Collateral utilities – the day dawns?

You might forgive firms trading non-cleared OTC derivatives for breathing a collective sigh of relief and focusing on more urgent matters now the margining deadline has moved back. But that is far from the case. There is a huge amount of work to do across the industry in a space where solutions are still being invented around us. This article outlines the emerging vendor innovations, the challenges of fitting them together into a "utility ecosystem", and the key disciplines needed to form an effective change programme to meet next year's deadline.

Margin Requirements for Non-cleared OTC Derivatives

First, a little background for readers unfamiliar with the regulations. In order to reduce systemic risk and to promote central clearing, the Basel Committee on Banking Supervision (BCBS) and the International Organization of Securities Commissions (IOSCO) have set out margin requirements for non-centrally cleared derivatives. Counterparts must exchange IM on a two-way non-nettable basis, potentially giving rise to Herstatt risk, and must exchange VM in the currency of the underlying swap (or accept a haircut). Other requirements include maximum thresholds and minimum transfer amounts. This is a huge departure from how the industry has operated historically.

To add to the challenge, if a margin call cannot be agreed between the parties within five days it must be reported. If more disputes arise the Margin Period Of Risk (MPOR) could double, and double again, driving up the quantity and cost of IM. The industry must therefore urgently find ways to avoid disputes. But historically there has been no mechanism (or need) for agreeing risk sensitivities or risk factor levels, without which margin numbers can't possibly agree.

Utility ecosystem

The day of an industry-wide collateral utility ecosystem is dawning, and may be about to provide some answers. Some utilities are "market-owned / market-governed", some are commercial / for profit. Each model has its merits. Market-owned utilities offer participants a say in its direction and a stake in the outcome, offset by the governance challenges of decision-by-committee. Commercial ventures should be able to make decisions quickly to exploit market gaps, unconstrained by the delays of committee governance, but may find it harder to get enough industry backing to reach critical mass. Survival will be Darwinian.

Based on our work with sell-side, buy-side, custodians and triparty agents, The Field Effect has encountered or worked with many of the utility providers. Let's take stock of some of the players.

The much-anticipated "son-of-Project-Colin" announcement in July 2015 by AcadiaSoft, TriOptima, DTCC and Euroclear promises an industry-wide margining hub by linking together services from each player. The solution extends triResolve portfolio reconciliation into risk factor sensitivity matching, combines MarginSphere 2 margin call and collateral matching with the Margin Transit Utility (MTU) for settlement instruction enrichment using Omgeo's SSI service, enhanced with instruction issue and tracking. It's a complex suite of functionality, messaging and data transfer, but with the backing of 13 global banks surely success is assured. But whilst the investor backing is impressive, at the time of writing we have yet to see any functional or architectural detail and can only imagine the governance challenge of satisfying such a wide stakeholder group.

Nor does the AcadiaSoft / TriOptima initiative have the playing field to itself. NetOTC has been developing a margining and dispute management service for some time and may have a head start with detailed requirements and technical build. Originally conceived as a multi-

lateral netting service, the focus now is on meeting the more urgent requirements for bilateral margining. As a commercial service it can generate and pursue new ideas at will, and has highly innovative features that avoid IM settlement risk, and offer a reduction in IM quantity equivalent to netting. NetOTC also promises a choice of margining models: not just standard schedule and ISDA's SIMM (standard industry margining model), but also their own HVaR model which claims superior spread risk modelling. NetOTC's challenge is to generate enough industry backing to bring the service to market.

Whilst there may be some competitive overlap in the two services, in our opinion each has specific strengths and the industry would be well served if the solutions would inter-operate. The question is, how?

Third party margin calculation services such as OpenGamma, TMX and others have been quick to spot the opportunity to margin non-cleared OTC and could play a role in utility solutions. Derivatives processing systems such as Calypso have also announced margining functionality for non-cleared OTC, and of course offer rich front, middle and back office functionality on-premise or as a service. Many of these services also simulate collateral required from central clearing houses by replicating margining models from the likes of LCH.Clearnet, CME, ICE and others. Through this mechanism they support the need for firms to optimise allocation of collateral across multiple demands, both cleared and non-cleared.

Utilities are also springing up in related areas such as documentation. The rules around exchanging collateral are typically captured in an ISDA credit support annex (CSA), a complex document containing legal terms related to eligibility, haircuts, currencies, interest rates, termination events and so forth. CSAs are notorious for the difficulty they present in extracting high quality golden source reference data that can be consumed efficiently by the many and varied systems that need them. The new regulations will force some new standards on terms such as minimum transfer amounts (MTAs) and thresholds, so firms face a major re-papering challenge. Banks will have to margin all trades after the compliance deadline under new CSAs, but are entitled to continue margining legacy trades under the old rules. So both sets of CSAs must be maintained and managed. Third party utilities such as Recommind's Perceptiv service offer ways to streamline extraction of structured CSA information from unstructured "legalese" to create accessible golden source data. Perceptiv has the backing of three major investment banks, with the promise of more coming on board to create an industry-wide solution. But new players are also emerging in this space, such as Logical Construct, who offer solutions for locating data in scanned contractual documents across a wide range of business areas, including CSAs.

