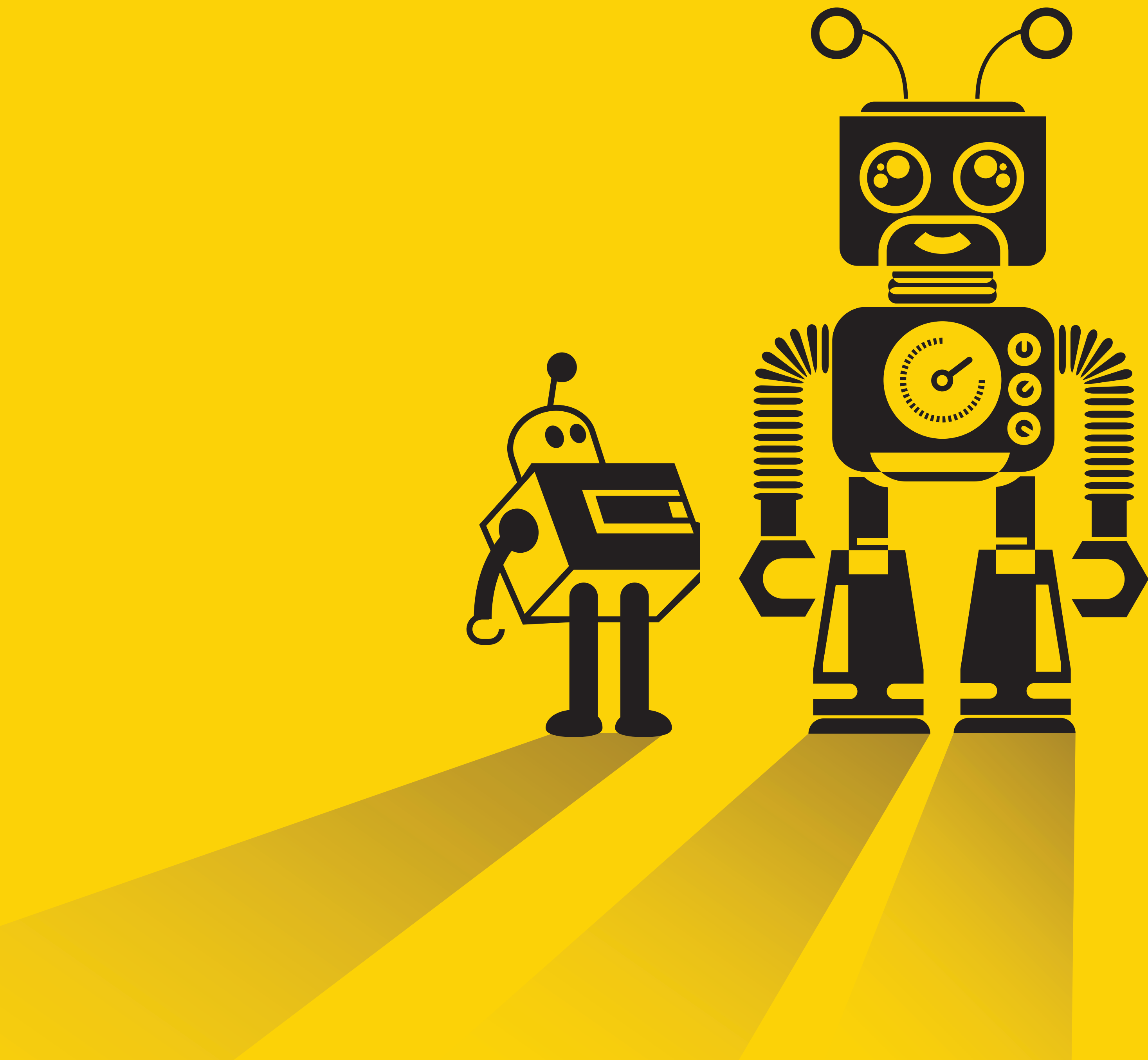
SLT SECURITIES**LENDING**TIMES

Annual**Report** 2015
Technology Guide




GC
WARM
HOT
NGT

Wait Securities Finance, it might be dangerous ... you go first

As the securities lending, repo and collateral management segments continue to shed their own distinct personalities and intertwine to become securities finance, the technology that calls them master is developing in its own right, particularly as the status quo is being challenged by regulators and markets alike.

Central counterparties for securities lending are growing in prominence and are already a legitimate route to market for many. Eurex Clearing and Pirum outline how market participants might 'connect' to the Lending CCP on p52 and p46.

OCC is also ensuring absolute confidence in its ability to meet commitments, having worked collaboratively to secure a new source of funding. Head to p54 to find out more.

Trading platforms have dominated the headlines, with EquiLend's Next Generation Trading system coming to market. It offers to make participants' lives a lot easier, in the words of CEO Brian Lamb on p18. Despite the strides being made here, Rob Sammons of Anetics stresses caution on p32, with email still the main means of communication between counterparties to a trade.

Technology will continue to serve securities finance as needed: the challenge will be in how those needs are articulated so that the solutions match.

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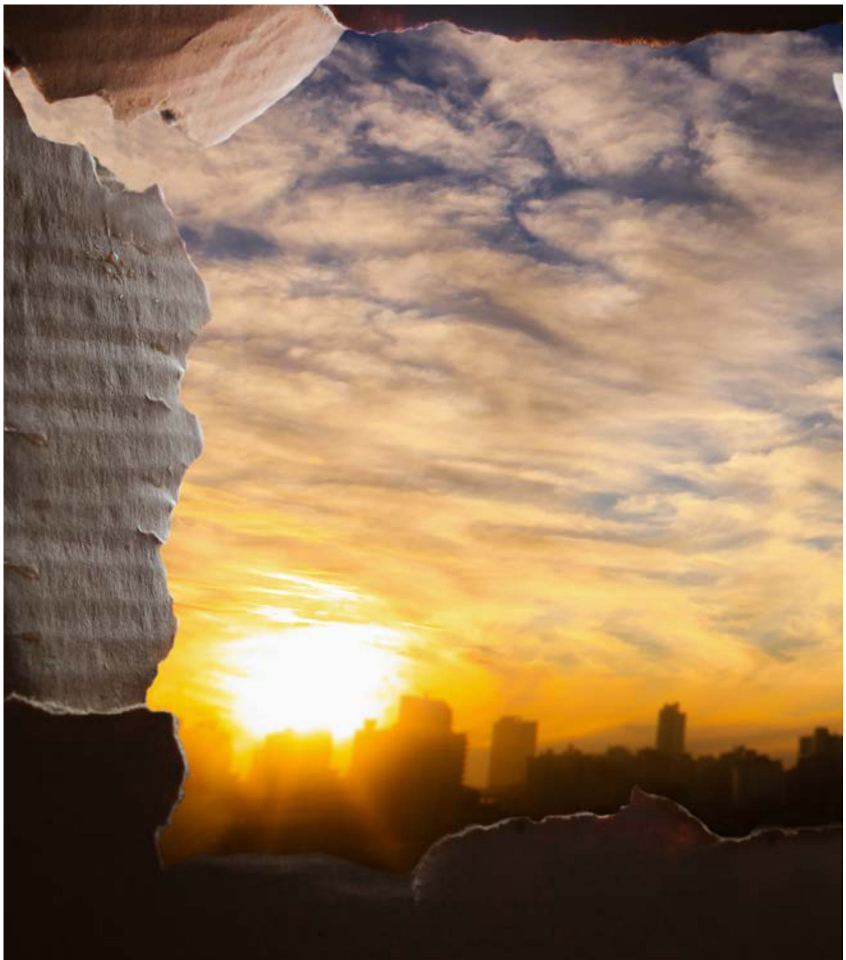


Rapid innovation in securities finance

New vendors entering the market, product launches arriving regularly and partnerships developing. Technology providers have never been so busy

A number of vendors have rolled out new products and updates that will boost efficiency for securities finance participants.

EquiLend successfully rolled out its Next Generation Trading (NGT) securities finance trading platform.

NGT is a consolidated, multi-asset class trading platform for the securities finance marketplace that allows traders to conduct their entire trading workflow on a single screen.

Using existing trading venues and messaging capabilities, NGT increases trade-level transparency, improves workflow automation and generates efficiencies for the market, according to EquiLend.

EquiLend began building NGT in 2013 following demand from clients for a consolidated trading system that would enable increased executions, real-time bid/offer negotiation, a more dynamic workflow, and streamlined setup.

More than 28,000 trades are currently executed on EquiLend's trading platform each business day. With the launch of NGT, EquiLend anticipates capturing a greater share of trades as institutions look for more efficiencies in their securities finance trading activities.

EquiLend CEO Brian Lamb said: "NGT is the biggest initiative in the securities finance trading arena in years. We collaborated with clients on the ground across five continents to ensure the global securities finance industry would be prepared for a new trading dynamic focused on transparency and efficiency."

"With NGT, traders around the globe can, for the first time, conduct their entire trading workflow all on one screen, from indications of interest with counterparties through to trade execution."

Dow Veeranarong, product owner for EquiLend, commented: "EquiLend's partnership with our clients to build NGT is driven by their desire for increased efficiencies and executions across a wider range of securities."

EquiLend and BondLend also launched Trade Match, which provides an automated way to compare pre-settlement, cross-product securities finance transactions.

Trade Match reconciles all the trade components of either the start or close leg of each trade type.

The software's exception management reporting prioritises the core pending settlement risk items for the users, helping them to reduce fails and rectify trade economic discrepancies on a real-time basis.

According to EquiLend and BondLend, Trade Match recognises nuances between equity and fixed income clients.

BondLend clients can use reconciliation terms specific to the fixed income business, offering the flexibility to handle different trade types.

Trade Match is also compatible with One File connectivity, EquiLend's new workflow for streamlined build-out to EquiLend's post-trade services.

Lamb said: "We have heard clients' concerns around the changing regulatory environment and reduction of settlement cycles."

"Coupled with the industry focus on developing best practices, we are excited to offer a tool to help clients reduce risk on their pending trades."

"By leveraging Trade Match, an automated solution, we allow firms to be scalable with their business."

Financial software company 4sight developed new support for the agency lending disclosure (ALD) process, allowing borrowers to reconcile the trades booked in 4sight Securities Finance (4SF) against what is booked in the lending agent's system.

The new functionality offers the ability to send automated messages to the risk and finance departments with reporting on exposures to underlying beneficial owners.

All of the underlying principals to a trade in 4SF can now check if they have been authorised as a counterparty by the borrower. This allows the borrower to then notify the agent in the event of discrepancies.

"ALD is a cumbersome regulatory requirement for many market participants. We have updated our functionality to increase straight-through processing and improve communication with the risk and finance departments," commented Martin Seagroatt, 4sight's global marketing and product innovation director.

"The 4sight ALD module now offers clients greater transparency and increased awareness of counterparty credit risk, while reducing the operational complexity of the ALD process."

The Depository Trust & Clearing Corporation (DTCC) added new global custodian and prime broker automation capabilities to Omgeo Alert.

State Street was one of five custodians due to go live on the Omgeo Alert Global Custodian Direct service in 2015.

The release, Alert 5.0, includes the Global Custodian Direct feature, which enables global custodians and prime brokers to electronically maintain timely and accurate standard settlement instruction (SSI) data in the system, on behalf of their clients. Currently, investment managers perform these updates manually.

Global custodians and prime brokers, through adoption of Alert, can offer their clients the additional service of maintaining and providing SSI data in an automated, secure and efficient manner.

The service also facilitates the communication of custodian-sourced, market practice-compliant data by connecting a custodian's central SSI repository to the Alert host, using ISO 20022 messaging.

"Asset managers have traditionally maintained SSIs for their accounts, however, custodians have always been the source of this data, where each account settles and holds its assets. Omgeo created Alert to enable asset managers to maintain their SSIs in a central repository for brokers to access, driving value for these segments," explained Bill Meenaghan, executive director of Alert product management at Omgeo.

"By adding custodians as users, we will be able to improve information quality standards, since custodians will automatically be updating their data as they create or change account standard settlement instructions."

