

**The CDS Big Bang:  
Understanding the Changes to the  
Global CDS Contract and North  
American Conventions**

**March 13, 2009**

## Table of Contents

Executive Summary .....	3
Why the Contract and Conventions Are Changing.....	4
The Size of the CDS Market .....	4
Regulatory Interest in CDS .....	4
Benefits of Changes to Trade Compression .....	5
Benefits of Changes to T+0 Trade Processing .....	6
Benefits to Central Clearing .....	7
Benefits of Each Change .....	8
Making Single Name CDS More Like the Markit CDS Indices and Bonds .....	9
Expected Contract Changes .....	10
Introduction .....	10
Determination Committee – Credit Events and Succession Events.....	10
Responsibilities of the Determination Committee.....	10
Composition of the Determination Committee.....	10
General Voting .....	11
Mechanics: Credit & Succession Events.....	11
Mechanics: External Review .....	11
Hardwiring of the Auction Mechanism.....	12
Effective Date for Credit Event & Succession Event Purposes .....	13
Expected Convention Changes to North American CDS .....	15
Introduction .....	15
Fixed Coupon.....	15
Liquidity in 100 or 500 .....	16
Trading with a Full Coupon .....	17
Restructuring Clause Convention .....	18
Quoting Convention .....	19
Conventional Spreads.....	19
ISDA CDS Standard Model.....	19
Markit CDS Converter .....	20
New Runs .....	20
Migration of Old Contracts to New Contracts/Conventions .....	21
Big Bang Protocol .....	21
Portfolio Re-couponsing .....	21
Restructuring Conventions.....	22
Full Coupon Convention.....	22
Conclusion .....	23

## Executive Summary

The CDS contract itself as well as how it is traded are about to undergo significant changes. The changes to the CDS contract are global changes. However, there are convention changes that for the foreseeable future will only apply to North American CDS. Rather than altering aspects of the CDS market piecemeal over time, both contract and convention changes will be implemented simultaneously in what has become known as the CDS Big Bang. Currently, many of these changes are expected to take place on April 8<sup>th</sup>; however, that date is subject to revision. Additionally, the specific contract and convention changes outlined in this report may potentially change prior to implementation.

### Why is the CDS Market Changing?

The CDS market has experienced phenomenal growth that has attracted the interest of dealers, investors, and regulators. This growth has focused attention on enhancing the infrastructure of the CDS market in order to achieve T+0 or same day trade matching, the elimination of offsetting trades, and centralized clearing. The global contract and North American convention changes are designed to improve the efficiency of these industry priorities.

### Global Contract Changes

There are three changes to the CDS contract and they are global. First, the contract will be changed to hardwire the auction mechanism for CDS following a credit event. Currently, participants in the CDS market must sign up for a separate protocol for each auction. Second, Determination Committees will be formed to make binding determinations of whether credit and succession events have occurred as well as the terms of any auction. Third, the effective date for all CDS contract will be changed to the current day less 60 days for credit events and the current day less 90 days for succession events. The provisions for Determination Committees and auction hardwiring are expected to take effect on new and legacy (for adherents of the Big Bang Protocol) trades on April 8<sup>th</sup>. The provision for credit and succession event effective dates is scheduled to take effect on April 8<sup>th</sup> for new trades and June 20<sup>th</sup> for legacy trades for investors that participate in the Big Bang Protocol.

### North American Convention Changes

Similar to the way Markit CDS indices currently trade globally, single name CDS in North America will trade with a fixed coupon. The coupon will be either 100 basis points or 500 basis points and upfront payments will be exchanged. Contracts that trade with a 100 fixed coupon will generally be quoted in dealer runs as a Conventional Spread and contracts that trade with a 500 fixed coupon will generally be quoted in dealer runs in points upfront. But there will also be instances where participants will see 100 fixed coupons quoted in points upfront and 500 fixed coupons quoted in Conventional Spreads. The Markit CDS Converter translates the Conventional Spread into the required upfront payment and helps investors convert between quoting conventions. It is available for free at [www.markit.com/cds](http://www.markit.com/cds). Additionally, regardless of when new trades are made, the buyer will have to make a full coupon payment on the first payment date. As such, the seller of CDS protection will make any needed accrual rebate payment to the protection buyer at the time of the trade. These changes are expected to be implemented on April 8<sup>th</sup> for new trades. The handling of legacy positions regarding the new fixed coupons and conversion to the new restructuring clauses will depend largely on individual investor preferences. This report presents a few potential solutions.

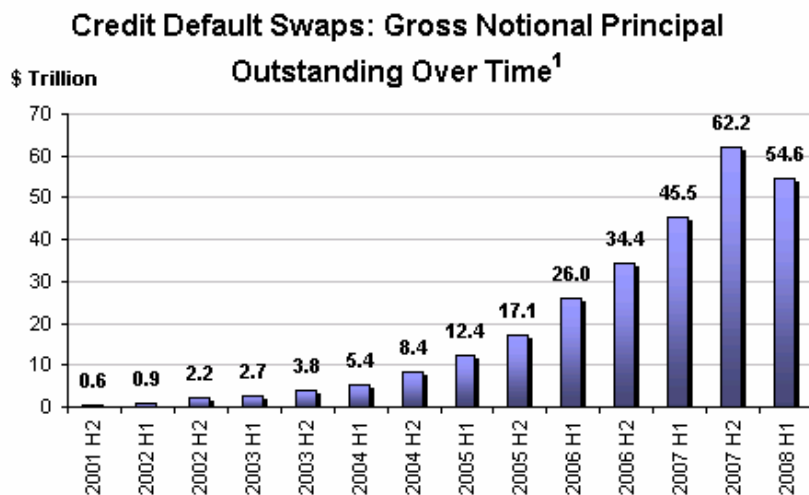
### How Will This Change Existing CDS Positions?

CDS positions under the existing contract and trading conventions may become relatively illiquid. Thus, investors might elect to "roll" into new contracts or work on a bilateral basis with their counterparties to make desired adjustments. A process known as portfolio re-couponing may also be available to help investors modify their existing portfolios into 100 and 500 fixed strike positions while maintaining the risk profile and payments of their existing net positions. To make old contracts fully fungible with the new contracts, participants in the CDS market are being encouraged to sign what has become known as the Big Bang protocol. Adhering to this protocol would allow for the determination committee, cash auction, and effective date provisions to be applied retroactively to existing positions.

## Why the Contract and Conventions Are Changing

### The Size of the CDS Market

Although statements that the CDS market is worth a multiple of the stock market are inaccurate, the CDS market is clearly a sizable market that has attracted the attention of dealers, investors, regulators and lately, the general public. The growth in credit default swaps volumes has been nothing short of phenomenal. On a gross notional outstanding basis, the market has roughly doubled in size every year through 2007. Due to the size of the CDS market, there has been significant focus on fundamental improvements to the infrastructure of the market. Specifically, the reduction of notional values through trade compression, the timely matching of CDS trades, and the central clearing of CDS have become industry priorities. While the elimination of offsetting trades, matching of trades, and central clearing of CDS contracts can occur under the existing contract and trading conventions, they would not happen as effectively or efficiently as possible. As such on April 8<sup>th</sup> (currently estimated), there will be significant changes to the global CDS contract as well as to North American trading conventions. These changes have collectively become known as the CDS Big Bang.



Source: ISDA

### Regulatory Interest in CDS

While the general public has only recently begun to take an interest in the credit default swaps market, the size of the CDS market drew regulatory focus and attention which has been sustained for some time. Regulatory attention has been most pronounced in the North America and Europe. In the United States, the industry has been working closely with regulators such as the Federal Reserve Board (FRB). The FRB and fourteen dealer banks started working in the fall of 2005 to address operational inefficiencies and backlogs in the processing of over-the-counter credit default swaps trades. This group became known as the "Fed 14". Since that time other banks have joined these efforts. The industry made great strides reducing backlogs of unconfirmed trades and reducing the average days outstanding even in the face of a rapidly growing market.

<sup>1</sup> The ISDA numbers on gross notional principal outstanding are compiled through surveys of market participants. In these numbers, it is believed there are issues of double counting. As of the week ending February 13, 2009, the DTCC Trade Information Warehouse reports just under \$28.5 trillion in gross notional among credit derivative products, a little more than half of that in single name CDS. It is important to note that notional value does not represent the overall value of the CDS market and is not comparable to the total market value of the equity markets, for example. Notional value is the input into the calculation to determine cash flows and is used interchangeably with "notional amount". Lastly, gross notional outstanding collapses dramatically when there is a credit event as open positions for that credit become fungible with one another.

The industry's commitments and progress have been communicated through a series of letters to the FRB and via Markit Metrics, which was established as the result of the first meeting of the Fed 14. Markit Metrics is a tool that is designed to allow regulators and dealers to track key operational milestones achieved by industry participants.