Crucial to the emerging infrastructure are the triparty agents. Euroclear and Clearstream both offer smart mechanisms for accessing assets locked up in previously inaccessible places to enable allocation as collateral. Their Highway and Hub solutions differ, but both enable collateral givers to allocate assets to collateral takers in a way that is faster and cheaper, dramatically increasing the velocity of collateral. In our opinion, triparty is essential infrastructure to support the future industry landscape. As collateral and cash becoming increasingly interchangeable, we believe CLS has a growing role to play, and first steps have been taken with the recent joint LCH announcement offering cleared FX options. SWIFT is also playing a role in connecting everything together, with the development of new collateral messaging standards.

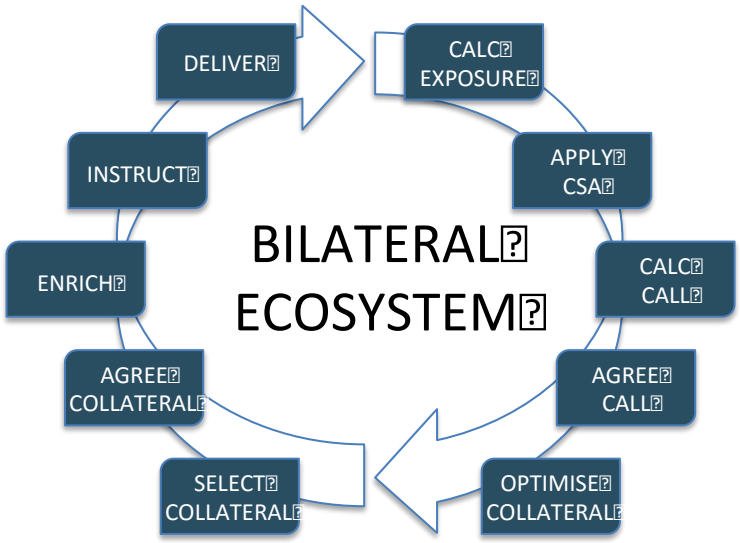
How to decide?

Every firm must make a set of interlocking solution decisions: build or buy, in-house or utility, best-of-breed vs composite solution. Some utility vendors cooperate and some compete, so each decision has implications for other selections. How to make sense of it all? We urge

taking a holistic view of the target operating model. Our experience indicates that mapping end-to-end business process is the essential discipline to inform solution design and decision making, helping identify how to make the ecosystem work for your firm.

Key processes

Designing every single business process is not necessary for solution design. We recommend focusing on the narrow set which have the most architectural significance. These will be similar across many businesses, even if expressed in different language, and we suggest the following model might be a good place to start.



Architectural Issues

In our experience there will be several knotty problems to resolve while you are designing the target process. They will differ by organisation, but by way of an example here are a couple we have considered.

Reconcile or call? Should you reconcile risk sensitivities and margin calculation before making the call? This will ensure that the call is correct before it is issued. Or should you issue the call and see whether it is agreed by the counterparty, only invoking the reconciliation process if an investigation is required?

Optimisation and transformation? Many firms continue to invest in improving optimisation and transformation capabilities. How should these functions be integrated into the non-cleared margining workflow?

Five Steps to Heaven!

Clearly there is a lot of work to be done. We have been working on change projects in the cleared and non-cleared markets for many years, and we would like to share some of our experience helping firms design target operating models quickly and effectively.

1. *Define your vision, set your objectives, measure your goals* – set out strategically what you want to achieve to paint the "big picture" to steer decisions. This may seem obvious or even trivial, but many firms fail to articulate it then wonder why change initiatives fail to deliver the vision.

2. *Pain Points, Opportunities and Gaps –* Examine your current state architecture and processes, find what makes it a manual or painful process. Identify opportunities (freeing up staff, speeding end-to-end process, reducing cost etc.) and define gaps. See where you should be doing something and plan for that. Test the target operating model against everything you have captured, to ensure you are addressing as many of the pain points, opportunities and gaps as practical.
3. *Processes, Activities, Tasks –* So how do you define a target state? Where do you even start? We think of target operating model as the alignment of people, process and technology – starting with process. Each process has a number of activities, made up of tasks containing steps. That is an incredibly useful approach, as it breaks the target state up into easily manageable chunks, but allows us to link people, processes, technology, data and locations and start drive out the functions and datasets.
4. *Channels –* With a diverse set of utility solutions and in-house systems, there will be numerous touch points with external actors. Each must be understood in terms of data standards, messaging and service qualities.
5. *Data –* It's pretty obvious that data quality and standardisation are critical to the solution. Once you understand all the datasets, their format and content you can begin to design a data model. Industry experience with trade reporting regulations demonstrated the continuing challenges of data quality. Demand for quality data just increased - we now need standardised risk factor sensitivity data which can be extraordinarily hard to produce, and is often held in completely different systems. Collation and transmission of this data is going to be a major challenge for many firms.

Analysing these dimensions will uncover the information needed to evaluate competing utility solutions and design the optimum target state for your firm. Appropriately modelled, you will be able to efficiently drive out business requirements, vendor RFPs, technical specs, plans and business case.

Whatever approach you adopt, these key disciplines will be needed to form an effective change programme to meet next year's deadline.