

# Certainty of execution and clearing

Creating a credit-checking tool for OTC derivatives

**Leadership Series**

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## I. Background

Clearing certainty is an increasingly important issue for market participants. The clearing mandate in the Dodd-Frank Act in the U.S., and in pending European regulation, requires institutional investors to clear most over-the-counter derivatives trades through a central counterparty. The clearing mandate is expected to be implemented in the U.S. in mid-2012, followed by Europe.

In a centrally cleared environment, institutional investors need a clearing member to extend credit in order for their trade to clear. Without certainty of clearing at the point of execution, counterparties are exposed to the potentially significant costs of a trade failure. Some type of pre-trade credit-checking procedure is necessary to provide assurance that clearing members will extend sufficient credit. This procedure can occur at the clearing house, through an industry vendor or hub, or at a swap execution facility, where the trades are actually executed. It is this last solution that appears to provide the most compelling overall advantages.

## II. The Challenge

Although most OTC derivatives trades are not currently cleared between liquidity providers and institutional investors, new U.S. regulations will soon require the majority of these trades to be centrally cleared. The proposed U.S. rules call for a phased implementation to provide a reasonable amount of time for market participants to comply with these new rules.

The challenge for market participants — especially on the buy-side — is that they need certainty of clearing at the time the trade is executed. Asset managers and other institutional investors need a

clearing member to provide credit before a trade is executed to ensure that the trade will be cleared successfully. Without this pre-trade credit-checking process, the risks of failed trades increase to an unacceptable degree.

Yet despite the significant importance of certainty of clearing at the point of execution, no industry-accepted technology currently exists for pre-trade credit-checking.

### U.S. Clearing Mandate: Proposed Implementation Schedule

Phase	Entities	Time to comply
Phase 1	Swap dealers and security-based swap dealers Major swap participants and major security-based swap participants Active funds	90 days
Phase 2	Commodity pools Private funds as defined by Sec. 202(a) of the Investment Advisors Act of 1940, other than active funds Employee benefit plans identified in Secs. 3(3) and 3(32) of ERISA (1974) Persons predominately engaged in activities that are in the business of banking or are financial in nature as defined in Sec. 4(k) of the Bank Holding Company Act of 1956, except third-party subaccounts	180 days
Phase 3	All other entities, including third-party subaccounts and end users	270 days

### III. Potential Solutions

Pre-trade credit-checking tools might be built by three distinct categories of industry participants: clearing houses, technology vendors, and swap execution facilities (SEF). They all have their challenges. In addition, clearing members will need to adjust to potentially many SEFs, clearing houses, and industry hubs unless one credit-checking procedure or tool becomes the dominant player in the marketplace.

	Clearing Houses	Third-Party Hub	SEFs
<b>Technology Considerations</b>	May be hesitant to build credit-checking tools if they are unable to devote the technology resources to build the solution on a timely basis or don't see an adequate return on investment.	Many large institutions are concerned that a third-party might not be in a position to deliver a robust solution in the timeframe required.	SEFs with a technology heritage may be best positioned to develop credit-checking tools. With a robust development operation and years of experience in building market infrastructure, the established SEFs are the most likely to develop an integrated workflow that addresses this industry solution.
<b>Key Challenges</b>	Ability to build a robust credit-checking system in the required timeframe. CCPs are currently working to build out systems to support the increased derivatives to be cleared under the Dodd-Frank requirements, so much of their resources are being absorbed.	If there were only one hub, it would centralize the risk of the hub itself failing commercially. If there were more than one hub, it would no longer be a central source. There also may be greater concern around data protection compared to when a CCP or SEF is trusted with the role.	A robust, real-time system must be developed to minimize any delays to the execution of a trade.
<b>Key Advantages</b>	As an integral part of the clearing process, the clearing house may be a logical place for credit checking to occur.	A third-party hub would minimize the need for clearing members to allocate credit lines across different SEFs.	SEFs possess the technology expertise to build a robust credit-checking system. A SEF solution would provide for minimal latency by checking credit where the trade occurs while maintaining the information security and confidentiality required for pre-trade checks.