Although there have been several regulatory statements in North America concerning the CDS market, the President's Working Group's (PWG) March 2008 "Policy Statement on Financial Markets" was among the most influential. The PWG was originally established by President Ronald Reagan to study and respond to the market conditions of "Black Monday" in October 1987. The PWG consists of the Secretary of the Treasury (as Chairman), the Chairman of the Board of Governors of the Federal Reserve System, the Chairman of the Securities and Exchange Commission, and the Chairman of the Commodity Futures Trading Commission. In the March 2008 statement, the PWG outlined their diagnosis of the causes of the recent financial market turmoil. They cited loosening of lending standards, inadequate risk systems, residential mortgage backed securities, and weaknesses at the rating agencies as the significant drivers. The document also makes some recommendations for the over-the-counter (OTC) derivatives markets, which includes the credit default swaps market. Specifically the PWG recommended the following:

1. More ambitious standards for timely trade matching. A desire for T+0 or same day trade matching is behind many of the CDS changes discussed in this report.
2. Amend trade documentation to include provisions for cash settlement of credit events. Currently participants in the CDS market that wish to participate in the auction, used for cash as well as physical settlement of CDS positions, must sign a separate protocol for each credit event.
3. Provide a foundation for industry-wide, operational infrastructure changes that maximize automation and electronic processing, and reduce counterparty risk via trade compression and collateral arrangements.

In Europe, similar conversations have been occurring in parallel with the discussions in the US around infrastructure enhancements to the CDS market. Most of these conversations have occurred primarily through the European Commission, although regulators in several jurisdictions have been involved on other matters particularly as they relate to the banking systems of their respective countries. Most recently, nine of the major European CDS dealers and the European Commission committed to introducing central clearing by the end of 2009. A description of central clearing is provided later in this report.

In terms of specific changes to the CDS product for the European region, it is still too early to fully know all of the possible changes that will occur. We do know that European contracts will be subject to the global contract changes enumerated here in detail, specifically: hardwiring of the auction protocol, event determination committees, and standardized event effective dates. We can predict that Europe will likely not adopt the dropping of restructuring from its contracts simply due to the need by clients in the European region stemming from differing bankruptcy procedures across different regimes and a greater focus on Basel II capital relief.

## Benefits of Changes to Trade Compression

The purpose behind compression is to reduce CDS gross notional amounts outstanding while not altering the economic details of a party's net position. Reducing the number of outstanding trades is also a key aim. In order to not alter the economic details of a net position, one has to replicate the same risk profile and cash flows for each trade. Additionally, any compression process also has to take into consideration each bank's credit limits to counterparties.

The CDS compression process jointly developed by Markit and Creditex involves terminating existing trades and replacing them with a far fewer number of new "replacement trades" which have the same risk profile and cash flows as the initial portfolio. The initiative, available to both the U.S. and European CDS markets, has the support of 16 major CDS market dealers. Markit and Creditex were awarded the administration of the portfolio compression process in the summer of 2008. Since then, over \$ 2 trillion notional value has been reduced for single name trades with no change in actual value. The process recreates the cash flow and risk position of each counterparty with a smaller notional amount and number of trades. Benefits are a decrease in operational risk, smaller capital charged (as they apply to gross notional amount), and improved operational costs (each trade costs money to maintain). The success of this service has been credited in part with helping continue the trend of reducing the overall notional volume in the CDS market.

CDS trade compression combines trades into common buckets where there is the same reference entity, seniority, currency, restructuring clause, and maturity. Then the process searches for the most efficient way to reduce notional without altering the risk profile or cash flows subject to risk tolerances set by participants. An example follows:

Credit	Notional (\$mm)	Buyer or Seller of Protection	Maturity	Coupon (bps)	Cashflow per Year (\$k)
1) The Widget Corporation	30.0	Buyer	6/20/2014	200.0	-600.0
2) The Widget Corporation	-15.0	Seller	6/20/2014	100.0	150.0
3) The Widget Corporation	-10.0	Seller	6/20/2014	325.0	325.0
The Widget Corporation	5.0	Buyer	6/20/2014	250.0	-125.0

*These three trades can be replicated with one trade: Buy protection of \$5 mm notional at a 250 bps coupon generating a cash outflow of \$125,000. Note in this example we ignored counterparty limits and specifying counterparties for simplicity.*

Source: Markit

While Compression has been successful, its effectiveness is constrained by the lack of fungibility in the current CDS contract. There are two ways to increase the effectiveness of trade compression: increase the yield through a more effective compression rate and increase the volume of trades eligible to be included in the process. The summary table below shows how either more trades can become eligible for compression or the compression ratio can be improved based on the adoption of proposed changes to CDS.

		Benefits	
		Compression Rate	Eligibility of Trades
Convention Changes	Standard Coupon	<b>5-10% increase</b>	---
	Elimination of Long Stub/Short Stub	---	<b>5% increase</b>
	No Restructuring (if fully adopted)	---	<b>2-3% increase</b>

Source: Markit, DTCC

By standardizing premium payments to 100 or 500 basis points annually, we estimate that compression rates will improve by 5-10% over the long-term as the reduction of coupon possibilities (now infinite to two standard) aids efficiency. Compression is subject to diminishing marginal returns. By standardizing the timing of premium payments such that the first premium payment is not variable based on a trade date, this will increase by 5% the overall amount of trades that can be initially compressed. A more detailed description of the long stub/short stub issue is provided later in this report. Lastly, standardizing the restructuring clause to 'No Restructuring' should increase initially eligible trades by 2-3%. While these percentage increases may seem like small gains to a casual observer, remember that the gross notional amounts are quite large. Even a very small percentage increase has the impact of reducing gross notional numbers dramatically, particularly when increasing the eligibility of trades as there is a multiplier effect.

## Benefits of Changes to T+0 Trade Processing

The market has taken strides over the last two years to improve operations and reduce the backlog of outstanding confirmations. Through our Markit Metrics data we see that average 2008 monthly trading volumes were approximately 22,500 contracts (compared to approximately 17,500 in 2007), 92.5% of which are confirmed electronically (compared to 85% approximately in January 2007). Outstanding confirmations decreased from roughly 10,000 contracts in September 2007 to an average of 3,000 contracts in Q2 and Q3 2008. While industry participants work to streamline processes and systems, parallel efforts to standardize the product and reduce its complexity will greatly help meeting the targets mentioned below.

A key driver behind many of the CDS contract and convention changes are the gains in operational efficiency and how the changes help fulfil the industry's commitment to the Federal Reserve Board (FRB), especially in regards to trade processing and reducing the backlog of unconfirmed trades. Specifically the sixteen leading CDS dealers in North America have pledged in an October 31, 2008 letter to the FRB:

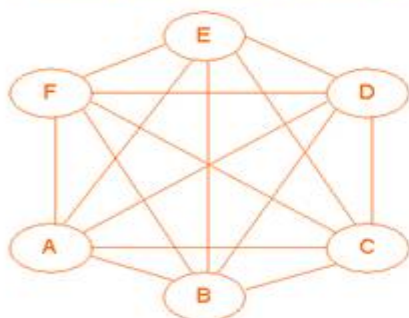
- 1) Submission Timeliness: By June 30, 2009 T+0 (trade date) submission target of 85% across all trades, including novations
- 2) Submission Accuracy: By June 30, 2009 94% accurate first time submission of all trade types, including novations (confirmation without modification)
- 3) Confirmation Timeliness: By June 30, 2009 95% T+5 confirmation target

The goal is T+0 or same day trade matching for every traded CDS instrument. How close you get to this goal is an interaction of three variables: how fast you submit trades, how accurate the trades are when you submit them, and how fast you correct trades. These factors line up with the three pledges that the industry made to the Fed. Standardization and streamlining of operational details and processes is the only way to get there. If the proposals currently considered are fully adopted, trade breaks on the North American standard contract should occur only on five different characteristics: reference entity, upfront payment amount, notional trade amount, maturity date, and currency—all of which should be readily known by the front offices of each counterparty. By reducing the number of details on which a trade can break and putting the resolution of these details into the front office, the processing of trades will become timelier and less prone to error. Should there be an error, there would be a quicker turnaround time for resolution as well.

## Benefits to Central Clearing

Recent months have seen increasing calls (including from regulators across the globe) for the introduction of central clearing for CDS trades. It is felt that the establishment of one or more central counterparty (CCP) entities will help to remove some of the systemic risk associated with CDS trading. The current market reflects multiple bilateral relationships as there are two parties to every CDS contract. The move to a central clearing platform would reduce the complexity by making a well-funded organization a central counterparty to CDS contracts. The existence of a well-funded central counterparty standing between trades is meant to deter potential domino effects of counterparty failures. While the CDS markets remained liquid and functioning during the collapse of Lehman Brothers and Bear Stearns, those events highlighted the risk and underscored the need for a systematic fix. Should one or more counterparties default simultaneously under a CCP structure, a CCP would first seek to net and hedge positions as much as possible in an effort to reduce the impact on the CCP to make good obligations stemming from those positions. The more standard the contracts are the more effective the CCP's hedges will be.

- Bilateral**
- Web of counterparty exposures
  - Complex collateral movements
  - Potential domino effect of one dealer default



- Clearing**
- Hub and spoke with central guarantor
  - All collateral moves to/from clearing house
  - Clearing house capitalised to withstand dealer default



Source: The Clearing Corporation

How do these contract and convention changes support central clearing? The answer is standardization.