Dick Taggart, a member of the Omgeo board of managers and executive vice president at State Street, who also serves as chairman of DTCC's SSI utility product governance committee, said: "By enabling global custodians to access and update Alert automatically via GC Direct, we add significant efficiency and risk reduction to the industry."

"SSIs will be more complete and accurate, which helps reduce fail risk, and Omgeo's establishment of a true utility under the DTCC umbrella reduces costs and risk for all subscribers and participants."

Subsequent phases will expand asset class coverage in the service, as well as offer an enhanced application program interface for brokers, asset managers and third-party transaction services to retrieve SSI information in real-time during trade processing.

Collateral considerations

Collateral management continues to rise in prominence in securities finance, with new vendors entering the market, product launches arriving regularly, and partnerships developing.

SmartStream Technologies acquired IBM's Algorithmics Collateral Solution, including all of its assets related to software, sales and support.

The acquisition adds to SmartStream's existing suite of solutions, helping financial firms to automate their end-to-end post-trade lifecycle, reducing the costs and levels of risk involved.

The Algorithmics Collateral Solution, which was rebranded TLM Collateral Management, offers collateral lifecycle automation for buy- and sell-side institutions, custodians and asset servicing firms of all sizes.

SmartStream has predicted that its clients will see increased value for post-trade processing through the integration of collateral management with SmartStream's operational risk control framework.

IMB purchased Algorithmics in 2011 for $387 million, acquiring its risk and analytics software and content advisory services, as well as the collateral solution.

SmartStream acquired only Algorithm's collateral product from IBM. This includes solutions for cash and intra-day liquidity management, corporate actions, reconciliations, data management and exception management.

Philippe Chambadal, CEO of SmartStream, said: "This acquisition marks another significant step for the company and our customers. Funding and counterparty risk management have a critical focus for our customers, who will now be able to leverage the integration of TLM Collateral Management with our leading cash and liquidity management solutions to give a clear picture of a firm's exposure."

"This will give them the unique ability to mitigate counterparty risk and to respond to market changes in real-time. The solution gives a complete picture across the front-and back-office and a centralised view of a firm's inventory and exposure, enabling greater transparency of funding and collateral needs, which ultimately underpins trading."

Illuminate Financial Management invested in CloudMargin, the collateral and risk management technology platform originally backed by a group of senior financial market executives.

The cloud-based solution, which launched in 2013, is a cross-product, collateral and margin management technology.

CloudMargin was developed to cater specifically to buy-side and non-bank institutions such as corporates, hedge funds, insurers, pension funds, and asset managers.

The move marks Illuminate's first investment in a financial technology firm since it was launched last year by Mark Beeston, now managing partner of the company.

Illuminate's investment is the only institutional funding completed by CloudMargin as it eyes the next phase of its growth.

Beeston commented: "CloudMargin fits perfectly into our investment thesis of identifying and accelerating the growth of young companies that will lead the next stage of technology innovation within capital markets."

"It is unique in that it offers a low cost solution for a range of industry participants as well as improving efficiency for the major sell side players who interact with those same counterparties."

"This technology is going to be transformational in the evolution of collateral processing and we look forward to supporting CloudMargin's growth over the coming years."

Andy Davies, CEO and co-founder of CloudMargin, said: "We are delighted that Illuminate has chosen to invest in CloudMargin."

"This is a great validation of both our technology and the solution we have created. Illuminate has already played a role in developing better access, connections and relationships with our target market, and we look forward to partnering with them to accelerate CloudMargin's growth and client adoption."

CloudMargin was also selected to provide collateral management technology for Old Mutual Global Investors, the implementation of which was successfully completed in January 2015.

In the past, CloudMargin has focused its web-based services on the needs of firms such as corporate treasurers, insurers, pension funds, banks and asset managers.

"We are delighted that CloudMargin has been selected by Old Mutual Global Investors and it has been a privilege to add them to our rapidly growing client base. It shows that our solution is scalable for every type and size of buy-side institution," said Davies.

Dan Cunningham, head of investment operations at Old Mutual Global Investors, added: "I've been really impressed by the system's functionality and by how straightforward the onboarding process was."

The firm partnered with AcadiaSoft to provide real-time collateral management communication to their clients.

Using the new link to AcadiaSoft MarginSphere, CloudMargin's clients are able to issue and respond to margin calls, manage disputes and then negotiate and process margin movements electronically with their brokers.

This happens in real-time without sending emails or faxes, prevents the re-keying of data and removes the need to monitor an email inbox.

CloudMargin clients pay a rolling monthly subscription based on actual usage levels and receive a full-featured collateral management platform that, CloudMargin claims, outperforms "the dated million-dollar offerings of the legacy technology vendors".

MarginSphere is a margin confirmation community where counterparties engaged in collateral management can automate the complete margin cycle.

It is the result of collaboration between AcadiaSoft and the industry's largest financial institutions that are focused on driving efficiencies and reducing risks through margin automation.

CloudMargin's link to AcadiaSoft is live and available to all clients.

"The move from email and fax communications to electronic messaging is the greatest single driver of efficiency and STP the collateral management world has seen in years," commented Davies.

"AcadiaSoft's innovative solution is a natural partner of CloudMargin and together our clients and their brokers will see immediate efficiency and accuracy gains. I'm thrilled to offer this new functionality to our rapidly growing client base."

Chris Walsh, COO at AcadiaSoft, said: "We are excited to be integrated with CloudMargin to bring increased [straight-through processing] to the collateral management process."

"The welcome addition of CloudMargin to the AcadiaSoft community is a key advancement for us towards our goal of a completely automated, industry-wide margin process."

Continuing to forge partnerships, ArcadiaSoft teamed up with Murex to extend the reach of electronic messaging capabilities.

Murex's MX.3 solution for enterprise collateral management now offers direct connectivity to ArcadiaSoft's MarginSphere, providing straight-through processing (STP) for clients from margin calculation to settlement and accounting.

The solution will support a range of margin calculations optimising the calculation chain across bilateral and cleared, over-the-counter, repo and securities lending products, as well as exchange-traded derivatives.

It also includes the margining requirements issued by the Basel Committee on Banking Supervision and the International Organization of Securities Commissions, while improving the availability of OTC clearinghouses standard methods.

David Radley, global head of sales at Acadiasoft, said: "We are excited to be integrated with Murex's MX.3 platform to help their clients achieve STP in the collateral management process—a capability we refer to as 'straight through margining'."

"The welcome addition of Murex to the AcadiaSoft community is a key advancement towards our goal of a completely automated, industry–wide margin process."

Etienne Ravex, collateral management product manager of Murex, said: "Our partnership with AcadiaSoft as a recognised leader for margin confirmation automation significantly reinforces our support to our clients in their collateral optimisation journey."

Societe Generale unveiled Tempo, its new collateral management outsourcing system for buy- and sell-side market participants.

The solution is designed to reduce the complexity, operational burden, and costs associated with collateral management for asset managers, institutional investors, banks and major corporates.

The launch comes as a response to new risk management standards and margining regulations for both cleared and uncleared derivatives. In the modern market environment, there is greater need for automation in these processes across the full network of CCPs, counterparties and clearing brokers.

Varying collateral eligibility, concentration and haircut criteria also increases the need for additional high-quality collateral.

Tempo is designed to address these complexities, helping clients to diversify investment strategies in compliance with changing regulatory requirements. It can also help them to reap the benefits of diversified collateral mass, productivity gains, reduced counterparty and operational risk, and enhanced collateral flexibility.

Clément Phelipeau, product manager for derivatives and collateral management services at Societe Generale Securities Services, said: "As transactions will increasingly need to be collateralised to mitigate market risk, implementing the best possible collateral management strategy will be imperative for both the buy-side and sell-side."

The new solution draws on the French bank's securities services business and its multi-asset prome brokerage arm, Societe Generale Prime Services.

It is designed to integrate smoothly with existing internal systems and can work in conjunction with the bank's prime services clearing solution for OTC derivatives.

Tempo's agency mode is available for OTC derivatives, exchange-traded derivatives, securities lending and repo collateral needs.

The solution spans the full collateral lifecycle, including central margining, dispute management, asset pool management, and collateral optimisation and allocation.

Phelipeau added: "Tempo is a unique combination of Societe Generale's multi-asset collateral management expertise which will help clients make the most of their assets in the coming years."

DTCC's Omgeo ProtoColl front-end collateral management system is to be integrated with DTCC-Euroclear GlobalCollateral Limited's Margin Transit Utility (MTU), a solution designed to deliver straight through processing of the settlement of margin obligations.

With this integration, Omgeo ProtoColl clients will gain a view of all transactions processed in the MTU from their existing ProtoColl user interface, streamlining margin call activities and enabling better monitoring of the collateral management process from a single interface.

"Our clients have been asking for ProtoColl to be linked with the MTU in order to ensure that activities taking place within the MTU seamlessly integrate with ProtoColl functionality," said Tim Keady, managing director and DTCC's chief client officer.

He added: "By doing so, users will benefit from a uniform experience, while enabling them to further automate their collateral processes, reduce counterparty risk, and allow them to more efficiently manage all areas of the collateral workflow."

Omgeo ProtoColl uses a rules-based workflow approach, allowing for exception-based processing on reconciliation, counterparty exposure, collateral optimisation, auto-fulfilment of pledged assets, and downstream notification.

MTU is a global collateral processing utility to streamline and bring automation and transparency to collateral movements and settlement.

Keady explained "The open architecture of MTU aligns well with ProtoColl's architecture, enabling us to bring the benefits of the MTU directly into existing ProtoColl workflow processes."

Clearstream and ICE Clear Europe are collaborating to create a triparty margin collateral management service, linking the London-based central counterparty (CCP) to Clearstream's Global Liquidity Hub.

Customers of the Clearstream international central securities depository (ICSD) will be able to use the Global Liquidity Hub to manage margin requirements at ICE Clear Europe, while ICE clearing members will have a link, through the hub, to a triparty collateral management solution.

ICE Clear Europe members can deposit securities and use them as collateral, managing their risk exposures in an automated and efficient collateral environment.

The new service supports a move to improve stability of capital markets through increased trades. It is designed to help prevent bottlenecks when sourcing the correct high-quality collateral to meet the CCP's margin requirements.

Stefan Lepp, head of global securities financing and member of the executive board at Clearstream, said: "ICE Clear Europe customers will now benefit from streamlined triparty collateral management through our Global Liquidity Hub."

He added: "This new partnership is part of our strategy of enabling customers to use the Global Liquidity Hub as a single source of liquidity to collateralise multiple global exposures in a streamlined and optimised manner. More importantly, users of the Global Liquidity Hub will be able to manage all cleared activities from a single location."

Paul Swann, president of ICE Clear Europe, said: "ICE Clear Europe is committed to providing enhanced clearing services to help members comply with new regulatory requirements. Clearstream's triparty collateral solution provides ICE Clear Europe members with an additional and efficient way of meeting initial margin requirements via one of the best linked collateral pools globally."

Lombard Risk's collateral management, clearing, inventory management and optimisation solution, Colline, now supports margin requirements on non-centrally cleared derivatives.

Colline maintains pace with global regulatory requirements by ensuring that each release includes functionality to enable clients to meet their regulatory obligations in a timely manner, for all capital market participants including clearinghouses, banks, clearing brokers and derivatives end-users-both cleared and non-cleared businesses.

Colline's OTC clearing functionality has been available since 2010, and has been continually enhanced to meet evolving global regulations as they come into force.

Functionality within the OTC module is similarly enhanced to meet global margin rules for non-cleared OTC business.

"Users can take confidence in that Colline has been supporting various regulatory initiatives such as [the International Organization of Securities Commissions], Basel III, Dodd-Frank and European Market Infrastructure Regulation as they have arisen," said John Wisbey, CEO of Lombard Risk.

"The configurable design allows us to easily adapt and enhance the solution as regulations are imposed rather than having to build new modules to support the ever-changing regulations as many of the other industry vendors have been doing to keep pace."

