CFTC Technology Advisory Committee

Rule 1.73

The Challenges of Risk Managing Give-Ups and Bunched Orders for Futures and Options on Futures

Version 2.5 October 30th 2012

Clearing Member Risk Management Rule 1.73

Give-Ups: Clearing FCMs must establish risk-based limits for the customer and enter into an agreement with the executing broker that requires the executing broker to screen orders for compliance. The clearing FCM shall establish and maintain controls reasonably designed to ensure compliance with the limits.

Bunched Orders: Clearing FCMs must establish limits for the block account and screen the order; enter into an agreement with the account manger requiring them to screen orders; FCMs that clear the allocated trades must establish and maintain systems of controls reasonably designed to ensure compliance with the limits.

Executive Summary

- **The FIA fully supports the goal of CFTC Rule 1.73 to improve risk management across FCMs.**
  - The risk management of give-ups is a significant challenge, and - unlike the OTC market - futures trades cannot be broken in the event of failure of a counterparty to meet its obligations.

- **The aim of this presentation is to attempt to demonstrate the challenges around implementing the rules for give-ups and bunched orders.**
  - Clients either choose to use multiple clearing relationships to minimize counterparty risk, or have this mandated within the conditions of the funds that they manage.
  - Clients choose to use multiple execution relationships based on various factors including quality of service, available functionality, relationship and the option of alternative execution in the event of issues with any single counterpart.
  - This has led to a significant percentage of traded volume being executed through give-up agreements and often executed as a bunched order that is allocated on a post-trade basis.
  - Risk management has evolved to support "speed bumps" on a pre-trade basis, and has a qualitative element as well as being quantitative on a post-trade basis, and is generally geared to avoiding limit breaches rather than reacting to them.

- **Both clients and FCMs have built a complex infrastructure of in-house and 3rd party vendor solutions for various components of the futures trade cycle.**
  - Core components are costly and time consuming to upgrade or replace.
  - There are no common standards for transmitting risk management messages.

Major Futures Exchanges Give-Up Volumes

- **Who Uses Give-Ups ?**
  - Asset Managers, Pension Funds, Hedge Funds, Commodity Trading Advisors, Institutions
- **Why Use Give-Ups ?**
  - To minimize counterparty and concentration risk

	CME Group Total Volume	Give-Up Volume	Give-up % of Total Volume
January 2012	144,573,133	73,610,717	51%
February 2012	115,826,085	88,440,551	76%
March 2012	118,860,082	95,655,852	81%
TOTAL	379,259,300	257,707,120	68%

	Exchange Total Volume	Give-Up Volume	Give-up % of Total Volume
ICE US Q1 2012	25,434,329	4,545,390	18%
ICE EU Q1 2012	69,477,970	15,332,835	22%
LIFFE Q1 2012	216,595,302	152,955,737	71%
EUREX Q1 2012	409,021,213	238,545,933	58%
TOTAL	720,528,814	393,896,649	55%

Bunched Orders and Allocations

- **Account managers use bunched orders to maximize the efficiency of their execution to avoid entering multiple orders for the same instrument and side:**
  - By executing all orders together, the trades can then be equitably allocated across all individual funds to minimize any price disadvantage.

- **Bunched orders that will be allocated post-trade are executed into what is often referred to as a "Top" account[1]**

- **Top accounts used for post-trade allocation are risk managed by the FCM separately from other accounts:**
  - All top accounts should be flat by the end of the day. This is typically mandated by the exchange[2].
  - FCM Operations teams monitor top accounts throughout the day and generate alerts if trades have been waiting too long for allocation.

---

1 Top accounts are also known as "Allocation" accounts or "Suspense" accounts depending on local exchange rules. The Top account is used by the executing broker to initially clear the trades from a bunched order pending allocation. On allocation the trades are given up to a clearing broker or moved to a cleared account for the client at the executing broker.

2 Extract from CME Group Rulebook regarding bunched orders, http://www.cmegroup.com/rulebook/CME/I/5/36C.html:

With respect to bunched Globex orders, such orders may be entered using a series designation or suspense account number provided that

1) the order is being placed by an account manager for multiple accounts eligible for post execution allocation or
2) a written, pre-determined allocation scheme that defines the series has been provided to the futures commission merchant accepting or clearing the order prior to the time that such order is entered.