- 1) Event Determination Committee—a central decision point and trigger for credit and succession events prevents differing conclusions or triggers for different contracts on the same entity.
- 2) Hardwiring of Auction—supports a binding and standard cash settlement price when there is a credit event.
- 3) Rolling Event Effective Date—every open position has the same effective date regardless of when the original trade took place.
- 4) Fewer Restructuring Clauses—having fewer restructuring clauses available helps reduce the complexity of centrally clearing many more contracts.
- 5) Fixed Coupons—makes payment amounts standardized thereby making it easier to offset contracts.
- 6) Standardization of Accruals—makes the timing and amount (along with fixed coupons) of payments uniform in the first premium period (and throughout the duration of the contract) across all trades (same reference entity, seniority, currency, restructuring clause, and maturity), thereby making it easier to offset contracts.

## Benefits of Each Change

It is tempting to think of each design change or contract feature separately particularly when trying to understand how the proposed change will work. The goals of reducing outstanding trades by trillions of notional dollars, restructuring the way trades are processed so that trades can be matched in the same day, and the creation of a central counterparty mechanism are ambitious goals in scale and scope. The interaction of these changes and their interdependency makes these proposals stronger and more coherent than simple one-off changes.

		Goals		
		Trade Compression	T+0 Trade Processing	Central Clearing
Contract & Convention Changes	Event Determination Committee			☑
	Hardwiring of Auction			☑
	Rolling Event Effective Date	☑		☑
	Fewer Restructuring Clauses	☑	☑	☑
	100/500 Fixed Coupons	☑	☑	☑
	Full Coupon	☑	☑	☑

Source: Markit

While the proposed changes to the CDS contracts are focused on standardization, the flexibility that the contracts currently provide has been a key factor in the success and growth of the market over time. Market participants requiring the flexibility that highly customized transactions provide should still be able to find a market for such transactions. For example, if clients wanted to trade a contract with a maturity date that did not fall on an IMM date, clients would be able to do this transaction just like they do now as they will most likely find a dealer willing to make that market. It may not be liquid as most would trade the new standard contract, but this is no different today from trading a contract that is “off convention”.



## Making Single Name CDS More Like the Markit CDS Indices and Bonds

In the credit default swaps market, the Markit CDS indices are the most liquid instruments. Markit CDS indices represent over 48% of the notional value in the DTCC Trade Information Warehouse. Many of the changes outlined in this report make single name CDS more like Markit CDS indices.

Additionally, the fixing of coupons, the exchange of upfront payments and the standardization of accruals make single name CDS more like bonds. While the changes to the CDS contract and North American conventions are significant, they are not as dramatic as they may initially seem.

### More Like Markit CDS Indices & Bonds

	Markit CDS Indices	Bonds	Proposed Standard North American CDS Convention and Global Contract Changes
Fixed Coupons	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Upfronts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Standard Accruals	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
No Restructuring <sup>2</sup>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Standard Event Effective Date in Past	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>

Source: Markit

<sup>2</sup> Markit CDX indices trade with No Restructuring for the most part. The Emerging Markets indices of CDX trade with Restructuring. Markit iTraxx indices trade with Modified-Modified Restructuring except for the Sub-Financials which trade with Restructuring.

## Expected Contract Changes

### Introduction

Some of the proposed CDS changes are simply a matter of a change in trading conventions or market practice by participants that do not require any changes in the contractual language. However, for some changes, it will be necessary to amend or revise the 2003 ISDA Credit Definitions. The International Swaps and Derivatives Association, Inc. (ISDA), the industry trade association, has been working on a supplement that will specifically amend the definitions such that the following changes can be made: creation of event determination committees, hardwiring of the auction mechanism, and standardized event effective dates with a consistent lookback period. Furthermore, these changes are expected to be part of what is called a “Big Bang” protocol which has the purpose of applying these changes retroactively to existing trades for those that adopt the protocol.

### Determination Committee – Credit Events and Succession Events

The industry is designing Credit Derivatives Determination Committees (DC) which will be implemented through a supplement to the 2003 ISDA Credit Definitions. There will be one DC per region with the regions defined as: The Americas, Asia Ex-Japan, Australia-New Zealand, EMEA (Europe, Middle East, and Africa), and Japan. The supplement will be binding for all new trades. This is meant to harmonize the industry and avoid potential misinterpretations. Note as part of this supplement the role of calculation agent will be amended accordingly. The expectation is that this change will be implemented on April 8<sup>th</sup>, but this is subject to change.

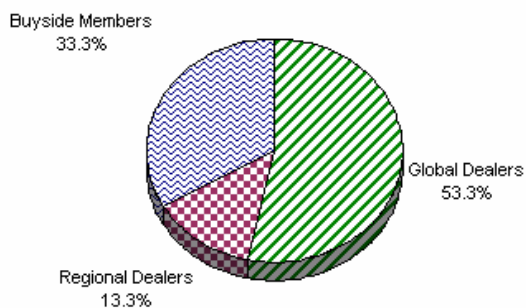
#### Responsibilities of the Determination Committee

Each DC will have several responsibilities for its region. First and foremost, the DC will decide whether a credit event has occurred, its type and date. The DC will determine whether to hold one or more auctions and the specific terms of the auction (we go into this in more detail under “Hardwiring of the Auction Mechanism”). The DC will approve requests by dealers to act as a Participating Bidder and make amendments to the Auction Methodology after a public comment period and with the support of an eighty percent (80%) supermajority vote. The DC will make determinations on the acceptable deliverable obligations and any substitute reference obligations, if applicable. Lastly, the DC will make determinations regarding succession events.

#### Composition of the Determination Committee

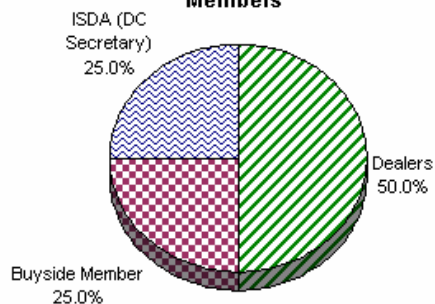
The structure and composition of each DC is consistent across regions and consists of the following: eight (8) global dealers, two (2) regional dealers for each region, five (5) buy side members, two (2) non-voting dealers, one (1) non-voting buy side member, and the International Swaps & Derivatives Association (ISDA) as a non-voting secretary. To reiterate, there will be sell-side and buy-side representations on the DC with fifteen (15) voting members and three (3) non-voting members at any one time (the DC Secretary is the fourth non-voting member).

**Determination Committee Composition: Voting Members**



Source: Markit

**Determination Committee Composition: Non-Voting Members**



Source: Markit

There are separate criteria for membership on a DC depending on whether the member is a dealer or buy side member. To become a dealer member, the dealer institution must fulfil three requirements. First, the dealer must be a participating bidder in auctions. Second, the dealer must adhere to the “Big Bang” protocol. Last, the composition of dealer members will be based upon notional trade volumes as reported by Depository Trust and Clearing Corporation (DTCC) data via their Trade Information Warehouse (TIW). To become a buy side member of a determination committee is a two-tier process. Buy side members of a DC will be randomly selected from a buy side pool. To qualify to be in the buy side pool, the institution must have at least \$1 billion in assets under management (or the equivalent), have single name CDS trade exposure of at least \$1 billion, and be approved by one-third (1/3) of the then-current buy side pool. The buy side members of the DC will be randomly selected from the buy side pool and serve for staggered one year terms. The buy side members on the DC must include at least one hedge fund and one traditional asset manager at all times. No institution can serve a second term until all eligible institutions have served. The proposal gives the buy side a direct voice and formal, permanent representation.

### **General Voting**

To start the voting process, any ISDA member may request a DC be convened to address a question (typically concerning the occurrence of a credit event or succession event). At least one member of the committee must agree to consider the question. Every committee member is required to vote in all binding votes with one excused absence per year. A binding vote occurs on any questions related to a credit event, deliverable obligations, succession events, or substitute reference obligations. All resolutions by a DC will be published by ISDA.

### **Mechanics: Credit & Succession Events**

In order for a DC to consider whether or not a credit event or succession event has occurred, an ISDA member must bring forth the issue for consideration with the sponsorship of a DC member. The issue must be raised when the “lookback” period (60 days for credit events, 90 days for succession events) is still applicable. Note, once the issue is formally raised, the time taken for the committee to deliberate the necessary questions is not taken into consideration for purposes of the rolling effective date provisions. In other words, if an ISDA member (along with a DC sponsor) requests that a DC consider a credit event for a specific credit believed to have occurred 45 days ago, buyers of protection would not “lose” the credit event simply because a committee takes longer than 15 days to deliberate.

Upon the submission of a question ISDA, in its role as DC secretary, will frame the necessary questions for the committee along with determining the applicable reference entities and transaction types involved. In the consideration of a credit event, the DC must consider whether an event has occurred. If an event is deemed to occur, deliverable obligations must be specified and decision must be made as to whether an auction is necessary. If an auction is necessary, the auction terms must be determined. The steps for consideration of a succession event are very similar particularly in how the process is initiated.

### **Mechanics: External Review**

If an eighty percent (80%) supermajority is not achieved on any question before the DC, the issue automatically goes before an external review panel. Depending on the vote by the 15 firms in the DC, a Review Committee of selected firms from an approved pool of independent firms will review the results, and their opinion will be final and binding. Thus, binding arbitration replaces litigation for any issues requiring dispute resolution.

