



ICE Clear Credit

Preparations for a Potential Clearing Participant Default

Overview

In preparation for a significant Clearing Participant default, ICE Clear Credit maintains and enhances, as necessary, its Risk Management Framework and default management plan, which are supported by appropriate tools, management information and testing

Financial Resources

- Maintain a prudent amount of default waterfall funds
 - Based on current cleared portfolios
 - Based on current market conditions
- Ensure sufficient liquid resources are available to meet the daily cash payouts required from the clearinghouse on behalf of the defaulted Clearing Participant ("CP")
 - Mark-to-market
 - Unsettled upfront-fees
 - Coupon payments

Process and Tools

- Establish a default management plan
- Develop tools to facilitate the execution of the default management plan
- Create standards for information exchange with CPs
- Explore additional default management elements
 - Expand auction participation
 - Further incentivize competitive bidding
- Maximize opportunity to return to a matched book

Management Information

- Each business day, provide management with up-to-date information required to execute the plan
- Provide position, risk, pricing and treasury information through systems views and endof-day reports
- Determine first-order hedges daily for each CP
- Maintain an internal database of default management contacts
- Administer Default Committee membership rotation (i.e., seconded traders)
- Keep templates on file for official communications

Testing

- Conduct annual default management industry tests
- Participation from all CPs, clearinghouse management, Default Committee, Risk Committee, ICE Clear Credit Board and regulators
- Results reviewed by the Risk Committee, Board and regulators
- Perform internal ad-hoc department-level tests, as required
- Perform stress testing and back testing of default waterfall funds
 - Total value of resources
 - Available liquid resources

Process and Tools Management Information

Testing

Default Waterfall

ICE Clear Credit offers multiple layers of protection to facilitate the continued financial performance of cleared swaps, should a Clearing Participant default

Layers of Protection

Membership Criteria and Standards Ensure sufficient operational capabilities, risk-management experience and financial resources

Mark-to-Market
Margin
Requirement

Adjust through a daily debit/credit process that reflects end-of-day market prices

Initial (Risk) Margin Requirement

Collateralize potential portfolio loss under distressed market conditions

Intra-Day Risk Monitoring

Identify risk requirement erosion and proactively maintain proper collateralization level

Guaranty Fund Contribution

3

Mutualize potential losses under extreme but plausible market scenarios

FUNDED Defaulter's Initial Margin Collateral on Deposit Defaulter's Guaranty Fund Collateral on Deposit ICE Priority Contribution Non-Defaulter's Guaranty Fund Collateral on Deposit UNFUNDED Powers of Assessment

Liquidity Tiers

- Require CPs to maintain specific percentages of their collateral on deposit in asset types with defined liquidity horizons
- The specific percentages, or tier sizes, correspond to the maximum assumed 1-day (45%), 2-day (65%) and greater than 2-day movements in Initial Margin (e.g., 45% cash required for USD denominated positions in the house origin)

Process and Tools Management Information

Testing

Adequacy of Financial Resources

ICE Clear Credit maintains financial resources designed to cover at least the worst-case simultaneous default of two Clearing Participants

Modeling Approach

- ICE Clear Credit's Initial Margin model captures multiple risks, including:
 - Instrument spread level variability (5-day, 99% quantile)
- Unexpected credit loss events not accounted for in the market valuations of Single Name instruments (i.e., jump to default)
- Potentially increased liquidation costs of lessliquid and/or more-concentrated positions
- ICE Clear Credit's Guaranty Fund is sized to provide at least Cover-2 protection
 - Consider the worst-case simultaneous default of two CPs and three reference entities

Financial Resources

Resources as-of December 31, 2014:

Initial Margin: >\$17 billion

Guaranty Fund: > \$2 billion

ICE Capital Contribution: \$50 million

+ Assessment Rights

 A market event sufficient to deplete all financial resources would be unprecedented and would likely involve the default to the clearinghouse of several of the world's largest financial institutions in addition to the Cover-2 requirement

Process and Tools

Management Information

Testing

Default Management Plan

ICE Clear Credit has an established default management plan

Phase 1 (~3 hours)

Declare

Fund

Activate Default Committee

• Demonstrate default conditions are met

Monitor and prepare

- · Obtain required approvals
- Ring-fence defaulter's portfolio
- Communicate to CP's, regulators and the public

- Liquefy collateral using committed repo facility, if required
- Meet immediate cash payment obligations
- Ongoing collateral liquidation / transformation to prepare to meet payment obligations on subsequent days
- Activate the Default Committee by seconding traders from the 3 active CPs in the current rotation
- Traders consult with ICE Clear Credit on hedging and auction strategy, and assist with execution if required

Phase 2 (~1-5 days)

Reduce Risk / Hedge

Port

Auction

- Execute risk-reducing trades
 / first-order hedges
- Minimize potential losses over the time required to return to a matched book
- Identify non-defaulting clientrelated positions
- Identify FCM willing to accept non-defaulting positions
- Negotiate with Trustee to determine the Initial Margin and mark-to-market margin that can be transferred with the ported positions
- Execute transfers and money movement

- Split default portfolio into subportfolios for separate auction (as necessary)
- Distribute auction portfolios
- Receive bids
- · Determine auction awards
- Execute transfers and money movements
- If a matched book cannot be achieved, allocate residual portfolio

Process and Tools

Management Information

Testing

Potential Enhancements (Processes and Tools)

ICE Clear Credit is contemplating a number of additional components to its default management plan, in consultation with market participants and regulators

Auction Expansion and Incentives

- Extend auction to include direct buy side firm participation
- Provide additional incentive for CPs to bid competitively
 - Subordinate Guaranty Fund consumption for less competitive bidders and bidders not meeting minimum bid requirements

Recovery and Resolution

- Reduced gains distribution (variation margin gains haircutting)
- Provide time for the market to prepare for a final auction without consuming additional resources
- Final Auction
- Provide a last opportunity for the market to absorb the remaining defaulter's portfolio to avoid tearing-up contracts
- Pay final auction costs from remaining resources
- Selective tear-up
- Return to a matched-book without clearinghouse resolution
- Tear-up only residual positions in the defaulter's portfolio
- Pay full tear-up replacement cost from remaining resources

Process and Tools Management Information

Testing

Annual Default Management Tests

ICE Clear Credit conducts an industry test of its default management plan in collaboration with Clearing Participants and the Default Committee

Purpose

- Demonstrate clearinghouse and CP operational readiness to manage a potential CP default
- Demonstrate CPs' ability to price a realistic default portfolio under tight timeframes
- Explore new or additional components of the default management plan
- Provide opportunity for the industry and regulators to provide feedback to the clearinghouse to improve its plan and execution capabilities

Test Elements

- Perform all internal business process steps as realistically as possible and in "real-time"
- Management and staff members meet, perform analysis, present results, make decisions and communicate with third parties as though a real CP default had occurred
- Prepare a production-like parallel system environment and perform near end-to-end execution
 - Run the simulation using test default portfolios combined with current clearinghouse positions
 - Book risk reducing trades
 - Execute auction mechanics
 - Perform auction award transfers and cash flow ledgering
 - Generate all standard end-of-day reports
- Include all CPs in auction execution
- Require the 3 seconded traders to report to the ICE offices to work with the Risk Department
- Complete accounting to demonstrate compliance with default and liquidity waterfalls

Process and Tools Management Information

Testing

Summary of activities in the December 2014 industry test