Asset management firm Brandywine Global chose SunGard's Apex Collateral solution to help it comply with increased regulatory demands and improve reduce counterparty credit risk.

Brandywine Global previously relied on manual workflows but turned to SunGard to help automate its collateral management process and maximise operational efficiencies while mitigating risk.

Apex Collateral will help to support the firm's growing business and comply with pending regulations around bilateral traded derivatives as well as requirements for the clearing of FX forwards.

The solution also boosts Brandywine Global's clients and investors' confidence that the firm is managing its exposure and monitoring counterparty risk through the exchange of collateral.

Brandywine Global will benefit from the new solution with umbrella agreement structures, consolidated broker-level calls and direct connection with SWIFT.

Mark Solomon, vice president of complex instrument operations at Brandywine Global, commented: "Brandywine Global is committed to implementing state-of-the-art technologies that help us increase service levels to give our clients the same capabilities as the largest firms on Wall Street."

"SunGard has a proven track record of success in building technology solutions for asset managers and a clear commitment to developing a long-term collateral management practice. Apex Collateral can help us continue to improve our client service, build and support new businesses and enhance our regulatory reporting capabilities."

Ted Allen, head of collateral product management at SunGard, added: "Brandywine Global and other asset managers rely on Apex Collateral to help them expand their businesses by handling the increasing volume of portfolios as regulatory requirements continue to grow in complexity."

"SunGard's expertise helps Brandywine Global maximise its use of technology to keep with the demands of their increasingly sophisticated clients while helping control their total cost of ownership."

Finally, 4sight launched a new triparty functionality to support its securities finance and collateral management system.

The solution will support the triparty process with Clearstream, J.P. Morgan and BNY Mellon, and includes functions for all steps of the process, from agreeing to a running quality value (RQV), to messaging capabilities.

It can also match allocations, allowing users to view them against their respective trades. Users will be able to quickly reconcile mismatches in value of exposures against collateral received, and view the RQVs that need to be booked, changed or cancelled.

The service can also help users to identify triparty collateralised trades, streamlining the booking process.

4sight has added support for the industry standard vendor-specific versions of SWIFT's MT527 and MT558 messages, and better workflow support for SWIFT MT535 messaging

This includes improved clarity and reconciliation regarding what a user believes is in a long box, what is actually in it, and what has been allocated.

New features combine data from three triparty providers in to one system, allowing for easier management of collateral for all three agents at once.

Johnnie Peacock, client services director at 4sight, said: "Due to client demand, we overhauled our existing triparty support and added a raft of new features. Our clients are now able to see their triparty collateral allocations and automatically match off against their respective trades."

An equal but positive reaction

How long will market participants wait before fixing something? Brian Bollen finds out

Does the securities lending market stand on the cusp of existential change? The posing of this question prompts a series of reactions, ranging from an enthusiastic ‘yes’ at one end of the professional spectrum to a wearied ‘it’s always been evolving and developing and will always continue to evolve and develop’ at the other end.

Putting philosophical matters to one side for the time being, the present and future of the securities lending industry is all about technology. John Arnesen, the London-based global head of securities lending at BNP Paribas Securities Services, is focusing on what he describes as eliminating the need to ‘balloon’ head counts.

“We are investing in technology to provide high-tech solutions with reduced resources,” he says. “Securities lending is quite reactionary in its pursuit of that goal, and the traditional ways in which borrowers communicate their needs to us and we communicate availability to them has barely changed down the years, or become more efficient.”

Why have market participants not pushed for a higher degree of automation? Arnesen identifies the primary contributory factors as either a lack of resources or the extent to which they have become comfortable with an environment in which systems and processes have been cobbled together. This approach to not fixing something that isn’t obviously broken cannot continue to prevail, suggests Arnesen. The demands made by regulators are forcing an industry-wide rethink of the status quo, and events such as the arrival of Target2-Securities (T2S) present themselves as industry game-changers.

For instance, the first round of T2S implementation in June 2015 will clearly have an immediate effect, which will then be followed by a series of knock-on effects that will force a change in operational models in terms of standing instructions, notes Arnesen.

“With the Central Securities Depository Regulation coming down the pipeline behind it, it will require us to deal with borrowers in a different way,” he adds. “Penalties for failed transactions will change behaviour; borrowers will need to be more comfortable about the availability of stock. The current system of communicating availability information to all borrowers daily will change.”

At this point, Arnesen makes positive reference to the efforts being made by EquiLend with its Next Generation Trading (NGT) platform, which

went live in April 2015 and is discussed in more detail on p18. Brian Lamb, CEO of EquiLend, describes NGT as an enhanced version of its AutoBorrow messaging paradigm. He says it marks the latest step in the company's 14-year history of achieving success, stability and liquidity that is unparalleled in the market. It will literally change the face of the market if the claims being made on its behalf are accurate.

"This industry is littered with emails, messages and indications of interest," says Lamb. "We will enable clients to connect the NGT screen to their proprietary systems to allow full straight-through processing (STP) with no re-keying."

EquiLend says an average of more than 28,000 securities finance trades are made each business day on its platform, representing a total value of around $30 billion each day. The firm has more than 100 clients around the globe. If NGT does what is claimed, those numbers will surely have only one direction to travel: upwards.

Such developments do not emerge from, let alone exist successfully in, a vacuum. Everything has its context and in this case, it is the requirement for everyone active in the securities lending industry to do more with less, year after year. "You can only do that with technology solutions to create the scale and efficiency you need to develop this business," says Lamb. "It is still a thriving business despite regulatory efforts to make it more difficult, and it will continue to evolve."

He paints a picture of an industry-wide landscape featuring a range of projects aimed at delivering greater efficiency and interoperability of systems, in which the providers of solutions will increasingly work in close cooperation with their clients.

"We know what our clients need, and we build what they need," he adds. "Even so, everyone is asking us to move more quickly; clients want everything yesterday. At a high level, the marketplace is clearly in a transition phase, and some existing players may consider quitting the third-party lending business to re-emphasise the most profitable parts of their business. Those who stay in will make more money, but they will need improved technology to deliver the greater efficiencies and scale to do so."

Another EquiLend development is also on the market. Trade Match, which provides an automated way to compare pre-settlement, cross-product securities finance transactions, was released the last weekend in March.

Lamb predicts that Trade Match will have a significant impact on clients' day-to-day workload and drastically reduce risk on pending trades.

Trade Match reconciles all the trade components of either the start or close leg of each trade type. Its exception management reporting prioritises the core pending settlement risk items for the users, helping them to reduce fails and rectify trade economic discrepancies on a real-time basis. Trade Match also recognises nuances between equity and fixed income clients. Iain Mackay, post-trade service product owner at EquiLend, says: "Inventory management and latency have become a very important priority within the industry. Trade Match provides an opportunity to effectively manage this by offering same-day matching and affirmation transparency, giving clients a more effective reconciliation tool to ensure delivery of stock to the counterparty, which will enable them to reduce costs, increase client service and meet regulatory requirements."

The different stakeholders in the industry—beneficial owners, agent lenders, brokers/prime brokers and hedge funds—all have their own distinct pressing needs, says Tim Smith, executive vice president of SunGard's Astec Analytics. Owners that once blithely lent stock in return for a regular cheque to offset custody costs have had to change tack in response to the post-2008 environment and consider the risk-reward equation more carefully.

He asks rhetorically: "Are they getting the most out of their agents? Could someone else do it better? Is it even worth it? They can no longer just lend everything in their portfolio out to get cash; they need to examine in minute detail the intrinsic value of lending."

An overriding element in this new environment is, surprise, surprise, cost savings. "Everyone needs to cut costs and carry out more performance measurement, which, in turn, leads to a greater emphasis on costs," says Tim Smith. Over the past two decades, the outsourcing of IT requirements has become established as a shortcut to improving service while minimising costs, but it seems there remains a long way to go before its maximum potential can be realised. "With all the changes that we have already seen, and others still to come, it is clear that it is better for securities lending protagonists to focus on their core business rather than on operational matters."

Oliver Smith, director of securities finance at Markit, is another who sees regulation as presenting the biggest challenges. But he also sees opportunities arising as repo, securities lending and securities financing come closer together under a single, consistent umbrella, which in itself is a driver of technological advance.

"The technology required for that has to be developed in an extremely cost-conscious environment," he says. "The tightening of regulation does not translate easily into increased revenues and providers need to adapt to the new requirements without disappearing into a black hole of overwhelming expense. We are focused on client needs and adapt our offering to meet those needs in a single platform."

One area he identifies as a positive as the market continues to evolve is the potential for securities lending in exchange-traded funds (ETFs). Markit has recently launched a new initiative to help encourage the use of ETFs to become fully accepted within collateral eligibility schedules. This will allow borrowers to better optimise their collateral management function by being able to post a wide range of ETFs as collateral, he says. At the same time, it offers lenders the benefit of accepting ETFs as collateral while not substantively changing their collateral risk, he concludes. **SLT**

Needs or bust: Paul Lynch, COO of eSecLending

What do you see as the most pressing technological needs of borrowers and lenders and their agents/primes?

Paul Lynch: There is constant competition for bigger and better delivery of real-time data, real-time analytics (including value-at-risk and stress testing), and real-time performance benchmarking and trade data. Additionally, standardising all forms of transaction messaging is still needed to eliminate manual interaction for corporate actions, recalls, returns, settlements, etc.

How are regulations increasing operational workloads?

Lynch: Regulations have not yet significantly increased operational workload. I would expect that there will be a need for more data downloads for regulatory trade information repositories in the near future. Overall, the industry has been very proactive at self-regulating the tracking and storage of trade data information. I do not expect data downloads for trade repository information to create an operational workload issue.

> "Everyone needs to cut costs and carry out more performance measurement, which, in turn, leads to a greater emphasis on costs"

What are some of the best practices that service providers can employ to overcome these issues?

Lynch: Most industry service providers have been working on straight-through processing (STP) since the late 1990s. Although there is some bespoke processing for customised trades or interactions with certain investment managers, a high percentage of the core transactions between the borrowers and the agents are automated via STP. The remaining core trades are automated with minor manual interactions.