An external review panel starts with the presumption that the simple majority decision of the DC is correct. If a vote of the DC reach a 50% plus one to 60% majority, two out of three external reviewers could overturn the result. If a vote of the determination committee was greater than 60% but less than 80%, three out of three external reviewers are required to overturn the decision. External reviewers are selected for each question from a pool determined by the particular determination committee. This pool consists of firms that have been nominated by members of a DC and confirmed by a majority vote. Once a question goes to an external review process, five (5) external reviewers are selected of which three (3) serve and two (2) will serve as alternates. A DC may select any of the three (3) active reviewers by unanimity; otherwise these are selected at random by the Secretary (ISDA). Selected reviewers must disclose any potential

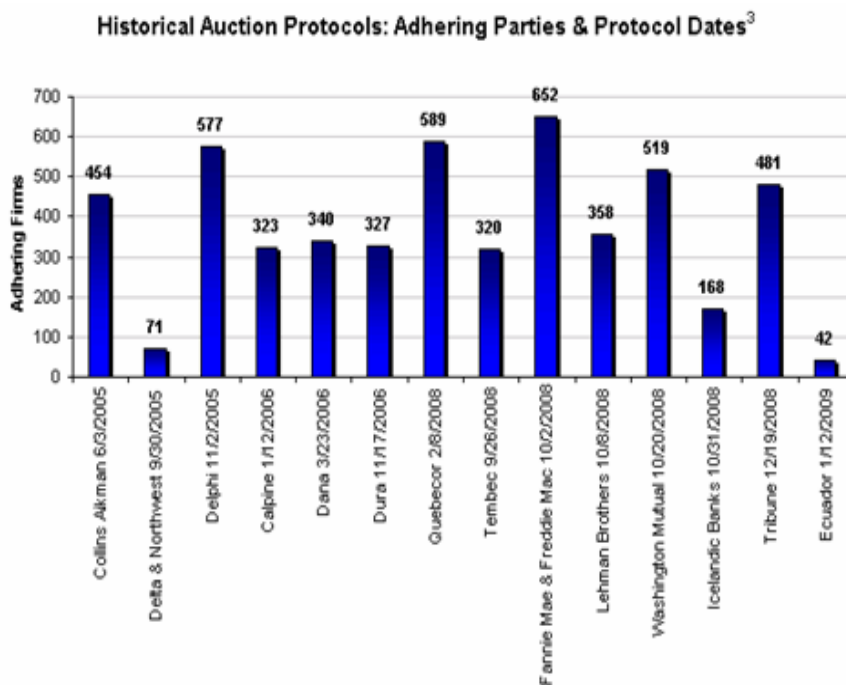
conflicts of interest in which case they may recuse themselves from the question and/or be removed by a majority vote of the DC.

The default length of an external review process is ten (10) business days and is expected to include written and oral arguments with DC members choosing an advocate to represent their argument. The length of the review can be modified to be shortened or lengthened with eighty percent (80%) approval of the DC. External Reviewers can only consider information that was available to the DC at the time of the binding vote on the relevant question. All decisions of External Reviewers will be published by ISDA.

## Hardwiring of the Auction Mechanism

### The Situation Today:

The current CDS contract only addresses physical settlement of trades. Since 2005, an auction process has been instituted and most market participants sign to protocols (a legal document amending all previous trades) for an auction to take place to determine the final recovery rate of a defaulted entity. The process initially began because there were concerns that the sheer size of outstanding CDS notional amounts relative to the amount of deliverable bonds would set off a scramble by CDS investors to acquire bonds to deliver and artificially drive up the price. While the process has worked well, requiring market participants to sign up to protocols in order to amend their existing trades is an involved process which can be avoided by hardwiring the auction mechanism language into the contract. Tracking down all CDS investors every time there is a credit event and determining whether or not they want to adhere to the protocol is not particularly efficient. To date, there have been over 30 auctions jointly administered by Markit and Creditex. The confidence in the auction process was demonstrated when the auction mechanism was hardwired into the Loan CDS contract when that product was created.



Source: Markit, ISDA

*While adherence to an auction is voluntary and precise participation rates are not available, most investors with positions in the relevant reference entity have agreed to the auctions. High participation rates have been consistent. The low numbers of participants on the Ecuador auction, for example, is a function of the relative few investors with open positions in Ecuador at the time of that credit event as opposed to a low participation rate in the protocol.*

*Historical participation rates by institutions are not known precisely but according to DTCC, the Quebecor auction (the first one they processed) saw institutional participation accounting for 85% of the open positions in the DTCC Trade Information Warehouse. Since then, this participation coverage figure has steadily increased and has been consistently over 90% in recent auctions. Furthermore, all dealers have adhered to these protocols and significant buy side institutions have adhered.*

<sup>3</sup> Note, the chart excludes auctions for LCDS and some auctions are included under the same protocol (e.g., Icelandic Banks Protocol had 3 separate reference entities/auctions).

The credit event auction mechanism is a transparent and efficient process to determine a final price post credit event, and settle trades physically or with cash. All inputs into the auction process are made freely available at [www.creditfixings.com](http://www.creditfixings.com).

**Proposal:**

The credit event auction methodology will be hardwired into standard CDS contracts on a global basis while leaving only the specific auction settlement terms for each credit event to be determined shortly prior to the auction. For a description of the credit event auction methodology, please see "Credit Event Auction Primer" jointly published by Markit and Creditex. This document can be found at [www.markit.com/cds](http://www.markit.com/cds). The auction methodology is expected to remain consistent across auctions but can be amended by a supermajority (80%) of the DC after a public comment period.

The auction settlement terms are attributes best left settled based on the specifics for each particular credit. It is conceivable that there may not be a credit event auction if the outstanding volume of trades is so small as to not merit one. Auction specific terms will be set by a majority vote of the DC and published prior to the auction. These terms include the following: 1) auction date, 2) initial bidding information publication time, 3) subsequent bidding information publication time, 4) inside market quotation amount, 5) maximum inside market bid-offer spread, and 6) minimum number of valid inside market submissions.

Deliverable obligations for each credit event will be determined by the DC for each auction. A simple majority vote of the DC is sufficient as long as the result is unchallenged. If challenged, an 80% vote or External Review would be required. Hardwiring of the auction mechanism has a target implementation date of April 8<sup>th</sup>.

**Effective Date for Credit Event & Succession Event Purposes**

**The Situation Today:**

Under the current CDS contract, protection against a credit event begins on the business day following the trade date. As such, two trades buying and selling CDS on the same reference entity for the same notional amount but on different days are not truly offsetting. For example, assume an investor sold protection today and then entered into an offsetting transaction to close off the exposure a week later (bought protection). With a T+1 effective date for protection, there is a "stub" or window of 7 days where the investor is short and does not have the buy protection leg in effect. Under the existing contract, this would persist until the first trade matured. The investor could find out that a credit event occurred sometime during this 7 day window. Creating a standard date for the existence of protection regardless of trade date solves this problem.

*What problem does this solve? The issue with how effective dates work in the current contract is that there is basis risk because offsetting positions really do not fully offset. Consider the following example. You sell protection on January 8, 2009. This trade means that you are responsible for any credit events that occur starting January 9, 2009 for the duration of the contract. In a week, you go to offset the position by buying protection; this protection becomes effective on January 16, 2009. If it was later determined that there was a credit event anytime on or after January 9<sup>th</sup> but before January 16<sup>th</sup>, your sell protection position would trigger; whereas your buy protection position would not trigger. A standardized effective date such as the one proposed would eliminate this residual stub risk.*

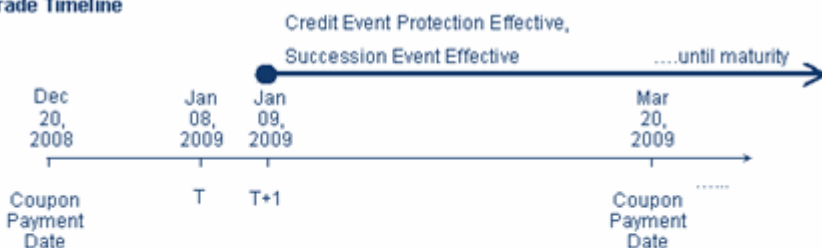


Source: Markit

Proposal:

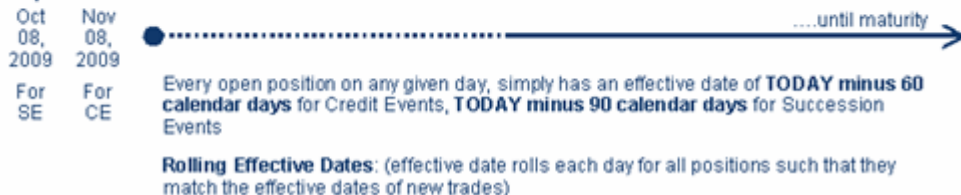
The new contract will split effective date for accrual and coupon payment purposes from the protection effective date. Accruals and coupon payments are addressed in a later section. Contracts will trade with a daily rolling effective date. This means that a trade done under the new CDS contract between counterparty A and B will have an effective date for credit events of Today - 60 calendar days (or Today - 90 calendar days for succession event purposes). The following day that trade will have an effective date for credit events of (Following Day) – 60 calendar days. In one week the trade will have an effective date for credit events of (Following Week) – 60 calendar days. Rather than focus on the trade date, the critical issue is that under the new contract—trade date is irrelevant (unless the trade date occurs after the Auction Final Determination Date). All existing positions will have the same effective date for credit events and the same effective date for succession events. This has been referred to in the industry as the “statute of limitations” for credit and succession events.

