers and take the lowest price.

If the buy-in is not completed in five business days, the buyer’s right to deliver the bonds is reinstated for a further five business days.

Under the 2003 Definitions this process continues indefinitely until the contract is settled. This system has been adopted as market convention for contracts with North American Reference Entities.

Alternative Settlement Procedure Relating to Loans not Delivered

If loans specified in the NoPS have not been delivered five business days after the Physical Settlement Date, Alternative Procedures begin. At this initial stage, provisions are made for the delivery of alternative bonds or loans in cases where the failure to deliver was a result of a failure to obtain requisite consents from the borrower.

At any time later than 20 business days after the Physical Settlement Date, if loans have not been delivered, the seller can require the buyer to deliver a particular bond (transferable and not bearer) or loan (assignable) provided it complies with Deliverable Obligation Characteristics. The seller can select which bond or loan is to be delivered so long as it can identify a willing seller of the instrument.

There is no time cap placed on these Alternative Procedures.

Buyer and seller play 5-day ping pong

In the 1999 Definitions there was no provisions for buy-in of bonds after the Physical Settlement Date



Can't obtain borrower's consent

Seller can source and select the instrument to be delivered

Table 1: Regional Settlement Convention Summary

Reference Entity Location	Physical Settlement Period	60 Business Day Cap on Settlement
Europe	30 business days	Applicable
Japan	30 business days	Applicable
Non-Japan Asia	30 business days	Applicable
Australia & NZ	30 business days	Applicable
North America	As defined in S8.6 of Definitions, but max 30 business days	Not Applicable

Source: Merrill Lynch. Refers to investment grade corporate transactions

European and Asian Market Practice

Problems for CLNs

In Europe and Asia, credit linked notes are a popular investment vehicle as they offer a funded indirect means of 1) exploiting pricing anomalies between cash and CDS markets 2) achieving investment flexibility to tailor-make features such as maturity and 3) accessing names who have not issued bonds. In the US where the corporate bond market is much broader and deeper, CLNs are not a major product area.

The bond buy-in procedures outlined above pose great challenges for CLN structures as they put no final date on the settlement process, making it very difficult for the structurer/buyer to manage its risks given that the CLN itself has a finite life.

■ The 60-Day Cut Off

For this reason it is market convention in Europe and Asia to specify a 60 business day cap on settlement. Thus if the alternating 5 day buy-in procedure cannot achieve full settlement in 60 business days (after the Physical Settlement Date) the contract then terminates. The part of the contract not settled by that time would effectively then expire worthless even though a Credit Event has occurred. In North America by contrast, the settlement cycle would continue indefinitely until settlement is completed (if ever).

The wording of CLN issues has now adapted to this new system by using “Hedge Adjustment Event” language. These clauses allow the deferment of settlement of the CDS imbedded in the CLN if the structurer/counterparty has not received settlement from hedges of, or offsetting trading positions related to its counterparty obligations to the CLN.

Certain Other Issues

■ “Clean” Delivery

Exclude Accrued Interest

In settlement, the buyer must deliver bonds or loans with an outstanding principal balance equal to the notional amount of the CDS. It is market convention for accrued but unpaid interest to be excluded from this calculation.

■ Standard Specified Currencies

Contracts can be settled in other currencies

It is market convention to allow delivery of bonds or loans denominated in Standard Specified Currencies. These are the currencies (or successor currencies) of Canada, Japan, Switzerland, UK and USA together with the euro. Thus a \$10mn CDS contract could be settled with yen bonds provided the outstanding principal balance was equivalent to \$10mn at the time of delivery.

It has been argued that the potential for altering the bond to be delivered post issuance of the NoPS gives the buyer a degree of currency optionality.

Important Disclosures

Copyright 2003 Merrill Lynch, Pierce, Fenner & Smith Incorporated (MLPF&S). All rights reserved. Any unauthorized use or disclosure is prohibited. This report has been prepared and issued by MLPF&S and/or one of its affiliates and has been approved for publication in the United Kingdom by Merrill Lynch, Pierce, Fenner & Smith Limited, which is regulated by the FSA; has been considered and distributed in Australia by Merrill Lynch Equities (Australia) Limited (ACN 006 276 795), a licensed securities dealer under the Australian Corporations Law; is distributed in Hong Kong by Merrill Lynch (Asia Pacific) Ltd, which is regulated by the Hong Kong SFC; and is distributed in Singapore by Merrill Lynch International Bank Ltd (Merchant Bank) and Merrill Lynch (Singapore) Pte Ltd, which are regulated by the Monetary Authority of Singapore. The information herein was obtained from various sources; we do not guarantee its accuracy or completeness.

Neither the information nor any opinion expressed constitutes an offer, or an invitation to make an offer, to buy or sell any securities or any options, futures or other derivatives related to such securities ("related investments"). Officers of MLPF&S or one of its affiliates may have a financial interest in securities of the issuer(s) or in related investments.

This research report is prepared for general circulation and is circulated for general information only. It does not have regard to the specific investment objectives, financial situation and the particular needs of any specific person who may receive this report. Investors should seek financial advice regarding the appropriateness of investing in any securities or investment strategies discussed or recommended in this report and should understand that statements regarding future prospects may not be realized. Investors should note that income from such securities, if any, may fluctuate and that each security's price or value may rise or fall. Accordingly, investors may receive back less than originally invested. Past performance is not necessarily a guide to future performance.

The bonds of the company are traded over-the-counter. Retail sales and/or distribution of this report may be made only in states where these securities are exempt from registration or have been qualified for sale. MLPF&S usually makes a market in the bonds of this company.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or related investment mentioned in this report. In addition, investors in securities such as ADRs, whose values are influenced by the currency of the underlying security, effectively assume currency risk.