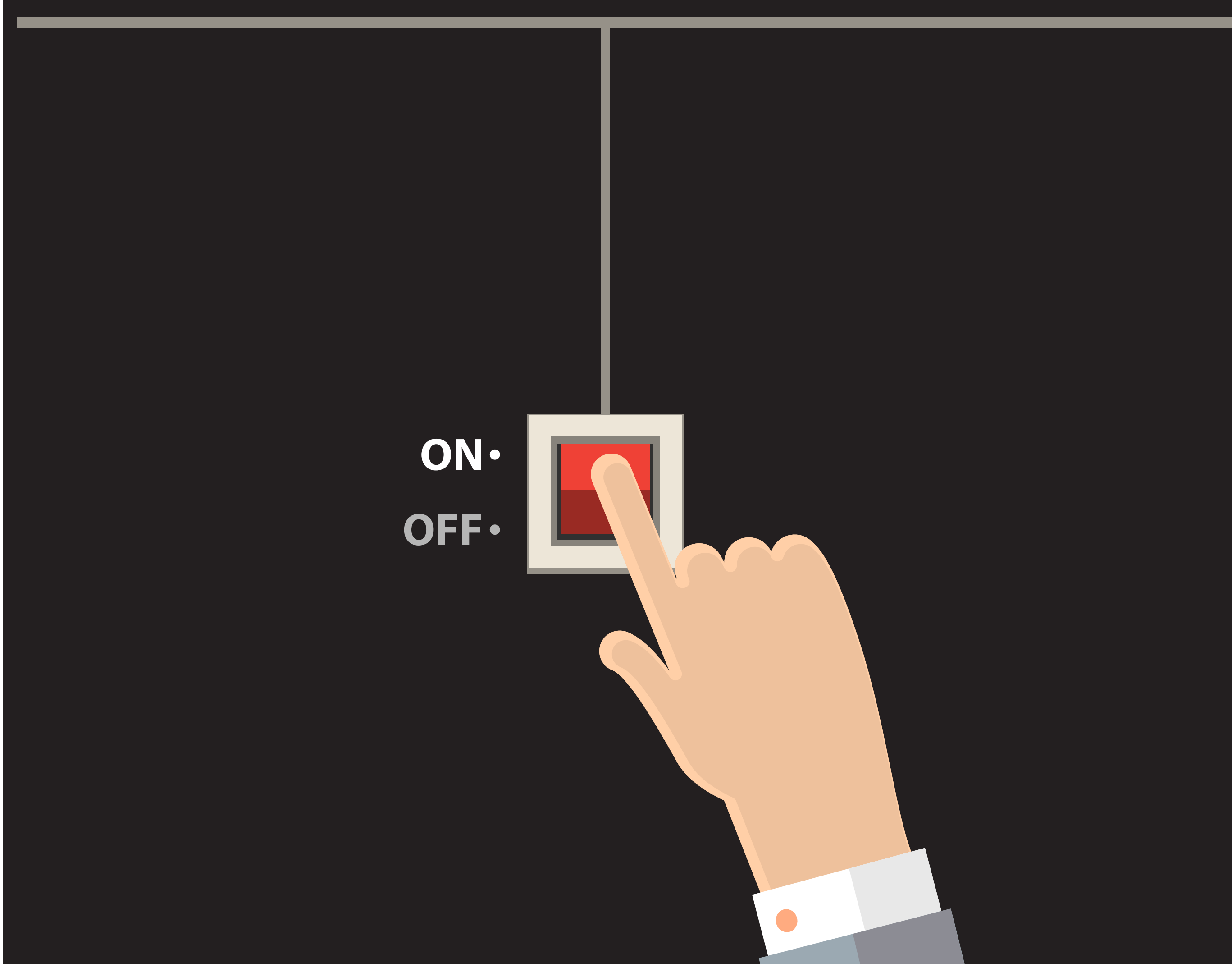
Bespoke processing is created for individual investment managers that want to be more involved with daily securities lending transactions, or when core trades are customised with tenor, multiple forms of collateral, or multiple fee changes.

What are your thoughts on in-house and vendor-built solutions in today's market?

Lynch: Vendor-built solutions are the basis for most agent lenders' books and records. Additionally, almost every provider has built a number of customised solutions/modules surrounding their vendor system. They have created enhanced trading platforms, customised client reporting dashboards, bespoke corporate action modules and real-time data management.

EquiLend rolls out NGT platform

Next Generation Trading is an all-new trading platform that captures the entire trade 'conversation'. EquiLend's Christopher Gohlke reports



In a global, over-the-counter market such as securities finance, variables by region and across asset classes abound with regard to how counterparties trade. Differences in trading terms, market nuances and nomenclature mean standards vary depending on where you sit and what you trade. Those vast differences make finding a standard approach on a centralised, global trading platform a tall order.

EquiLend's AutoBorrow solution, when it launched in 2001, leveraged a concept of 'schedules', a shortcut of sorts whereby firms set up terms and conditions specific to each of their counterparty relationships prior to trading. These schedules were meant to standardise the differences in trading terms. Trade messages sent thereafter by clients via the EquiLend platform would be enriched with those schedule details, allowing firms to book trades with the appropriate trade terms automatically added.

"We've been a victim of our own success," says Brian Lamb, CEO of EquiLend. With more than 100 clients using EquiLend and its fixed-income counterpart BondLend—each with dozens or perhaps hundreds of unique combinations of counterparty relationships, underlying fund relationships and trade terms—the platform now leverages "thousands upon thousands" of schedules. "The proliferation of schedules has really become a limiting factor for a lot of our clients."

Why should clients use NGT?

NGT will give the ability for lenders to lend more of their inventory, so their utilisation rates will go up, because they won't be leaving things unlent. It will allow lenders to manage the IOI process much more efficiently. It should allow the dealers to cover more of what they're looking for more quickly, without having to pick up the phone 10 times or having to chase around the street looking for securities, because that's what they're doing today. It should lead to greater volumes. People will, for the first time, be able to see on a nominal basis what they're negotiating

Brian Lamb
CEO
EquiLend

We are talking about automating the most time-consuming process you go through today: getting on a phone or email to source, negotiate and book trades manually. NGT automates this. It's going to make your life easier. That will free your time to spend negotiating the truly high-value trades, where interpersonal relationships come into play

Alvin Oh
Product owner for trading services
EquiLend

We've heard from many firms that they want to be more efficient in their day-to-day processes. What we're doing with NGT is providing an avenue for people to do that. In a sense, it's not revolutionary, it's just that the timing is right for the industry. We're hearing the demand and responding with a solution that allows our clients to communicate more efficiently with each other

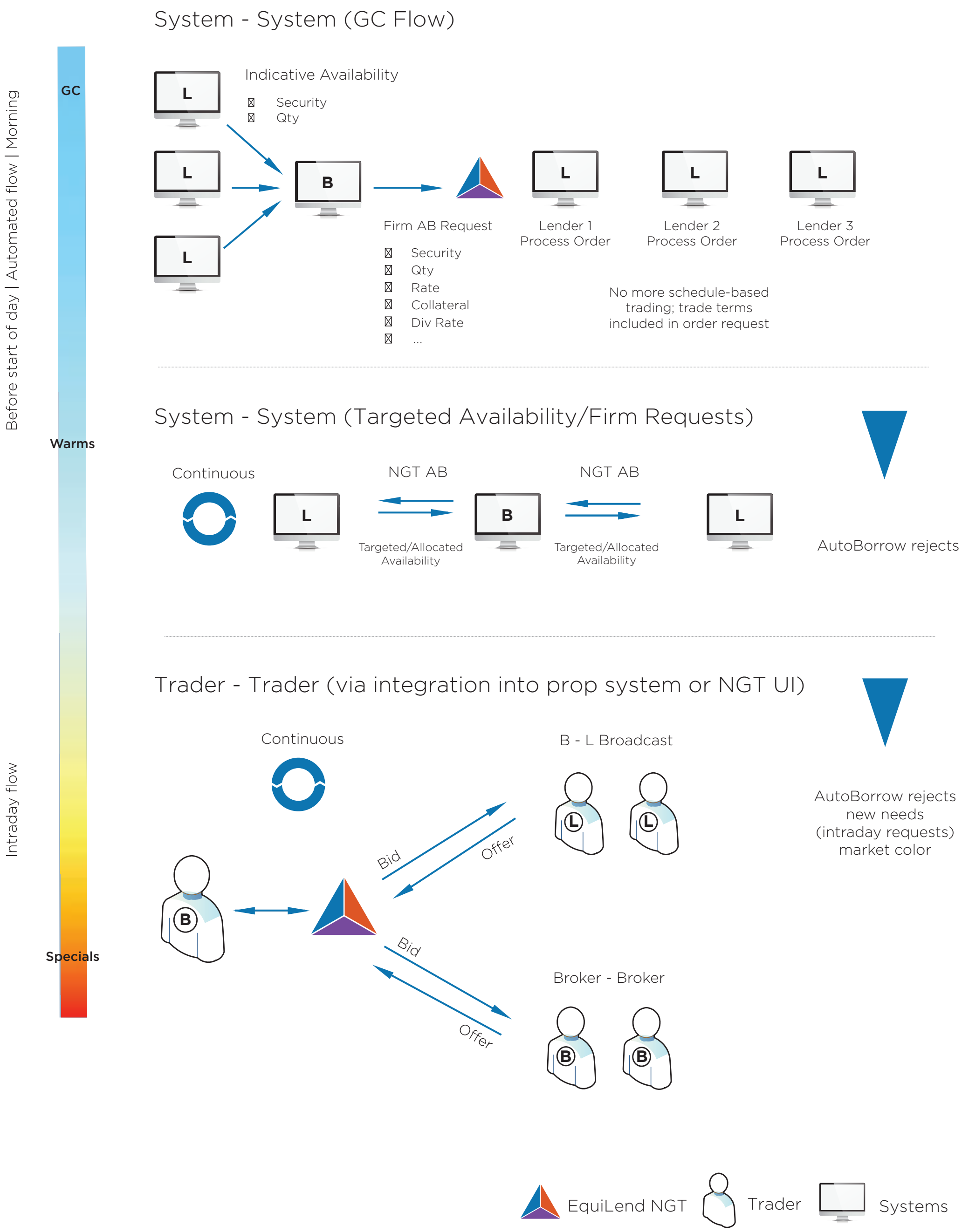
Dow Veeranarong
Global product owner
EquiLend

NGT's key features

NGT offers a consolidated user interface featuring a real-time order book, needs and inventory broadcasting tool, security and file upload capabilities and summary-level trade blotter, as well as:

- Dynamic, screen-based trading venue to manage securities financing activity and increase executions
- Ease of integration leveraging EquiLend's existing infrastructure
- Increased automation of manual processes
- Streamlined static data setup and maintenance
- New availability concepts
- Real-time bid/offer negotiation tool
- Migration away from traditional AutoBorrow schedules
- Supports traditional borrow-to-lender trade flows as well as broker-to-broker activity
- Support from EquiLend ownership and market constituents

NGT Flow



In recent years, those clients have asked for a new system to be able to be flexible to the ever-changing dynamics of the business, which is currently captured in the static information at the time of setup.

"So we listened," says Dow Veeranarong, global product owner for EquiLend, "and we asked ourselves: how can we enable our system to be flexible enough to capture the necessary information to execute the trade, and at the same time increase efficiency? And, while we are doing that, how can we improve the user experience as well?"

The solution embraced by EquiLend and endorsed by clients includes doing away with schedules and adding trade terms into the messages themselves. This allows the platform to keep up with changes in the business. "So there's no more schedule shortcut, but what we offer instead is a substantial amount of empowerment for traders, and we would expect the possibility for volumes to grow quite substantially as a result," says Lamb.

The phasing-out of schedules is only a component of EquiLend's new trading platform, Next Generation Trading (NGT), and will be accomplished in the beginning of 2016. NGT is built with clients' day-to-day workflow in mind and offers flexibility and transparency in trading never before offered in the securities finance industry. After two years of consultation with the industry and development time, NGT's trading screens and back end went live in April this year.

"Our clients say AutoBorrow has worked well for them over the past 14 years," says Alvin Oh, product owner for trading services at EquiLend. "But they asked us: can we expand upon what is working in order to help us address other areas of our business? So we took that feedback from clients across the globe—from traders and technology teams in the US, Canada, Europe and Asia—and built a new holistic solution that caters to the vast majority of the industry in terms of the day-to-day trading workflow: NGT."

NGT takes attributes of AutoBorrow, along with other EquiLend services such as Availability, Trade2O and Trade Optimization, and combines them into a single venue to facilitate the full trade lifecycle—not just execution. "NGT is not just a consolidation of services into one platform," says Oh. "It is the connecting and capturing of the entire trade conversation, from a pre-trade perspective, when the conversation just starts—'Do you have this security?'—all the way until it's done and booked in our clients' systems."

The launch of AutoBorrow allowed firms to automate the general collateral flow while having traders spend their time manually negotiating the higher-touch warm and hard-to-borrow trades. That was a novel approach to a business generally negotiated by phone calls and emails between parties. EquiLend now processes, on average, over 26,000 automated trades every business day.

With the successful automation of global general collateral trading via AutoBorrow, firms have looked to EquiLend to develop a solution for further efficiencies to their trading processes and automation of higher-touch trades. After all, those warm and special transactions still take place via the aforementioned manual processes. And because firms are resource constrained, needing to do more with less, they are looking for a solution to help.

"We've created technology as part of NGT that brings those email conversations in, scrapes the information, turns them into standardised backend messaging and gives lenders the ability to consume this data programmatically, slicing and dicing that data however they want," says Lamb. "That, then, creates the possibility for those negotiations to lead to an executed trade via NGT." Alternatively, traders can trade directly on NGT's screens.

Lamb continues: "NGT offers screens with full XML messaging underneath it, so every trade that goes via NGT will have the needed variables to match and settle. And it is also an opportunity for us to deliver an improved user interface experience for our clients."