**Current CDS Trade Timeline**



*The effective dates for Credit Events and Succession dates in the new contract would be separate and feature “lookbacks”. The effective date for credit events would be TODAY-60 calendar days. For succession events the effective date is TODAY-90 calendar days. Each day, the effective period for each “rolls” forward until the position is terminated. Trade date would no longer be relevant for determining the effective period.*

**Proposed CDS Trade Timeline**



Source: Markit

This change ensures fungibility as far as protection is concerned. A CDS trade with the same characteristics done under the new contract will have the same effective date as a trade done one week later. This allows for the trades to be netted easily and avoid residual stub risk between trades with the same entity/maturity/currency/restructuring done on different dates.

While the concept of a standard effective date under the proposal is similar to what is done with the indices, it differs in one key regard, the rolling feature. With Markit CDS indices, the current practice is to set the protection effective date for a particular series to the date the series starts trading. For a “five year” index trade, the series exists for 5.25 years (a 5.25 year maturity at outset makes it an average of 5 years maturity for 6 months while it is “on-the-run”). As such a protection seller in a CDS index is currently responsible for credit events for entities in the index that precede the trade date by as much as 5.25 years.

Thus, a similar change is being implemented for indices at roughly the same time in order to reduce any basis between the single name constituents and the indices. The target implementation date for credit event and succession event effective dates on new single name CDS trades is April 8<sup>th</sup>. For legacy single name CDS trades, the implementation date is targeted for June 20<sup>th</sup>.

## Expected Convention Changes to North American CDS

### Introduction

The changes to the North American CDS market outlined in this section, including a move to trading with a fixed coupon, do not require a contract change. In many cases, these conventions are being applied today. For example, heavily distressed credits already trade with points upfront and a fixed coupon of 500 basis points. North American high yield credits already typically trade with 'No Restructuring'. Some of the conventions in this section are new. Perhaps more importantly, the timing of these changes or broader adoption of existing conventions are intentionally being brought about to coincide with the new contract changes. To the extent that many of these proposals are interrelated in bringing about desired changes in standardizing CDS contracts, increasing operational efficiencies, driving towards T+0 trade matching, and supporting central clearing, it makes sense to address these changes all at once.

### Fixed Coupon

Most single names are currently quoted using a par spread (the spread that would cause the present value of a CDS trade to be zero for both the buyer and seller at the outset of the trade). Historically, only the high yield end of the single name CDS market has traded with a fixed coupon and upfront payment. Recently, the universe of names quoted upfront has increased as more names have become stressed. Typically CDS on an entity would start to be quoted on an "upfront" basis once the spread crossed a certain threshold. In this scenario, the buyer of protection pays an immediate upfront fee then a fixed periodic payment. The fixed payment would usually be 500 basis points per annum. For North American CDS, the new trading convention will include a fixed coupon of either 100 or 500 basis points. It is expected that investment grade entities will trade with a 100 basis points coupon while high yield will use a 500 basis points coupon, but dealers may make markets for either strike for a given name.

**Growth in Upfronts: Number of Upfront Quotes from Dealer Runs**



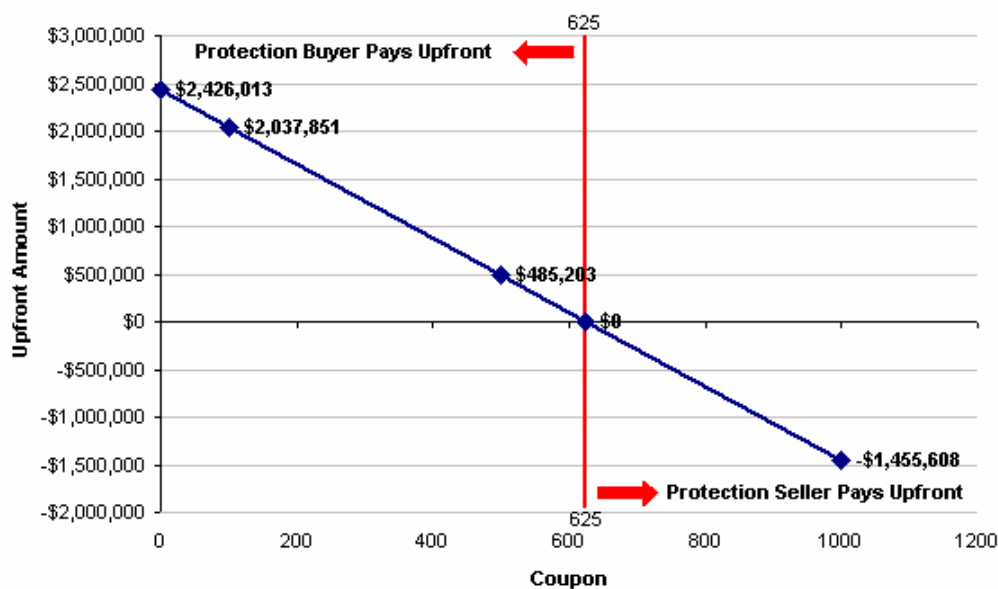
Source: Markit

*As the credit markets have generally deteriorated, investors have become more accustomed to seeing credits trading with points upfront and a 500 basis points fixed strike as the growth in points upfront seen in dealer runs would suggest.*

*Please note that the dataset includes multiple quotes from the same dealer source in many instances as more than one Markit Quotes customer may process the same dealer run message. The dataset is meant to simply illustrate the trend in the growth of credits trading in points upfront.*

Why 100 and 500 basis point fixed strikes? Why not 200 and 600 or all at a single strike of 500? First, a 500 strike is already done with many high yield names and thus is a logical starting place for at least one fixed strike. To the extent that investors prefer trading CDS with a small upfront payment, it is beneficial to allow for an additional fixed coupon strike. However, an excessive number of coupon options would detract from the standardization that the market seeks. The expectation is that a 100 basis points strike is properly parameterized for high grade and non-stressed names. Additionally, two fixed coupon strikes enable the possibility of "re-couponing" existing trades into new trades as we discuss in more detail later in this report.

The Widget Corporation 5Y CDS: Present Value Indifference Curve



Source: Markit

While participants in the CDS market often prefer to minimize upfront payments, it is important to note that from a present value perspective investors should be indifferent. Assessing a theoretical trade on The Widget Corporation<sup>4</sup>, an investor should be indifferent between buying protection with:

- 625 basis points annual coupon and no upfront payment
- 500 basis points annual coupon and a \$485K upfront payment
- 100 basis points annual coupon and a \$2 MM upfront payment
- No annual coupon and paying a \$2.4 MM upfront payment
- 1000 basis points annual coupon and receiving a \$1.4 MM upfront payment

Although the standardization of coupons is irrelevant from a present value perspective, the benefits to the CDS market from an operational perspective are significant. Specifically, when combined with other changes in the CDS market outlined in this report, the standardization of coupons allows for more simplified processing of trades as well as the netting of offsetting CDS positions.

### Liquidity in 100 or 500

Under the new North American convention, a particular credit can trade with a 100 basis points fixed coupon convention, a 500 basis points fixed coupon convention, or both. It is expected that liquidity will tend toward one or another on a name by name basis with the likely result being that investment grade names will trade under a 100 basis points fixed coupon and high yield credits would trade under a 500 basis points fixed coupon. Names could move from one convention to another depending on the view of their creditworthiness. Names are generally expected to trade with the same convention across all tenors but this is not explicitly required.

<sup>4</sup> Assuming that the par spread of The Widget Corporation is 625 basis points, the present value of all five options would be zero. At the initiation of the trade, the value of the cash flows paid by the protection buyer would equal the value of the cash flows made by the protection seller following a potential credit event.



## Trading with a Full Coupon

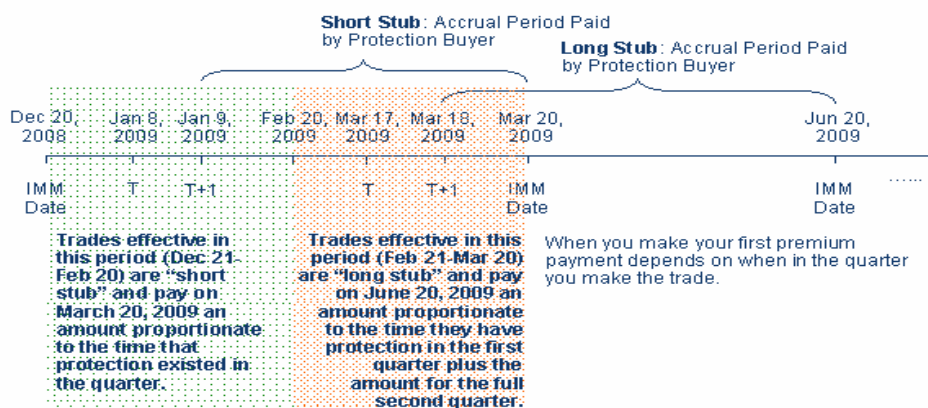
The Situation Today:

Under the current convention, whether a protection buyer pays a coupon on the first coupon or IMM<sup>5</sup> date depends on when the trade occurred. IMM dates are the chosen termination dates for CDS contracts: March 20th, June 20th, September 20th, and December 20th for any given year.