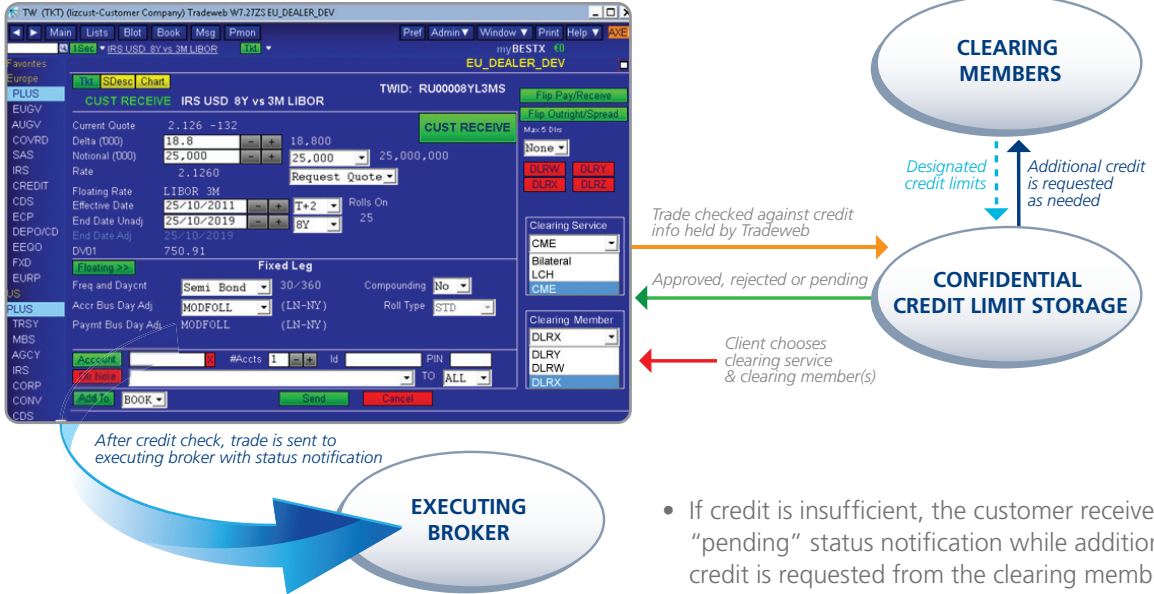
## IV. SEF Alternatives

SEFs with a technology heritage may be best positioned to develop credit-checking tools. With a robust development operation and years of experience in building market infrastructure, the established SEFs are the most likely to develop an integrated workflow that addresses this industry dilemma.

Industry participants seem to agree that there are three potential ways to build a credit-checking tool: “pinging,” daily upload, and a hybrid solution, which Tradeweb sees as the preferred approach.

	Approach	Challenge
<b>“Pinging”</b>	This approach provides a drop-down on the trading ticket, allowing the client to choose its clearing member. When the ticket is sent, the clearing member returns a message to the dealer to confirm that the credit has checked out.	Many clearing members are currently unable to automate the credit-checking process in real-time and return a message to the dealer in less than a second — which is considered the maximum acceptable delay. In addition, the buy-side may be wary of trade information being sent to the clearing member pre-trade because of concerns that this information could leak to an executing dealer.
<b>Daily Upload</b>	In this alternative, the SEF uploads credit limits from the clearing member at the beginning of the trading day and stores the information locally. The advantage of this method is that the turnaround is real-time.	Clearing members are not always comfortable outsourcing their risk-management tools or confidential client credit-limit information, regardless of the security profile of the SEF. In addition, credit valuation procedures may need to be standardized across clearing members.
<b>Hybrid</b>	In this scenario, the SEF uploads the credit limit from the clearing member at the beginning of the trading day. A tolerance limit is set, for example, at 75%. When the client reaches the tolerance level — which is monitored by the SEF — the clearing member is asked by the SEF to raise the limit. The limit stored within the SEF is then adjusted accordingly. The advantage of this approach is that the clearing member retains control and confidentiality. Buy-side clients support this method because there is virtually zero latency, and trade information is not communicated to the executing dealer and clearing member prior to the trade.	SEFs will need to establish robust connectivity with clearing members to ensure the integrity of credit checks.

## V. SEF Hybrid Solution: Tradeweb Workflow



At the beginning of the trading day, Tradeweb is populated with a credit limit for each account predetermined by the clearing member.

- This limit may be at the subaccount level or the firm level and would not necessarily represent total credit. The limit could change day-to-day and intra-day.

At the time of the trade, the customer chooses a clearing service and clearing member from the trade ticket. Some customers may be required to pre-allocate at this point.

Tradeweb will then check the request against the credit information held within our system.

- If the customer’s credit is sufficient, the trade is sent to the executing dealer with a message indicating that clearing has been approved.

While the trade is “pending,” the customer may elect to override the process and send the trade to the executing dealer with a message indicating no clearing approval has been received.

Once the credit check is complete, the trade is sent with a certainty of clearing status notification. Note that if credit is not extended, the RFQ will not be blocked but rather sent with a message indicating that no clearing approval has been received.

Tradeweb would allow clearing members to set a tolerance level at which to be notified when a certain percentage, for example, 75%, of the credit for a specific account has been depleted. The clearing member could then elect to increase the credit line or keep the limit firm and disallow trading above that credit limit. A “kill switch” would also be in place to allow a clearing member to shut down a customer’s credit in real time should they deem it necessary to do so.

## VI. Other Considerations

### **What additional information will be required?**

Relationships between liquidity providers, institutional investors, clearing members, and CCPs will need to be well understood and appropriately documented in order to allow for accurate credit-checking functionality. Information such as account identifiers must be stored and configured to accurately represent these relationships.

### **Building appropriate connectivity to clearing members**

SEFs such as Tradeweb currently have connectivity to clearing member institutions; however this is primarily to the liquidity provider desks therein. This connectivity will be enhanced to facilitate two-way communication between the SEF and the clearing member. SEFs will need to receive communication from clearing members on customers' credit limits as well as send trade information back to the clearing member.

### **Discussion on credit measurement methodology**

What is the appropriate method of measuring the risk of a trade and reflecting this risk within the credit limits provided? What should the units of measurement be? Clearing members will need to provide input and insight into the way they measure and manage risk to ensure that the methodology utilized by SEFs is an accurate reflection of the risk of the trade.

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