To retain the critical mass of counterparties active on the platform, NGT is built atop the "pipes and plumbing" of AutoBorrow. It enables seamless trade conversation between counterparties, whether machine-to-machine, person-to-person, machine-to-person or person-to-machine. Screens are customisable for traders across asset classes and regions, so the functions and nomenclature will be tailored to the user no matter where they are based or whether they trade equities, corporates or sovereign debt.

NGT screens will replace EquiLend's AutoBorrow Express and Trade2O services and will expand upon AutoBorrow's capabilities.

"Before NGT, from either a lender or borrower perspective, it was about throwing the entire kitchen sink of inventory and needs out to the street and seeing what sticks," says Oh.

"With NGT, we are enabling counterparties to be much more explicit and transparent in their negotiations, ultimately bringing about a more dynamic and efficient way of doing business." **SLT**

"NGT enables seamless trade conversation between counterparties, whether machine-to-machine, person-to-person, machine-to-person or person-to-machine"

Christopher Gohlke
PR & social media manager
EquiLend

The behemoth lumbers on

BCBS239 explains how banks should improve their ability to identify and manage risk. John Barclay of GFT examines the details

With only months to go before the January 2016 deadline, the Basel Committee on Banking Supervision's latest report reveals that banks are still struggling to comply with the principles of the BCBS239 regulation.

The report, published in January 2015, represents the capabilities and progress of the 31 G-SIB (global systemically important banks), in their quest to meet the full set of requirements by the 1 January 2016 deadline. This is the second BCBS239 report to be published and comes a year after the first was released in December 2013.

The report, Principles for Effective Risk Data Aggregation and Risk Reporting, sets out to provide guidelines on how banks can improve their ability to identify and manage bank-wide risk. What is clear from the latest report is that while much has been achieved, there remains a great deal to be accomplished, with banks facing a number of obstacles to overcome if they are to comply with the 11 principles directly relating to their capabilities.

What's required from BCBS239?

BCBS239 covers four main areas of data management, which include: (i) overarching governance and infrastructure; (ii) risk data aggregation capabilities; (iii) risk reporting practices; and (iv) supervisory review, tools and cooperation.

To meet the requirements of the regulation, banks will require major improvements in their IT architectures and infrastructures. Without these changes, banks will continue to struggle in establishing strong data governance, risk data aggregation and reporting practices.

One of the most important lessons learned from the financial crisis of 2007/2008 was that the IT systems and data architectures found in many banks were inadequate to support the broad management of financial risks. Many lacked the ability to aggregate and identify risk exposures quickly and accurately. Others were unable to manage their risks properly because of weak risk data aggregation capabilities and risk reporting practices.

The second BCBS239 principle (data architecture and IT infrastructure) says: "A bank should design, build and maintain data architecture and IT infrastructure which fully supports its risk data aggregation capabilities and risk reporting practices not only in normal times but also during times of stress or crisis, while still meeting the other principles."

In the aftermath of the financial crisis, regulators noted that those banks that had better risk data management processes were the ones that had appropriate technology and platforms in place, which helped them to analyse risk data better than others. BCBS239 can be seen as a response to this evaluation and analysis. The challenge now is whether banks can implement new platforms and technologies that will help improve their risk data management further.

We can expect to see an increase in the budgets that banks will allocate to risk aggregation technology in 2015 and over the course of the next few years. However, the difficulty facing banks is that time is rapidly running out to meet the 2016 deadline. Given this, BCBS239 runs the risk of simply becoming a 'box ticking exercise' for banks to comply with, rather than being used an opportunity to implement significant and long lasting improvements to their IT infrastructures.

With risk data aggregation and reporting now at the very heart of compliance for BCBS239, banks will need to look at technology differently. We should see a greater focus on IT infrastructure projects, with the aim of improving risk data analysis. Updates of legacy systems and existing data architectures should aim for greater functionality, more automation and better cohesion across departments and risk data types. Ideally, banks should be moving towards one single authoritative 'golden source' for risk data sets within their organisations, which can meet the needs of many different stakeholders.

IT and technology projects need to address and overcome the key areas of technology, data and processes to help improve risk analysis and to comply with the BCBS239 Principles. The technology used needs to have greater scalability in order to deal with the increase in data volumes and numbers of users. BCBS239 also highlights the growing importance on how data is stored, managed and processed. Banks need to have big data applications that have the ability to scale up—in the sense that they have the ability to react to larger volumes of data, faster data transmission speeds and increasing numbers of users of data-consuming applications.

The performance of data has to be better in terms of loading, processing and meeting reporting requirements. There also needs to be greater simplification in terms of maintaining data and its movement throughout the business. The report stresses the need for the G-SIBs to take action in terms of "simplifying current IT architecture and data flows across department and legal entities to streamline the aggregation process and to enable quick aggregation of risk data during times of stress".

It has been highlighted that many banks are relying too heavily on manual work-arounds and tactical mitigation, which can add layers of complexity, leading to major constraints on the flexibility, adaptability and operational robustness of BCBS239 solutions.

Banks now have to decide how much risk they are prepared to take on by establishing 'best-practice' models throughout the organisation. The models that each bank adopts and the technologies deployed will be influenced by the time constraints that exist and the ultimate long-term strategic vision held by each firm.

The amount of work required to update core legacy systems will be different for each firm as they are all starting at different points. As such, each will have their own unique journey to take to meet the compliance deadline. The legacy technologies in use will have a real impact on this, and each firm will have its own unique history of technology, data and processes based on previous investments, acquisitions and business initiatives.

Senior management need to engage more

With the likely increase in IT infrastructure projects, the report recommends greater engagement from senior management and boards of directors. The technology component of complying with BCBS239 cannot be seen as simply an IT issue. Senior management need to monitor in closer detail the progress of projects, recognise the need to minimise the use of manual systems, and understand the importance of quality controls.

This is now a major issue for senior management and boards, with the report indicating that improved reporting to board-level management is now a necessary requirement. In some banks, the full extent of limitations surrounding risk reporting has not previously been fully communicated.

Board members need to take greater interest in the importance of technology and the role technology has to play in developing an effective risk management culture. Sponsorship from senior management is crucial and there should be greater cooperation between board members and IT stakeholders in developing effective policies and strategies towards risk management. This kind of collaborative engagement between the business and IT has to take place if banks are to give themselves the best opportunity of complying with BCBS239.

No carrots but what about sticks?

Regulators and supervisory authorities have a variety of tools to encourage and enforce compliance, ranging from information-gathering powers to the enforcement of penalties and capital add-ons if their regulated G-SIBs or D-SIBs fail to comply with the BCBS239 principles. However, as the progress report points out, there is no uniform strategy among authorities for applying any specific tool or approach.

Compliance with BCBS239 has now been extended further to include domestic systemically important banks (D-SIBs). The report also advises that supervisory authorities that have not yet engaged with their D-SIBs should enter into initial discussions to assess how their D-SIBs will implement the principles within a three-year timeframe after they are designated as a D-SIB.

The D-SIBs should have the advantage of being able to assess the previous performance of the G-SIBs for guidance. They also have the advantage of being smaller entities, meaning that for them, the updating of IT infrastructures and data architectures may be less extensive.

If banks really want to have better risk reporting and data aggregation, the best technology has to be in place that will allow this to happen. Banks should be moving towards upgrading their current IT infrastructures and creating more agile and scalable risk platforms that will fully support regulatory requirements (such as BCBS239) and deliver other business benefits. This will invariably lead to an increase in IT and technology investment in the coming months and years for both G-SIBs and D-SIBs.

Banks need to start thinking differently about the data they have, how it's stored and what they would like to get from it. Data needs to be structured and stored in such a way that it can be processed and aggregated quickly and accurately for reporting purposes.

Business and IT leaders need to develop closer working relationships and greater understanding of the requirements for risk analysis and reporting. Banks will be in a far stronger position to assess their exposures if they can obtain this data quickly and accurately—something which was severely lacking during the financial crisis.

Having more agile and integrated risk data should also help banks deal with other emerging regulatory requirements as they develop, in what can be described as the 'new normal' environment of ongoing and constant regulatory pressure. In addition, having excellent risk data, technology and processes should deliver other benefits for the banks, not least the ability to make better decisions, based upon more accurate risk analysis.

Rather than simply meeting the requirements of BCBS239, this benefit should be embraced by banks and act as a catalyst for reviewing and updating existing IT architectures and technologies. **SLT**

> "If banks really want to have better risk reporting and data aggregation, the best technology has to be in place that will allow this to happen. Banks should be moving towards upgrading their current IT infrastructures and creating more agile and scalable risk platforms"

John Barclay
Managing principle, risk consulting
GFT

The new world order

Automation, STP and sound risk management through the use of technology are key to ensuring the triparty markets work efficiently in the modern era, says Martin Seagroatt of 4sight Financial Software

The triparty process is an area that creates a number of operational headaches for market participants. While many aspects of triparty trading are automated and real time, there are still components of the trade lifecycle that result in operational complexity and significant manual effort.

Many legacy technology systems or workarounds using spreadsheets do not offer sufficient functionality to support the triparty trading process. This results in unnecessary costs and a strain on operations.

There is also a trend emerging for more corporate treasurers to move into the triparty repo markets. This allows them to take advantage of the credit risk benefits of collateralised investments and additional yield opportunities in the current low-interest rate environment.

Collateral management is a new concept for most corporate treasurers. This could result in treasurers needing technology solutions that they can deploy quickly and easily with a minimal IT footprint to support the reverse repo lifecycle.

The main pain points experienced by the market around triparty trading centre around the following key areas:

- Operations;
- Reconciliation;
- Risk; and
- Allocation and optimisation.