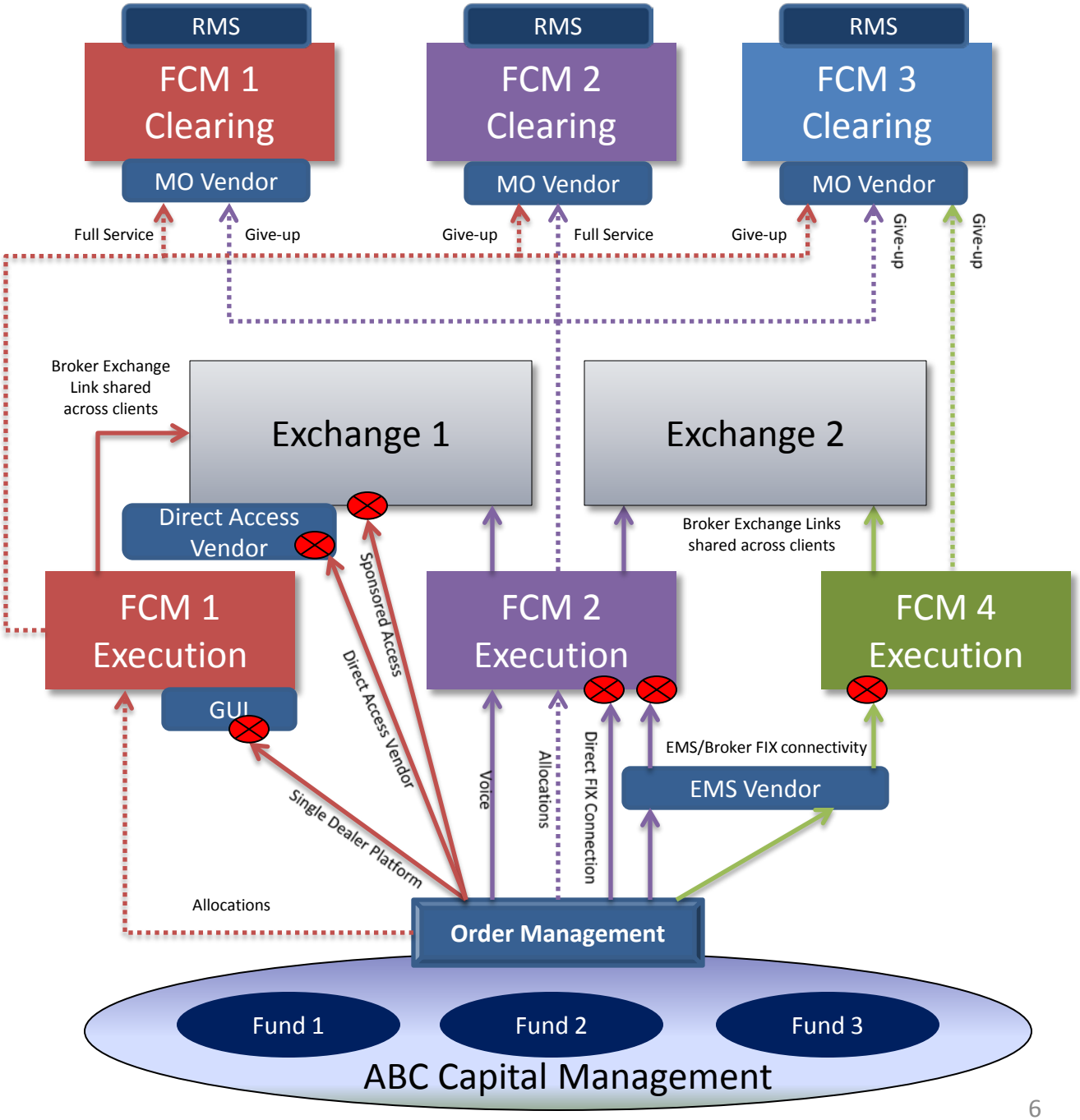
In the latter case, if such information has not been provided to the futures commission merchant prior to the time of order entry, each specific account number must be entered into Globex. Additionally, for all such bunched orders executed on Globex, the final account specific allocations must be submitted to the clearing system no later than the end of each trading day.