If the trade date falls before 30 days prior to the first coupon date, the accrual is due on the first coupon date for the number of days of effective protection during the period. This is called a “short stub” period. If the trade date is within 30 days before the first coupon date, there is a “long stub period”. No accrual of premium is paid on this first IMM coupon date, rather the long stub is paid on the following coupon date. That payment would include the portion of premium owed for protection in the first period plus the full premium for the second period.

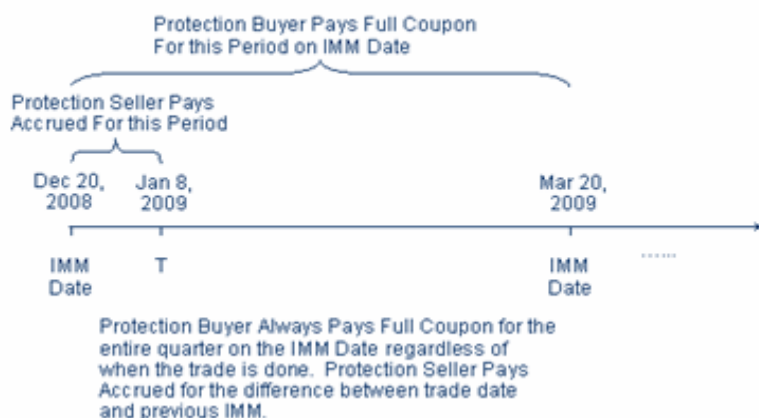
This adds an extra level of complexity to operations departments in setting up coupon payments. About 5% of the trades in the Trade Information Warehouse have not made a “first period” coupon. Currently, these trades are “long stub” (see diagram below). As such these positions can not be initially included in trade compression, the process used to net single name CDS positions to reduce gross notional outstanding.

### Current CDS Accrual Timeline



The current process for accrual payments places a burden on operations. For the same credit and same maturity, the timing of the first premium payment depends on when in the quarter the trade is done. Under the new standard, full premium payments would always occur on the IMM payment date. Any “overpayment” by the protection buyer for the time in the period for which they did not hold the position would be paid by the protection seller at the time of the trade.

### Proposed CDS Accrual Timeline



This practice makes the CDS a bit more like a bond in the sense of how bonds treat accrued interest. That is, payments are dealt within the same period instead of shifting to the next period and the payment amounts are adjusted for the time in which the position is held during the first payment period. The comparison ends there though as a CDS premium payment and a bond accrued interest payment are not alike.

Source: Markit

<sup>5</sup> IMM dates are the chosen termination and payment dates for CDS contracts: March 20th, June 20th, September 20th, and December 20th for any given year. They loosely correspond to the International Monetary Market (IMM) dates used in the Euromoney market, the third Wednesday of March, June, September, and December.

## Proposal:

Going forward, the contract will mimic the way the Markit CDS indices operate. Regardless of when the trade was executed during the coupon period, the protection buyer will pay the full quarterly coupon on the coupon payment date. This means that as the trade is executed, the protection seller has to rebate the accrued up to trade date to the protection buyer. Standardizing to a full coupon regardless of when the trade was initiated would thus recapture approximately 5% of the trades in the DTCC Trade Information Warehouse and make them immediately available for inclusion in trade compression. April 8<sup>th</sup> is the expected date for changes regarding full coupon and accrual rebates.

## Restructuring Clause Convention

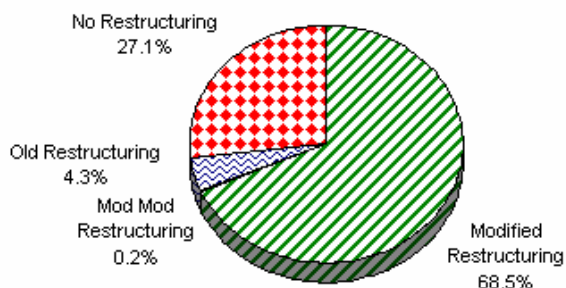
In addition to bankruptcy and failure to pay, restructuring of the reference entity is a defined Credit Event in the 2003 Credit Derivatives Definitions. CDS can trade with or without restructuring, and if the trade is made with restructuring the restructuring provisions define what characteristics deliverable obligations can have.

Under the 2003 ISDA Credit Definitions, there are four types of restructuring clauses: Old Restructuring (Old R), Modified Restructuring (Mod R), Modified-Modified Restructuring (Mod-Mod R), and No Restructuring (No R). The differences between them (at least for those including restructuring) largely focus on the maturity of the deliverable obligations and transferability of deliverable obligations.

Over time, certain credits have come to trade on a market defined convention. For example, Europe's CDS contracts typically trade with a Mod-Mod R convention (restructuring is specified as a credit event and deliverable obligations limited to debt with maturity up to 60 months), North American Investment Grade names trade with a 'Modified' restructuring convention (restructuring is specified as a credit event and deliverable obligations limited to debt with maturity up to 30 months), and North American High Yield names trade without restructuring. In Europe, 'Modified-Modified' restructuring is common because the bankruptcy laws make it difficult for borrowers to file in many jurisdictions. Restructuring and reorganization outside a similar process to the Chapter 11 bankruptcy in the U.S. is for stressed European companies. For North American Investment Grade credits, 'Modified' restructuring addressed the needs historically of hedgers of bank loan portfolios.

With the growth of the CDS market, hedgers of bank loan portfolios have become a smaller percentage of the overall CDS market. As such, the industry has considered dropping restructuring as a North American convention for some years. Some dealers even took this step unilaterally.

### North American CDS: Breakdown of Restructuring Clause Conventions



Source: Markit

*Looking at the curve conventions for each North American issuer in Markit's daily pricing file, a little over 25% trade as 'No Restructuring' currently. As the vast amount of names fall in the Investment Grade category, we see that 68.5% trade as 'Modified Restructuring'.*

There is an economic difference between contracts that trade with and without restructuring. Trades with restructuring demand more premium for protection as they give the protection buyer coverage for more possibilities of different types of credit events than trades without restructuring. The target implementation date for this convention is April 8<sup>th</sup>.

## Quoting Convention

Those that actively trade CDS are not strangers to dealer runs. Dealer runs are simply electronic messages containing a dealer's bid/offer markets on the credits in which they make a market or desire to provide a price indication. Currently runs for the CDS market look something like the below:

-TECHNOLOGY-			-TECHNOLOGY-		
ARW	210-220	+12	CSCO	140-150	+15
AVT	285-295	+20	ORCL	145-155	+15
CSC	135-145	+10	DELL	225-235	+20

*This is an example of a dealer run quoting a par spread. A par spread is the spread that would cause the present value of a CDS trade to be zero for both the buyer and seller at the outset of the trade. Here a recovery rate is not provided nor is it particularly relevant for the quotation. For CSCO, a protection buyer is paying 150 basis points annual premium regardless of the dealer's opinion on recovery.*

This run contains the ticker (or some other indication of the credit that is being quoted) along with the bid/offer for the spread. Change from the prior day is optional. In this example it is included. Unless otherwise stated or a full curve is provided, the quotes are for 5 year protection, the most liquid tenor. In this example run, it would cost 150 basis points or (150 bps \* 10 mm notional) \$150,000 per year to buy protection from a credit event on \$10 million worth of bonds for Cisco Systems (CSCO). The spreads contained in this dealer run are known as par spreads. A par spread is the spread that would cause the present value of a CDS trade to be zero for both the buyer and seller at the outset of the trade.

Although all new North American fixed coupon trades will settle with an upfront payment, it is expected that dealer pricing runs for Investment Grade names will be quoted in "conventional spreads", and that High Yield names will be quoted in points upfront in dealer pricing runs. As such, par spreads are expected to ultimately be excluded from dealer runs going forward.

## Conventional Spreads

As the CDS market in North America transitions to using Conventional Spreads (also known as Quoted Spreads) in dealer runs (for 100 fixed coupon quotes), it is important that investors can adequately compare spreads provided by different dealers and that the change in quoting convention does not cause trades to break. It is important to note that the Conventional Spread that will be in dealer runs for Investment Grade names do not represent either the annual coupon that would be paid for protection or the amount of upfront payment made at the time of the trade. The conventional spread represents a translation of the 100 fixed coupon and upfront payment into a single number that can be used to compare across dealers. In order to make an accurate comparison across dealers as well as to assure there is no confusion about size of the upfront payment that will be made, it is critical that industry participants use a standard model with standard inputs. The standard model that major CDS dealers have agreed to use is the ISDA CDS Standard Model which is administered by Markit Group.

### ISDA CDS Standard Model

On January 29<sup>th</sup>, 2009 JP Morgan announced that it had transferred its CDS analytical engine to ISDA as part of an initiative to make the code for valuing CDS positions open source. Under the direction of ISDA, Markit has been hosting, since the fall of 2008, a working group focused on creating and publicly releasing an industry standard code for valuing CDS. The code supplied by JP Morgan provided the base as version 1.0 of this effort.