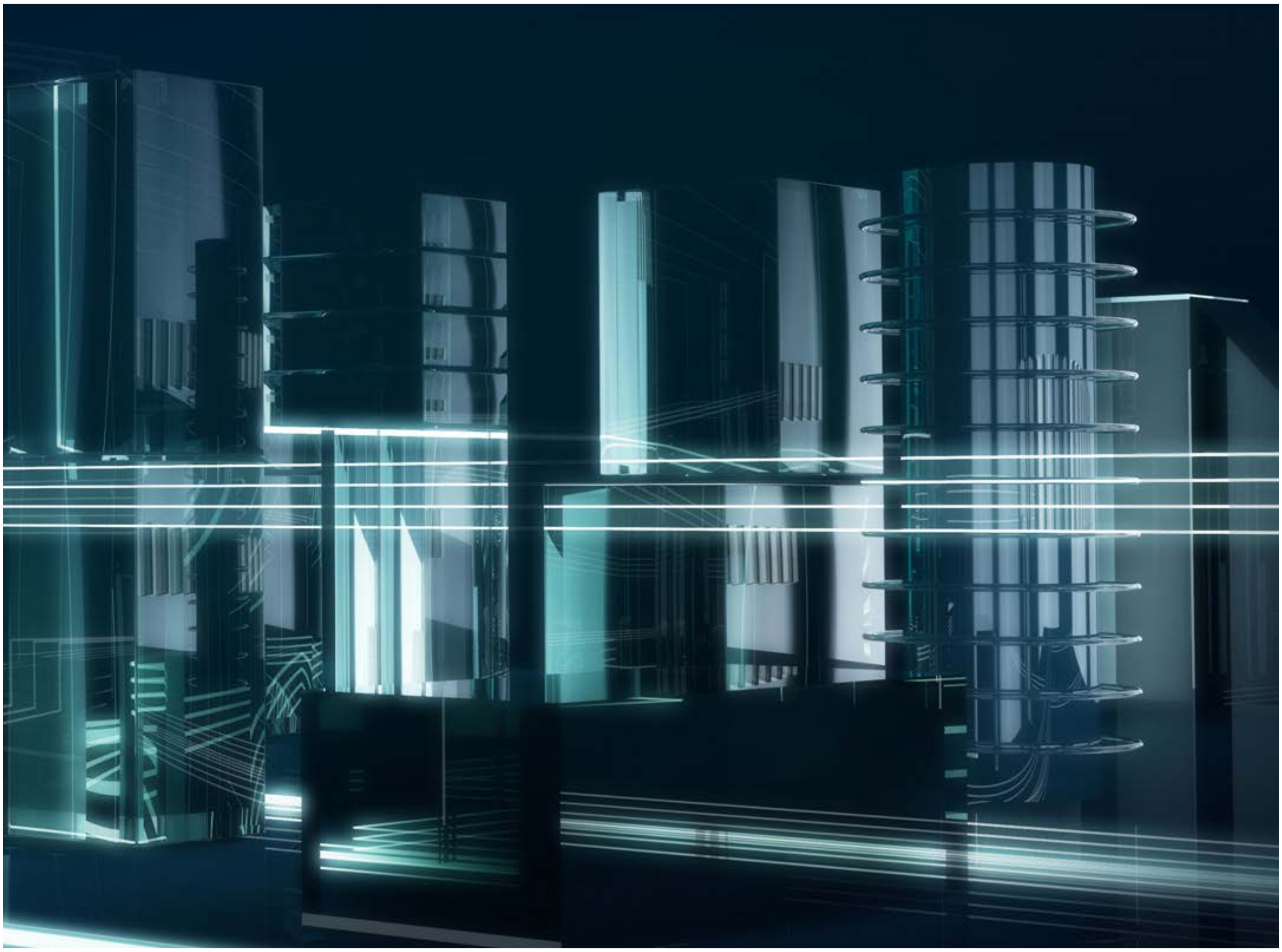
Operations

Various elements of trading via triparty agents place a strain on operations teams, leading to needless manual intervention and pockets of heightened operational risk. For example, the processing of request for value (RQV) SWIFT messages can often be cumbersome. Many firms currently use systems with little or no straight-through processing (STP) around the sending and receipt of messages. For each RQV, the firm must both notify the triparty agent and then monitor the status of each message.

To solve this problem, 4sight has enhanced its triparty module in the 4sight Securities Finance solution. The new features allow users to see which RQVs need to be booked, changed or cancelled in order to be 100 percent covered. The system can help users to easily identify triparty collateralised trades, streamlining the booking process.

Many firms do not currently have the capability to automatically match collateral allocations with their respective securities lending and borrowing or repo trades. They simply book a basket of collateral against multiple trades. Automation of these processes offers the ability to identify the underlying credit risk of trades, based on a clear view of the collateral allocated against each counterparty.

The 4sight triparty module now allows triparty collateral allocations from the triparty agents to flow directly into the 4sight system. The system



then automatically matches them to their respective securities borrowing and lending or repo trades.

This reduces the manual effort spent matching trades. It also maintains reference data integrity, unifying information on agent, schedule and security type and resulting in a much clearer picture of overall risk.

The system also offers automation of repo cash movements and a cash netting engine to reduce settlement movements, costs and fails.

Long box visibility and reconciliation

In the triparty trading process, it is important to be able to reconcile what you have allocated or been allocated with your RQV and exposure. Furthermore, the ability to reconcile what you still hold in your long box is useful from a collateral efficiency point of view.

Previously, reconciliation between the triparty agent and books and records systems was relatively manual and time consuming. To address these visibility gaps, 4sight has introduced closer real-time integration with triparty agents and automated SWIFT MT535 message processing.

This results in improved clarity and reconciliation of what the user thinks they have in their long box versus what is actually in their long box, and what has been allocated.

Another major operational burden involves checking what allocations have been made against eligibility schedules. This is currently a very complex process, with no easy way to reconcile this apart from manual checking. The checking of concentration schedules is often even more operationally difficult.

Many agent lenders have a fiduciary duty to their clients to thoroughly reconcile received collateral against eligibility and concentration rules as part of their contractual agreements.

Automation around this process allows the flagging of exceptions and breaks.This is far more efficient than a time consuming process of reviewing hundreds of lines of collateral, often using a ‘four-eyes’ checking process.

Technology systems must also offer a high degree of granularity in setting schedules. This will facilitate the full capture of subtle nuances of the types of collateral each client will accept along with often multi-faceted concentration rules.

Allocation and optimisation

Systems that offer sophisticated collateral allocation algorithms to support the triparty process are fundamental to trading efficiently via triparty agents.

According to a recent Federal Reserve report, Key Mechanics of The U.S. Tri-Party Repo Market: "A well-functioning triparty repo market depends on the ability to efficiently allocate a dealer's securities—the collateral in the transaction—to the various repos that finance those securities. In the US, collateral allocation currently involves considerable intervention by dealers, which slows the entire process."

"Ideally, the allocation process maximises the amount of financing that can be obtained from a given pool of collateral, or minimises the dealer's all-in net cost of financing, including the effect of haircuts. The use of the clearing banks' automated allocation systems, and the avoidance of 'manual overrides', is therefore promoted by the sophistication of the optimisation algorithms used in these systems."

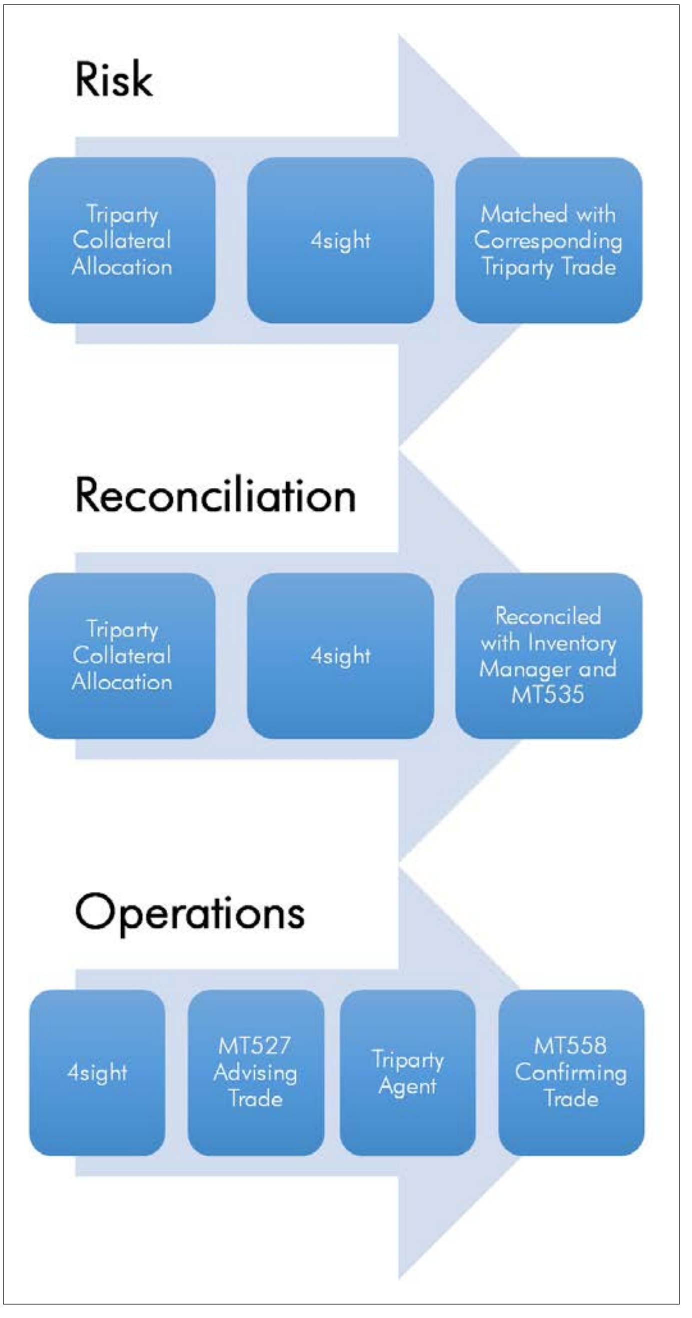
From a cost efficiency perspective, the ability to identify and then 'sweat' idle assets sitting in the long box enables the extraction of maximum value from the collateral pool.

From the borrower perspective, increased visibility over the triparty long box allows the firm to bring back collateral that has not been used by the triparty agent at the end of the day.

In a world where collateral costs are increasingly important, this means that the collateral pool is working as hard as it can for the firm.

Finally, as the collateral ecosystem becomes more integrated, the ability to view holdings across multiple triparty agents and central securities depositories is becoming increasingly important.

Being able to locate, mobilise and optimise collateral effectively on a cross triparty agent basis can offer major economic benefits. Effective technology solutions are key to this process.



Risk

The automation of manual processes can result in a significant reduction in operational risk and human error. There are a number of other ways risk management can be improved in the triparty collateral management process. Automated reporting around the triparty process can help to align risk with finance and can vastly improve understanding of credit risks in the trading book.

From the lender perspective, a better understanding of the collateral being received allows a focus on exceptions and a widening of schedules into riskier asset classes with confidence that the added risk can be controlled and monitored.

> "Automated reporting around the triparty process can help to align risk with finance and can vastly improve understanding of credit risks in the trading book"

Finally, on a systemic basis, a well-functioning triparty market acts as a key component in the plumbing of the financial system. Automation, STP and sound risk management through the use of technology are key components in ensuring the triparty markets work efficiently in the modern era of high-velocity collateral mobilisation. **SLT**

Martin Seagroatt
Director of marketing and product innovation
4sight Financial Software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Where's the cheese

Knowing where inventory is and when it's due back is still a tricky business. Rob Sammons of Anetics examines the current practice

The general short answer for many is, in the box (provided that it's free and available for re-hypothecation under a margin or lending agreement with the beneficial owner). Of course, what we're talking about here is a fungible security that may be loaned from one firm to another for the benefit of one, the other, or both parties.

Years ago, this was a simple process for most US broker-dealers. Such a security would be loaned out for purpose to another broker-dealer that needed it. The lender would take cash collateral in return and generate income on a spread between its cost of funds and the rebate rate agreed with the borrower. If the lending agent needed to raise more cash to finance operations, a basket of such free securities could be pledged to a third-party to secure a cash loan.

Our systems could easily keep track of such securities that were freely available because they were either in the box or in pledge. This simple tally was the basis for the availability list that brokers publish at start-of-day—and frequently update intra-day as old loans are returned or new loans are made. Once a security was out on loan, it was deemed no longer available.

We at Anetics in the most recent version of our toolkit now have an automatic process that does pledge substitution at the Depository Trust Company (DTC). So whether a security is free in the box or in pledge doesn't matter to the stock-loan dealer. The screen says a certain quantity is available, the dealer loans it out, and our system in the background will do the pledge substitution: freeing up the needed shares, while pledging a new quantity of available shares.

That was then. Between the now common practice of borrowing and lending securities for non-cash collateral, dealing equities-for-equities (for purpose on one side or both), the melding of the repo product in with conventional stock-loan, and the practice of financing a basket of securities between one broker-dealer and another, keeping track of what is free and available has become a lot more challenging. And this is all without beginning to consider the quality of a security as collateral. That valuation is (usually) done in a separate system that can rank or rate weak versus strong, and expensive versus cheap. But we do need to know, at all times, what is freely available and where it is.

Gone is the day when a stock-loan contract is either a borrow or a loan, and bulk collateral is, well, just bulk collateral. There are many flavours of borrows and loans and each contract type needs to be identified to establish its usability in the new scheme of things. A borrow could be a conventional stock borrow, a reverse-repo, or it could be the taking in of collateral. Likewise, a loan could be a conventional stock loan, a repo, or it could be the giving of collateral.

Next, the attributes of the account to which each contract gets booked defines the rules around the permitted use of the securities, including whether it is free for rehypothecation, or is to be kept in custody as collateral and is eligible for substitution.

From this we can form the complete picture showing the balance in each security, where it came from, where it's gone, and ostensibly, what is free and available for loan or reuse. The tally for quantity available now includes items already out on a loan type that is eligible for return and substitution, and items that may have been borrowed or taken in on a borrow type that allows for re-hypothecation or reuse.