ABC Capital Management trades on behalf of Fund 1, Fund 2 and Fund 3

Fund 1 clears at FCM 1
Fund 2 clears at FCM 2
Fund 3 clears at FCM 3

ABC executes orders on behalf of Funds 1, 2 and 3 on Exchanges 1 and 2 through FCMs 1,2 and 4 via various methods and allocates trades to FCMs 1, 2 and 3

Locations for pre-trade risk management



GUI: Single Dealer Platform

EMS: Execution Management System

FIX: Financial Information eXchange protocol

RMS: Risk Management System

Executing Broker Risk Management

- **FCMs use different pre-trade risk methodologies for listed derivatives trades that they execute.**
- **As per FIA Best Practice recommendations[3] these limits are typically based on order size ("fat finger") checks and intraday position per product, although there may be variations across FCMs.**
- **Intraday position limits are typically intended to act as "speed bumps" as opposed to accurately measuring the purchasing power of the client –**
  - There is a feedback loop to set accurate limits based on accounts that are also cleared at the FCM.
- **Pre-trade limits are typically set based on the following hierarchies –**
  - Limits per Product per Client firm.
  - Limits per Product per Client trader.
- **Different sized pre-trade limits are set based on the following factors –**
  - Smaller limits for orders sent direct to market.
  - Larger limits for orders sent to the FCM desk to be worked, or traded via an execution algorithm that slices the order before sending it to the exchange.
  - Larger limits for orders executed into an allocation account as opposed to a single fund account.
- **Pre-trade limits are distributed across multiple electronic execution systems -**
  - Limits are typically set separately per execution system to minimize latency.

3 FIA Order Handling Best Practices for Executing Brokers, http://www.futuresindustry.org/downloads/Order_Handling-Ex_Brokers.pdf

Clearing Broker Risk Management

- **FCMs use different near-trade risk methodologies for listed derivatives trades that they clear.**
- **Near-trade risk management occurs as close as possible to the time of the trade and relies on consolidating activity across a variety of execution channels:**
  - Multiple trading systems which may provide drop-copies to the risk management system.
  - Notification of trades (including give-ins) via the exchange clearing system.
- **Near-trade risk is typically managed on a fund level basis and looks at the ability of the client to meet the initial margin requirements of the trading activity in the fund that the FCM clears:**
  - This includes trades that remain with the FCM as well as trades given -in to the FCM.
  - This does not include trades that are given out to another FCM, or those that are held within a Top account awaiting allocation instructions from the client.
- **Clearing risk management is <u>quantitative</u> but also has a <u>qualitative</u> element:**
  - It has evolved to minimize hard limits that may inadvertently force the rejection of trades.
  - Client activity is constantly monitored in at near-trade and post-trade levels to avoid the possibility of a client being unable to meet their margin requirements.
  - It provides purchasing power feedback to adjust pre-trade limits set at the same FCM.
  - Thresholds are established for escalation and concerns are addressed with the client.
- **Due to the delays in accurately reflecting trading activity in a fund that the FCM clears, <u>automated</u> alerts are set at various thresholds such as 65%, 80%, 90% and 100%.**

Proposed Technology Vendor Solutions

- **Several 3rd Party technology vendors have announce that they can provide Rule 1.73 compliance.**
  - The FIA has spoken to several of these vendors and has evaluated how they provide compliance based on their own interpretation of the rule.

- **These vendors provide one or more components that facilitate execution and/or clearing, often connected via a common API of their own design:**
  1) Execution Management System or Direct Access Solutions for order entry.
  2) Middle Office system for accepting trades from the exchange clearing house/facilitating allocations.
  3) Post-trade clearing systems to manage client positions and collateral.
  4) Near-trade/post-trade risk management systems that also provide automated alerting.

- **It is important to note that different vendors have specialized footprints within the industry, and few vendors have equal footprints in execution, middle-office, clearing and risk management.**
  - Vendors with larger footprints in execution technology usually have a smaller footprint in operations.
  - Vendors with larger footprints in operations technology usually have a smaller footprint in execution.
  - Vendors that specialize in risk management typically do not have execution or operations footprints.