On February 26<sup>th</sup>, 2009 ISDA and Markit announced the availability of the ISDA CDS Standard Model Code with Markit as the Administrator of the code. In its role as Administrator, Markit provides support for the maintenance and further development of the code following open source principles. To be clear, Markit does not provide support for the implementation of the code. The code is available through an open source license at [www.cdsmodel.com](http://www.cdsmodel.com). Additionally, the standardized inputs to be used with the code including a daily yield curve as well as recovery assumptions for different seniorities of debt can be found on the same website.

## Markit CDS Converter

Currently the most standardized products in the CDS market are the Markit CDS indices. As mentioned earlier, the CDS contract and convention changes described in this report will make single name CDS more similar to the Markit CDS indices. The single largest cause of trade breaks with Markit CDS indices is a disagreement surrounding the upfront payment due from one counterparty to another. As the trading convention for North American CDS changes to a fixed coupon with an upfront payment, it is critical that trades do not break due to disagreements on the upfront payment that is due. This is a particular concern for entities that trade with a 100 basis points fixed coupon as dealer runs for these credits will display a conventional spread and not the upfront payment.

At the urging of CDS participants, Markit has created the Markit CDS Converter. This is a free tool available at [www.markit.com/cds](http://www.markit.com/cds) and was created to drive agreement on the upfront payment due for specific CDS trades. The Markit CDS Converter was designed with the input of key CDS dealers and utilizes the ISDA CDS Standard Model code as well as the standardized inputs for the code. The converter allows for easy translation between the conventional spread that will be found in dealer runs for investment grade reference entities to the required upfront payment.

## New Runs

### Conventional Spreads:

To the right is a hypothetical example of a dealer run that contains conventional spreads. Were this a traditional dealer run with par spreads, the dealer would be communicating a willingness to sell protection on AET for 198 basis points. However, post-April 7<sup>th</sup>, it is expected that the liquid contract for North American Investment Grade names will have a 100 basis points fixed coupon. In this hypothetical dealer run with conventional spreads, the dealer is communicating a willingness to sell protection on AET for a 100 basis point fixed coupon and an upfront payment. In order to know the amount of upfront payment that the dealer would expect, you need to translate the conventional spread of 198 basis points to the optional payment. The free Markit CDS Converter found at [www.markit.com/cds](http://www.markit.com/cds) was built for this purpose. In this example, the dealer that was quoting a 198 basis point conventional spread offer would be expecting a \$414,212.79 upfront payment for \$10 million notional protection with a 100 basis points running coupon.

AET	188 - 198
DD	142 - 150
RCCC	237 - 249
TE	262 - 272

Source: Markit

### Points Upfront Convention:

F	45 - 47
GM	84 - 86
IP	11 1/4 - 12 1/4
SLMA	33 1/2 - 35 1/2

To the left is a hypothetical example of a run using a points upfront convention (convention for 500 basis points fixed coupon). The particular dealer determines where they want to make a market based on their assessment of the credit's probability of default, recovery, and other factors. Based on this, the dealer then determines the appropriate all-running spread. This all-running spread is then divided into two portions: the fixed coupon of 500 basis points and the points upfront.

While this report outlines the expected quoting conventions, these are merely conventions. Dealers are not restricted in how they quote credits in their runs. The expected implementation date for quoting convention changes is currently April 8<sup>th</sup>.

## Migration of Old Contracts to New Contracts/Conventions

### Big Bang Protocol

In order to migrate legacy trades to include the hardwiring of the auction mechanism, allow for binding arbitration and event determination through the determination committees, and change the effective date for credit and succession events, there will be a protocol where participants can agree to adhere to these changes in much the same manner as participants can elect to adhere to the auction protocols today. By agreeing to the protocol, adherents would make the ISDA Supplement to the 2003 Credit Derivatives Definitions apply retroactively to existing positions. The final protocol is expected to be published on March 12, 2009. Those electing to adhere will have until April 7<sup>th</sup>, 2009 to send an adherence letter to ISDA with changes going in effect the following day. It is important to note that the Big Bang Protocol does not address the various coupons of legacy trades nor does it address modifying legacy positions beyond these provisions.

### Portfolio Re-couponsing

A process known as portfolio re-couponsing may serve as one solution to the market in order to migrate legacy trades to the new fixed strikes. As one of the joint administrators of the existing trade compression platform, Markit is an interested party in offering a potential portfolio re-couponsing service in the future. Portfolio re-couponsing would take legacy trade positions done at their original coupons and convert the position into two positions with 100 and 500 basis point fixed coupons. In order to preserve the economics of the original position, the two new positions together must have exactly the same convexity, jump-to-default risk, running payment, etc. as the original position. More simply put, the new positions must offer the same risk profile and cash flows as the original. While the trade population doubles initially, it enhances the ability to assign, unwind, or net all trades to one position.

Portfolio re-couponsing uses the methodology of trade compression. The compression process comprises the termination and re-creation of positions using a smaller and more efficient set of trades. The existing trade compression algorithm allows for multiple participants at a time. Subsequently, multiple portfolios can be converted at a time (e.g. a major hedge fund with multiple dealer trading relationships can convert their complete portfolio in one day on the platform as opposed to working it out bilaterally with every one of their counterparties). However, with portfolio re-couponsing, each net position in the post re-couponsing portfolio initially results in two contracts: a 100 basis points contract and a 500 basis points contract.

CDS Size (\$mm)	\$100
Premium (bp)	50 bp
Premium/yr	\$500,000

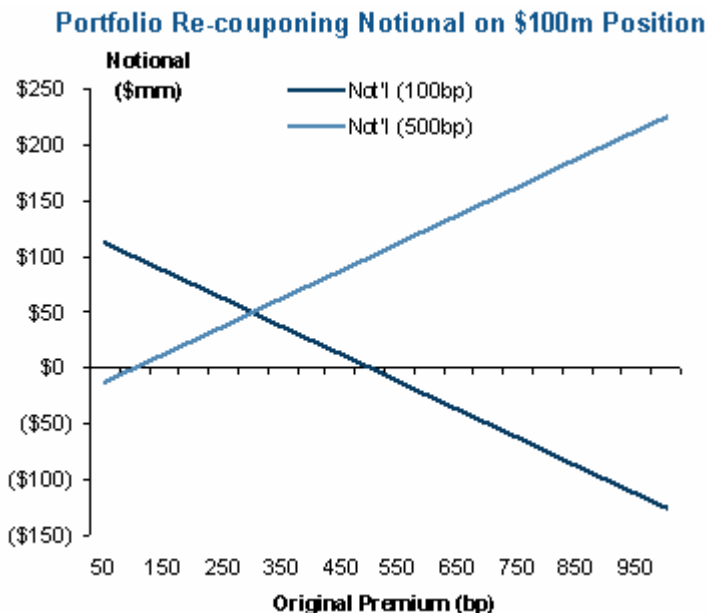
Repricing Metrics		Compression Size (\$mm)	Cash Flow
Notional A (bp)	100 bp	\$112.5	\$1,125,000
Notional B (bp)	500 bp	(\$12.5)	(\$625,000)
Total		\$100	\$500,000

Source: Barclays Capital

Assume an investor bought protection with a \$100 million notional legacy position and a coupon at 50 basis points requiring an annual premium of \$500,000 per year. In order to yield the same cash flows using the standard combination of the 100 and 500 fixed coupons, the resulting position would be \$112.5 million notional long at 100 basis points fixed and \$12.5 million notional short at 500 fixed.

For any original coupon of a net legacy CDS position, the 100 and 500 basis points coupon positions required to replicate the cash flows and risk profile of the original net position can be determined.

While, the process of migrating legacy trades in this manner will initially result in doubling the total number of open trades, the standardization and fungibility achieved would allow for the ultimate netting of open positions into one position (at each strike) in a more efficient manner.



Source: Barclays Capital

## Restructuring Conventions

As discussed previously, there is an economic difference between contracts that trade with and without restructuring. Trades with restructuring are worth more in general as they give the protection buyer protection for another credit event. Quantifying this difference is necessary to migrate a legacy trade that includes some form of restructuring to a new contract that does not specify restructuring as a credit event. If there is a wide interest in converting a large portion of legacy trades into the 'No R' standard restructuring clause, an industry organized migration plan may develop but the development of any such plan is uncertain. Regardless of whether an industry wide plan is of interest, specific investors that are interested in rolling legacy coupon and documentation positions to the new standard could do so by trading with their counterparty assuming mutually acceptable prices can be agreed.

## Full Coupon Convention

The changes in the CDS contract and North American conventions will not require anything special in terms of migrating existing positions other than what was already presented prior to this point. Specifically the changes in accruals or full coupon payments are irrelevant on even the most recently executed legacy trades after the first payment period has passed. The simple passage of time effectively resolves this.

## Conclusion

The phrase “Big Bang” is typically not used lightly. The CDS Big Bang entails fundamental changes to the operational, trading, and legal frameworks of the CDS market. However, in many ways, these changes are not dramatic.