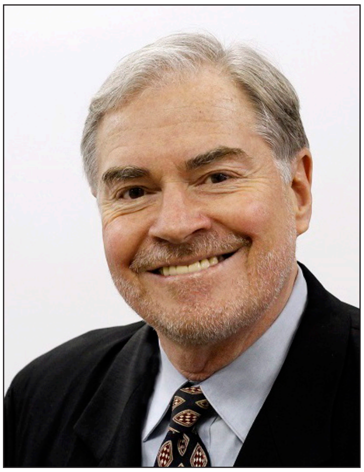
To date, it has become a grey area separating purpose from non-purpose. And many securities move short-term, from a day to just a few days. The next challenging part, and one that we have started work on but have yet to fully automate, is how to simplify the return process. We have developed a method that can automatically respond to an email requesting the return of securities on loan.

This books the borrow return and adjusts inventory if the securities were not in use and freely available. If the securities were in use, it creates a need-to-borrow or a recommended recall. A person on the desk must make the decision.

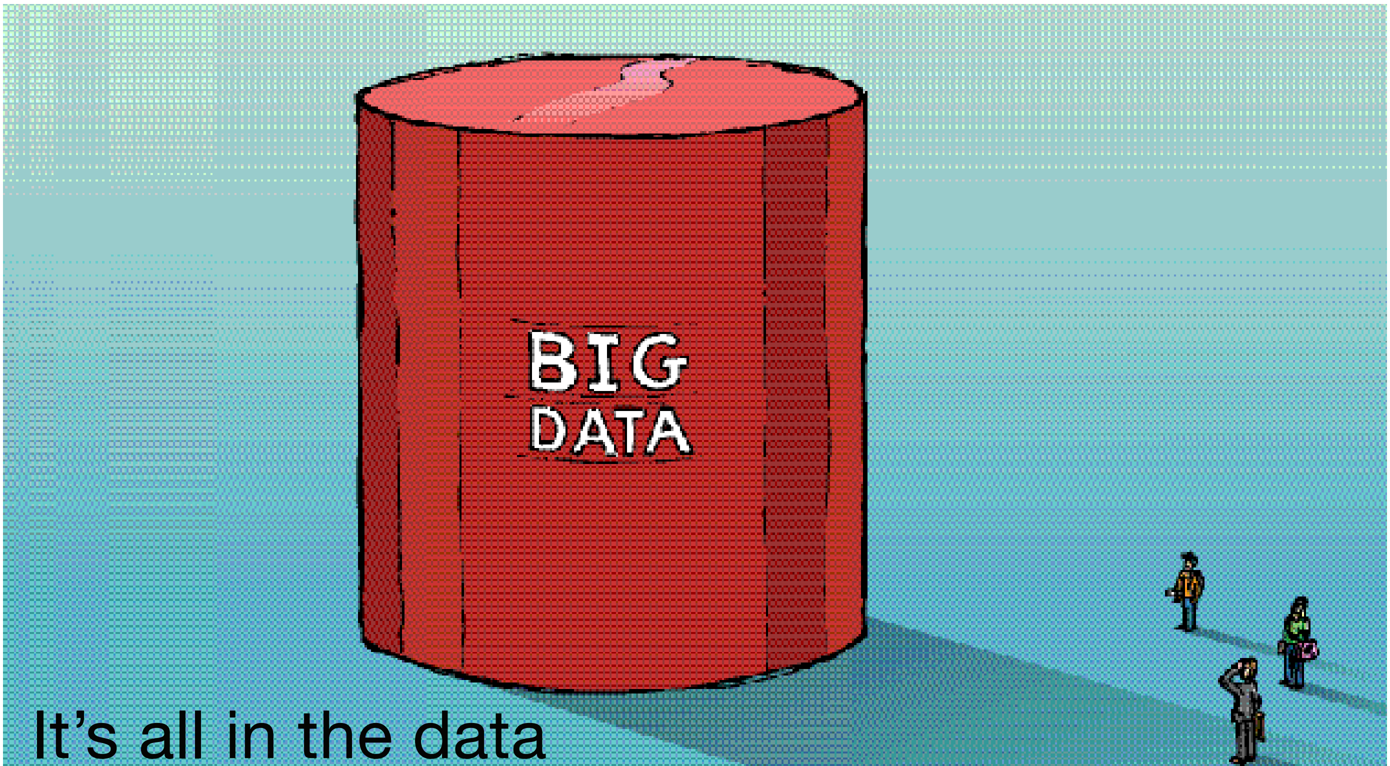
The use of email as the lingua franca for broker-dealers to communicate available-to-loan, need-to-borrow, and need back/please return, is the current practice. We have long been proponents of a more structured means of communication, something along the lines of FIX messaging. But for now, email will have to do. The ideal, sooner rather than later, would be an industry standard method whereby one broker-dealer can do collateral substitution with another in an automated, unattended fashion—just as we do today with a DTC pledge item.

As always, automation and straight-through-processing are the goals we strive for. I would welcome discussions with any party interested in collaborating on better methods. **SLT**

> "We have long been proponents of a more structured means of communication, something along the lines of FIX messaging. But for now, email will have to do"



Rob Sammons
Director
Anetics



It’s all in the data

What does an ideal collateral management technology solution look like, particularly if you’re an asset manager engaged in securities finance? Andy Davies and Charlotte Griffiths of CloudMargin take a look

Financial institutions traditionally viewed collateral management not as a necessity, but as something that had to be performed with little concern; a reactive function positioned at the culmination of the trading cycle that didn’t require too much attention or thought. Put simply, a process that was not important.

The 2008 financial crisis and the years that followed have had an unprecedented and drastic impact on the perception of collateral management and the importance of its operations.

The regulatory changes that have come hand-in-hand with the credit crisis have seen a rise in central clearing for over-the-counter (OTC) derivatives, use of trade depositories, Basel III capital charges and a change of internal counterparty credit risk management practices, to name but a few.

The level of visibility and scrutiny that collateral management is now facing means that firms need to know that the data they are receiving is without doubt correct, and that they are indeed covered from any exposure that may occur.

Although ideally all institutions would welcome any implementation that lowers head count and lessens workload, larger institutions such as banks and brokers have the necessary capital to throw money at the problem.

They can buy technology solutions that run into the millions. Without such resources, this approach is simply not a viable option for buy-side firms such as asset managers and pension schemes.

This is where disruptive technology solutions come into play, and firms dealing with securities finance should be looking for a variety of key elements when it comes to dealing with collateral management’s ultimate objectives: mitigating credit risk and systematic risk.

Collation of data

The first key element of any technology solution is the ability to collate data from a variety of different sources into a single view, giving you visibility of all asset classes and ultimately helping you to assess real-time data at one given point in time.

Although lending agents, central counterparties, brokers and service providers typically have great client reporting portals and provide the latest data to their clients, there is no consistency between the reports, which prevents all of the information being viewed in a single location. In such a fragmented industry, in terms of information, different parties are using numerous methods to carry out the same operation.

In a common scenario, an asset manager would need to access data and reports from numerous external portals to manage collateral.

For instance, it would use its global custodian as agent lender for the securities lending programme, manage cash via triparty repos directly with one of the main agents, maintain margin accounts with numerous brokers for futures and options trading, and trade directly with the large banks to hedge via OTC derivatives. The number of different external portals that the asset manager has to deal with, combined with reporting or extracts from internal

systems used for directly collateralised products, means the work effort becomes sizeable.

With reports originating from different portals, it's safe to assume that formatting is going to differ considerably, even between different products with the same counterparty, and that is not including the various currencies that will be present. It is not a swift process to combine this data, and even if you are operationally organised, having a solution that allows you to still work in silos, if you wish, is highly beneficial, as it gives you cross-product visibility in a single collateral pool.

If data is not collated in a single place to assess easily, it is hard for any firm to obtain a complete picture of the forces that can affect business.

There are a range of technology solutions available off-the-shelf that offer a platform that gives you visibility across certain asset classes, but there are few that are able to provide you with a solution that allows full optimisation of collateral across all asset classes, while giving you access to available inventory.

Most importantly, while spreadsheets offer elasticity and are quick to implement, re-keying and the cut-and-paste of data is inefficient and prone to human error. This collation of different disciplines that a technology solution provides allows the firm to minimise human involvement in the process.

However, any reputable vendor of a technology solution must be able to receive this information directly from the source without the beneficial owner having to be involved in downloading or reformatting the data. Again, technology to do this is available and solutions such as CloudMargin offer a system that allows data to be automatically aggregated, giving enterprise-wide visibility in real time.

Validation of data

What was once best practice is now a necessity. Market participants have to have oversight of collateral management, and most crucially, the ability to validate the data that is in front of them, which is a massively onerous task without the right technology.

Ultimately, asset managers must be safe in the knowledge that collateral is eligible, correctly priced and positions are accurately valued. This is all indispensible to the decisions that they have to make in the next phase of the collateral management process.

At a basic level, every external party will have separate market data sources for pricing non-cash collateral and will use different FX rates within calculations. A bad price or a flawed FX rate will lead to over, or under, collateralisation.

Therefore, it's prudent to revalue all collateral using a single, internally approved pricing source with a single set of FX rates to identify issues with the reporting received.

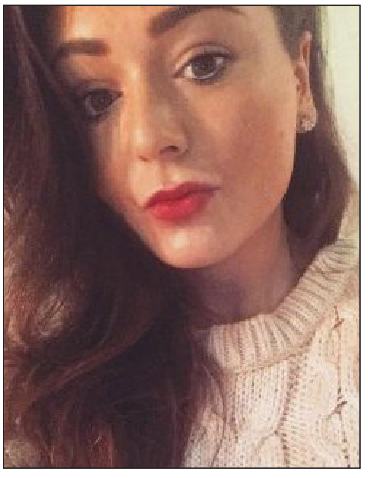
A similar set of controls should be applied to testing the eligibility of collateral, whether received directly, via an agent lender or allocated by a triparty agent. Any errors with codifying eligibility and concentration rules, or with the market data such as credit ratings and asset class, can lead to ineligible collateral being pledged or the wrong haircut being applied. Re-performing the eligibility tests using independent market data should validate this.
Technology allows you to not only view what collateral you are holding, but most crucially, independently, and instantly, check eligibility and validity of collateral positions and balances. This automation of the validation process is invaluable and leaves little, if no need for human interaction, barring exceptions. Any solution should be able to source market and price data from third parties (or consume the beneficial owner's internal data where available), test eligibility across all products from securities lending, tripary and bilateral repo, listed and OTC derivatives, and value exotic positions.

Operational efficiency

Once you have gathered all the data together and have independently evaluated its credibility, you can efficiently make the right decisions about collateral movement, whether that be recalling excess collateral, optimising and rebalancing portfolios, substituting ineligible assets, or something else. Ultimately, having technology in place allows you to allocate collateral in an optimal way based on various elements, including price, risk, liquidity, haircuts and financing costs, which streamlines the process materially.

To conclude, there should be real-time, exception-based visibility in all collateral books with errors being automatically identified and quickly resolved. True cross-product visibility opens the door to the margin efficiency of netting and the ideal collateral technology solution presents the user with the ability to make the right business decisions, without the worries that traditional methods of managing collateral impose. **SLT**

Andy Davies
CEO
CloudMargin



Charlotte Griffiths
PR and communications manager
CloudMargin

Game of stock loans

The balance of power continues to shift as regulations begin to come into effect. Oliver Smith of Markit Securities Finance examines the situation

The securities lending market has always adapted to change. From its back-office origins in the 1980s, the market has evolved into a multi-billion dollar front-office revenue business because of its ability to evolve. Markit's own numbers indicate that the total revenue earned for securities lending in 2014 was more than $9 billion (compared to less than $7 billion in 2009 after the Lehman Brothers crisis). As the recent regulatory reforms come into effect, the securities lending market again needs to remain agile, cost-effective and provide the correct balance of risk and reward to all participants within its value chain.