- **The main challenge with vendor solutions is the integration across other FCM systems.**
  - FCMs typically do not contract vendors to supply all 4 components.
  - Any migration of an FCM core component would be costly and time consuming.

FIA

Next Steps

- The industry would like to work with CFTC staff to help the agency reach its goals.
- The industry has formed a working group to consider ways of improving risk management for give-ups and bunched orders.
- Evaluating systems and controls already in place and discussing changes needed.
- Evaluating ways of electronically communicating risk management limits.
- Reviewing the FIA International Uniform Give-Up Agreement.
- Evaluating leveraging EGUS to agree and store limits.
- Actively interviewing third-party vendors.

APPENDIX A - § 1.73 Clearing futures commission merchant risk management (extract)
(a) Each futures commission merchant that is a clearing member of a derivatives clearing organization shall:
(1) Establish risk-based limits in the proprietary account and in each customer account based on position size, order size, margin requirements, or similar factors;
(2) Screen orders for compliance with the risk-based limits in accordance with the following:
(i) When a clearing futures commission merchant provides electronic market access or accepts orders for automated execution, it shall use automated means to screen orders for compliance with the limits;
(ii) When a clearing futures commission merchant accepts orders for non-automated execution, it shall establish and maintain systems of risk controls reasonably designed to ensure compliance with the limits;
(iii) When a clearing futures commission merchant accepts transactions that were executed bilaterally and then submitted for clearing, it shall establish and maintain systems of risk management controls reasonably designed to ensure compliance with the limits;
(iv) When a firm executes an order on behalf of a customer but gives it up to another firm for clearing, **(A) The clearing futures commission merchant shall establish risk-based limits for the customer, and enter into an agreement in advance with the executing firm that requires the executing firm to screen orders for compliance with those limits in accordance with paragraph (a)(2)(i) or (ii) as applicable; and** **(B) The clearing futures commission merchant shall establish and maintain systems of risk management controls reasonably designed to ensure compliance with the limits.**
(v) When an account manager bunches orders on behalf of multiple customers for execution as a block and post-trade allocation to individual accounts for clearing: **(A) The futures commission merchant that initially clears the block shall establish risk-based limits for the block account and screen the order in accordance with paragraph (a)(2)(i) or (ii) as applicable;** **(B) The futures commission merchants that clear the allocated trades on behalf of customers shall establish risk-based limits for each customer and enter into an agreement in advance with the account manager that requires the account manager to screen orders for compliance with those limits; and** **(C) The futures commission merchants that clear the allocated trades on behalf of customers shall establish and maintain systems of risk management controls reasonably designed to ensure compliance with the limits.**

Appendix B – Key to Terms and Abbreviations in the Diagram

FIX	**F**inancial e**X**change **P**rotocol	Industry standard protocol for the transmission of trading messages between clients, brokers, vendors and exchange.
GUI	Single Dealer Platform	A trading platform supplied to the client that allows the client to trade only with the FCM supplying the GUI. Orders are routed through the FCM's infrastructure.
Direct Access Vendor	3rd Party Trading Platform	A trading platform that connects directly to the exchange but is administered by the FCM providing access. Examples include Trading Technologies, PATSystems, FfastFill and Bloomberg TradeBook.
EMS Vendor	3rd Party **E**xecution **M**anagement **S**ystem	A trading platform used to stage and route orders to multiple brokers. It typically connects to the FCM through the FCM's FIX infrastructure and connectivity to the exchange. Examples include Bloomberg EMSX, Trading Screen, RealTick, FlexTrade or Portware.
Sponsored Access	Direct exchange access	The client connects directly to the exchange to submit orders and bypasses the FCM's infrastructure. The FCM manages the risk of the system using an exchange provided risk management API.
MO Vendor	3rd Party Middle Office System	A system that facilitates trade messages between the FCM and the exchange. The system receives trades executed through the FCM, trades given in to the FCM and allows the FCM to give out grades to other FCMs. Examples include Sungard's ClearVision and FfastFill's SEALS.
RMS	**R**isk **M**anagement **S**ystem	A system that provides near-trade and post-trade risk management, taking holistic information from a variety of trading systems and generating automated alerts based on various parameters. 3rd party vendors include PATSystems Risk Informer, FfastFill Orbit and Sungard STREAM Instant Control.