For the North American convention changes, one can see instances where these practices already occur in the market. High yield credits and indices already trade with a fixed coupon and settle on upfronts. The proposed quoting convention has similarities to the quoting conventions for the Markit CDX IG and HY indices. The treatment of accruals and the payment of full coupons on IMM payment dates are standard for the indices. In terms of restructuring provisions, North American high yield credits typically trade with ‘No Restructuring’ by convention. The Markit CDX indices for the most part also trade ‘No Restructuring’. North American investment grade credits typically trade with ‘Modified Restructuring’.

For the global contract changes, many of these practices are observable in the market and thus the changes are not dramatic. Hardwiring of the auction mechanism is already implemented in Loan CDS and simply streamlines a process that has already received broad acceptance in the marketplace. Rather than requesting participants subscribe to protocols as each credit event occurs, hardwiring will have the process applicable for all trades. Determination Committees replicate much of the work already done by industry committees. Standardization of event effective dates already exists for the Markit CDS indices. In total, the proposed changes provide a means to guarantee greater unanimity of results across positions, add more openness and transparency to the process, and give formal representation to members of the buy side community rather than informal representation.

Finally, this report has provided details about the expected changes to the global CDS contract and the North American trading conventions. However, it is important to emphasize that these are the expected changes and that modifications are more than a theoretical possibility. Additionally, while many of these changes are expected to be implemented on April 8<sup>th</sup>, 2009, the date for implementation is also subject to change.

## Contact

For further information, please contact:

### Tom Price

**Managing Director**

Email: [tom.price@markit.com](mailto:tom.price@markit.com)

### Otis Casey

**Vice President**

Email: [otis.casey@markit.com](mailto:otis.casey@markit.com)

Or please visit [www.markit.com/cds](http://www.markit.com/cds)



## Markit CDS Webpage

On February 6<sup>th</sup>, 2009 Markit launched a new, freely available webpage to promote greater transparency in the CDS markets. The webpage is updated daily and features a variety of content that you will not find anywhere else. The page features pricing on Markit's CDX and iTraxx indices and some pricing on single name CDS. In addition to pricing, the site contains links to valuable reports and primers on the CDS markets, industry and market statistics, calendars of key events, detailed results on credit event auctions, and other information. Slide materials from Markit's most recent conference "Current Issues in North American CDS" can also be found here. As more information becomes available on the changes to the CDS contract and conventions, Markit will update this site with appropriate materials and announcements.

To access this page go to: [www.markit.com/cds](http://www.markit.com/cds). Bookmark this page by clicking the hyperlink on the upper right hand corner.

The screenshot displays the Markit CDS Webpage interface with the following sections:

- Credit Default Swaps** (Header)
- CDS Market Summary** (Tabs: N.America, Europe, Asia)
 

Name	Spread/Price	Unit	Change(%)
Markit CDX.NA.JG	215.08	Spread	-1.16%
Markit CDX.NA.JG.HVOL	515.39	Spread	1.11%
Markit CDX.NA.HY	73.28	Price	1.60%
Markit CDX.NA.HY.B	73.05	Price	0.76%
Markit CDX.NA.HY.BB	90.14	Price	0.72%
Markit CDX.NA.XO	592.50	Spread	-1.50%
Markit CDX.EM	82.72	Price	0.93%
Markit CDX.EM.DIVERSIFIED	82.40	Price	0.98%
- CDS Calendar**

Event	Event Type	Date
Ferretti	LCDS Event Auctions	26-Feb-2009
Aleris	LCDS Event Auctions	05-Mar-2009 (TBC)
- Market Announcements**

North American CDS Conference Presentation – Jan 29, 2009  
[Click here for Markit RED Index Codes](#)
- Market's CDS Services**

Markit is a financial information services company and an essential source of data, valuations, indices and trade processing services. Below is a list of key Markit services.

  - CDS Prices
  - CDX Indices
  - RED (Reference Entity Database)
  - Markit Metrics
  - Markit Quotes
  - Portfolio Compression
  - Credit Event Auctions
  - Markit Wire
  - Syndicated Secured List
  - Markit CDS Converter
- Market CDS Converter**

For: Maturity: March 2014  
 Tier (Recovery): Snr (40%)  
 Standard Coupon: 500 bps  
 Notional: 1 MM USD

Convert:  Upfront %  
 Conventional Spread bps

Convert
- Market CDS Documentation & Education**

General | N.America | Europe | Asia

  - Credit Indices Primer
  - Credit Event Auctions Primer
  - Markit MCDX Overview
  - Markit Metrics: December 2008
  - Markit RED Primer
- Credit Event Details**

Reference Entity	Date	Final Price	PDF
Smurfit CDS	19-Feb-2009	8.875	
Smurfit LCDS	19-Feb-2009	65.375	
Nortel Networks Corp	10-Feb-2009	12	
Nortel Ltd.	10-Feb-2009	6.5	
British Vita ELCDS 1st Lien	09-Feb-2009	15.5	
British Vita ELCDS 2nd Lien	09-Feb-2009	2.875	
Sanitec ELCDS 1st Lien	05-Feb-2009	33.5	
- Market Movers**

**Tighteners**

Name	5Y Today	Daily Chg	Weekly Chg	28 Day Chg
JPMorgan Chase & Co	162.19	-10.91	35.07	23.79
Sempra Engy	111.89	-6.61	37.81	17.50
Nordstrom Inc	585.56	-30.06	-18.11	-67.30
Goldman Sachs Gp Inc	291.32	-13.44	30.21	-1.68
Devon Engy Corp	105.81	-2.95	14.86	-40.00

**Wideners**

Name	5Y Today	Daily Chg	Weekly Chg	28 Day Chg
Utd Parcel Svc Inc	76.55	9.27	15.19	-24.56
Cap One Finl Corp	392.14	42.56	103.67	80.48
Gen Elec Cap Corp	679.29	72.52	255.62	273.12
D T E Engy Co	379.40	38.45	73.79	-68.10
Mohawk Inds Inc	433.44	38.08	81.35	66.94

Prices as of 24/Feb/2009. Values in spreads (bps) or prices(%) where applicable unless otherwise stated.

Copyright © Markit Group Limited. ALL DATA PROVIDED AS IS, WITH NO WARRANTIES. All rights reserved. Data may not be reproduced or redistributed in any form, except as expressly authorized by Markit Group Limited.

## Copyright

### Unpublished work © 2009 Markit Group Limited

This work is an unpublished, copyrighted work and contains confidential information. Only authorized users are permitted to access this work. Any unauthorized use, disclosure, reproduction or dissemination, in full or in part, in any media or by any means, without the prior written permission of Markit Group Limited will subject the unauthorized party to civil and criminal penalties.

### Trademarks

Mark-it™, Markit™, Markit Loans™, Markit RED™, and Markit Metrics™ are trademarks of Markit Group Limited. Other brands or product names are trademarks or registered trademarks of their respective holders and should be treated as such.

### Data Services Agreement and Use Restrictions

You are bound by the terms and conditions of the Data Services Agreement as agreed to by your employer or its affiliate. In particular, access to the Markit website is limited to the number of locations and to the number of users specifically set forth in such Data Services Agreement whether such use is through physical transfer of a copy, electronic access through a wide area network of any description, or by any other means whatsoever. The Markit system and website contain trade secrets. Accordingly, you are expressly prohibited from (i) modifying, translating, reverse engineering, or disassembling any of the information, services or data found on such system and website, or (ii) creating derivative works based thereon, in each case, except as expressly permitted, if at all, by the Data Services Agreement governing your use thereof. Unauthorized copying of the Markit website or this user manual constitutes copyright infringement. Software piracy is theft.

To the extent anything in this user manual is inconsistent with or conflicts with the terms and conditions of the applicable data services agreement or the terms of use, the terms and conditions of the Data Services Agreement or the Terms of Use, as applicable, shall control.

Each user upon his initial accessing of the Markit website must agree and acknowledge as a condition to his access thereto to be bound by the terms and conditions of the data services agreement through which it was provided a username and password.

### Limited Warranty and Disclaimer

Except for the express limited warranties set out in the applicable Data Services Agreement, Markit makes, and the user and the client it is associated with receives, no warranties, express, implied, statutory or allegedly extended in any communication with the user or the client it is associated with. Markit specifically disclaims any implied warranty or merchantability or fitness for a particular purpose. Markit does not warrant that the operation of the program or website, or use of this publication shall be uninterrupted or error free. In no event shall Markit be liable for any damages, including without limitation, direct damages, punitive or exemplary damages, damages arising from loss of data, cost of cover, or other special, incidental, consequential or indirect damages of any description arising out of the use or inability to use the Markit system or website or accompanying documentation, however caused, and on any theory of liability.

This user guide may be updated or amended from time to time and at any time by Markit in its sole and absolute discretion and without notice thereof. Markit is not responsible for informing any client of, or providing any client with, any such update or amendment. Please regularly check the Markit website to obtain the current version of this manual.

Any download or distribution of data from the Markit website is subject to restrictions on the use thereof as set forth in the Data Services Agreement entered into between Markit and the client institution through which you were provided a username and password. Access to the website is expressly conditioned upon the compliance by each user with the restrictions, terms and conditions set forth in its client institution Data Service Agreement. It is the responsibility of each user to be familiar with the restrictions, terms and conditions contained in the Data Services Agreement.