At the recent Markit Securities Finance Forum held in London in March, panellists discussed how securities lending has developed into an invaluable tool to manage the financing and treasury functions. While traditionally important revenues from specials and yield enhancement will not disappear, it was recognised that the increasingly sophisticated requirements from the demand side can provide long-term opportunities for those willing and able to align their supply to the borrower's needs. Themes such as collateral, term and the right asset profile (such as high quality, liquid assets) were thrown up as examples.

The securities lending market remains relatively over supplied, with the value of lendable supply increasing in line with the strong equity markets and increased beneficial owner appetite following the collapse of Lehman Brothers. Demand, on the other hand, has remained relatively fixed, which has placed borrowers in the driving seat. And this enables borrowers to pick and prioritise the most effective risk weighted asset (RWA) counterparts for their business. It is no longer the case that lenders have their borrower lists underpinned by large general collateral balances.

With capital requirements for collateral at the forefront of new opportunities, clear changes can be identified, and cash is no longer king when it comes to collateral. The switch from cash to non-cash collateral

is more pronounced than ever before, and securities lending helps to facilitate the optimisation of balance sheets and the so-called collateral transformation trade. The demand for liquidity coverage ratio-compliant term structures, including evergreen trades, has resulted in a divergence of the equity and bond trade tenures as lenders take advantage of the premium placed on longer term funding on the fixed income side.

A consequence of more sophisticated demand is that asset owners, in conjunction with their agents, continually need to assess the correct parameters of their participation in a securities lending programme to ensure optimal, long-term, returns. For some funds, the level of oversight to ensure that fiduciary responsibility, combined with their required risk return profile, could mean sitting on the side-lines as they figure out how securities lending can work for them.

It was clear from the discussion at the Markit forum that an asset owner's primary function is not to facilitate securities lending. Complicated lending structures, aligned with regulatory requirements, as well as the perceived financial and reputational risk, can taper the appetite from beneficial owners to embrace the changes demanded from borrowers. Service providers can help the industry mitigate this risk by continuing to enhance the reporting and transparency offered to underlying clients. These tools can help them consider the relative pros and cons the new requirements around shadow banking and regulation.

Banks' reliance on the traditional supply side has also reduced as they continue to improve their own internal efficiencies. Repo, securities lending and synthetics desks are merging, which reflects similarities in the underlying economics of the functions, despite different capital costs. At the Markit forum, we heard estimates that around 30 percent of bank borrowing was managed through improved internalisation. Similarly, the total return swap or synthetic borrow was estimated to account for up to 20 percent of all business. The enforced forensic examination by banks of their fully loaded cost of trade means that lenders will need to map their supply more efficiently to their borrowing counterparts.

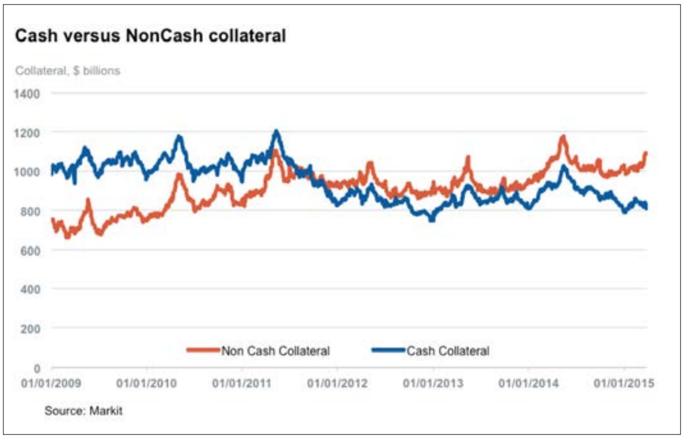
Markit's position remains to engage and support our customer base with relevant services that help them to customise and enhance their own offerings. The convergence of lending, financing and repo provides a unique opportunity for us to work in lock-step with our customers that require a more comprehensive and accurate view of the financing world. We have a proven track record spanning over 12 year of working with customers to deliver new solutions that meet their business needs.

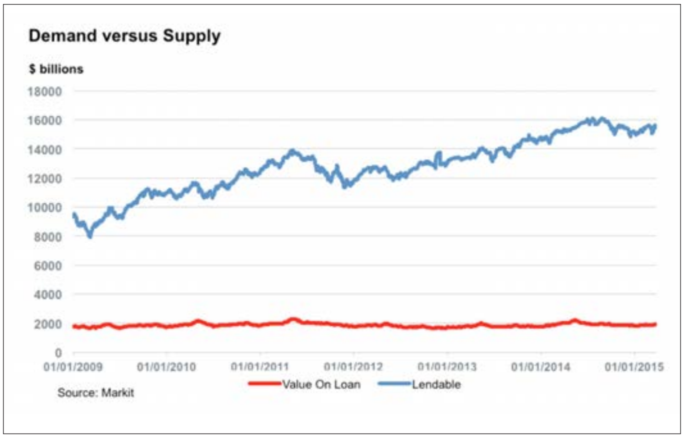
Since becoming a part of Markit, we have integrated services covering index and benchmark data, dividends forecasts, exchange-trade fund (ETF) analytics and bond pricing within our single securities finance platform. Our strategy is to continue to develop this consistent offering, which presents the relevant information to our customers.

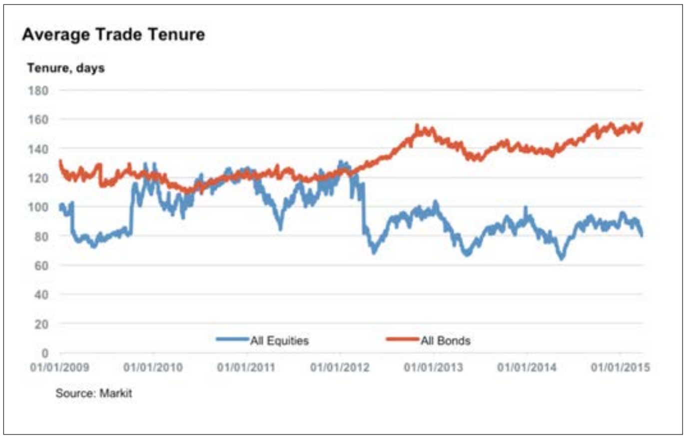
Most recently, we announced a new initiative at our forum to help encourage the use of ETFs as eligible collateral, drawing on our expertise in both the securities lending and ETF markets. Markit's ETF service provides reference and analytics data for more than 6,000 of these types of funds around the world. We have collaborated with key industry participants across securities lending, triparties and ETF issuers to define criteria that can be used to derive a schedule of ETFs that can be broadly accepted as collateral by the industry.

We commenced by offering two independent proof of concept schedules for equities and fixed income, which will allow borrowers to better optimise their collateral management function by being able to post a wide range of ETFs as collateral. At the same time, it offers lenders the benefit of accepting ETFs as collateral while not substantively changing their collateral risk. Currently, we are working with triparty collateral agents to deliver the industry with an automated service to manage the lists, which should help foster the greater use of ETFs as eligible collateral in a cost effective manner.

In conclusion, market dynamics within securities finance continue to shift as the regulations begin to come into effect. Constant, bilateral dialogue between market practitioners and service providers will ensure that securities finance remains a key, efficient and adaptable tool that's continues to aid liquidity in the broader financial markets. **SLT**







"The convergence of lending, financing and repo provides a unique opportunity for us to work in lock-step with our customers that require a more comprehensive and accurate view of the financing world"

Oliver Smith
Director, securities finance
Markit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BCBS-IOSCO: don't get caught out

Multiple but different implementations of margin requirements for non-centrally cleared derivatives transactions are challenging buy- and sell-side firms, according to Lombard Risk

You might be thinking that margining for derivatives trades in three jurisdictions is like playing bridge on three tables, simultaneously. And it is harder than that because each table has different rules. If new margin rules come into play as planned, derivatives users will need to learn how to play in Europe, Japan and the US from September 2016. Getting margin calls wrong is a very expensive business for buy- and sell-side firms and managing this multi-jurisdictional process will demand a highly disciplined approach.

The rules in each market share a lineage. The need for margin requirements for non-centrally cleared derivatives transactions was mandated in 2011 by the G20 as a common starting point. Then in September 2013, the Basel Committee on Banking Supervision (BCBS) and the International Organisation of Securities Commissions (IOSCO) firmed things up with their principles for margin requirements. These set out a framework to reduce systemic risk and promote central clearing by establishing:

- That margining practices must be put in place for non-cleared transactions;
- Which types of firm must exchange initial or variation margin;
- What the acceptable characteristics of assets to be posted as margin are and the acceptable way for transactions to occur; and
- The need for a consistency of rules between jurisdictions and appropriate timeliness.

The rules that are being proposed in Europe, Japan and the US use this framework as guidance. The BCBS-IOSCO's terminology—'appropriate', 'important' and 'confidence'—has given regulators that transpose the framework into local rules considerable flexibility.

Mind the gap

Differences between jurisdictions can be significant. For example, in Europe regulators are talking about imposing an additional 8 percent haircut if a firm does not pay the collateral in the currency of the trade, while US regulators are proposing that firms are able to pay in the currency of the trade or dollars, which would mitigate such costs.

Europe allows a slightly broader set of collateral than the BCBS-IOSCO or US rules. That will provide some relief in terms of liquidity, although with significantly greater haircuts required where that is exercised. The period of data required for calibration of margin requirements differs between jurisdictions. In Europe, the incumbent model of title transfer to move collateral has been disrupted by the requirement for posting of bankruptcy-remote initial margin.

Jurisdictions, such as Singapore are keen to meet international standards to support their own growing derivatives markets but are equally free to deliver their own nuances to the BCBS-IOSCO framework. Investment managers and derivatives dealers must prepare for the existing proposed rules and the potential variations they can expect to appear in localities around the world. Furthermore, challenges to the proposed rules are ongoing—for example, the September 2016 deadline in the US and Europe may be pushed back by up to two years—which increases the potential for adjustment of the rules.

Internal struggle

Firms subject to these regulations need to make margin calculations, source the right collateral and apply appropriate haircuts to assets. Although each of the jurisdictions in which they operate will have separate demands, calibration of margin requirements has to take place at a group level, which requires a centralised consolidated view of exposure and risk.

From an operational standpoint, a platform is needed that can aggregate this data, then apply the appropriate model and calculations as needed in order to operate across the legal entities that form the group and legal borders. It must account for each instrument type and for the unique approach each regulator takes to the relevant margin requirements. To optimise the use of collateral, the firm should be able to consider the pros and cons of existing inventory and assess the cost of acquiring collateral.

That assessment should take in the use of a listed derivative as an alternative to an uncleared swap. For example, under existing capital adequacy rules: highly liquid listed derivatives have a margin based on a two-day value-at-risk (VAR); for an over-the-counter (OTC) product, a five-day VAR charge is applied; and for non-cleared swaps, that is extended to a 10-day VAR charge. Deciding which instrument is optimal given the potential costs can deliver enormous savings.

Moving with the times

Not only should a platform be powerful, it should be flexible. With reviews of existing rules ongoing by the Commodity Futures and Trading Commission (CFTC), the potential for change of the current parameters is considerable. That means that a hardwired, purpose-built system that deals with a current set of market rules could quickly find itself overstretched. An institution with five legal entities needs to understand what its exposure and thresholds are across all of its agreements, stretching across all of those entities. Many counterparties are not in a position to access data at that consolidated level.

Developing a solution in-house is challenging because the resources needed to support the platform may need to be deployed as a rolling cost base to mirror the potential changes the rules may experience. No two firms are alike—a patchwork of systems will already exist to gather this data and run calculations in many firms, but its extent and rigor will vary. A solution is needed that can be integrated with that patchwork, or to replace manual processes where they exist, and predict margin pressures, analyse inventory and deliver real-time-margin calculations within the relevant regulatory framework. **SLT**

If you're not automated, you're leaking profits

Implementing asset-based billing in an accurate, scalable way requires overcoming static data accuracy, across asset classes, and is a must for allocating positions, says Thomas Benevento of PrimeOne Solutions

Today, recognising and adjusting to hedge fund pricing model changes is of critical importance. Before 'the crisis' and all the subsequent regulatory changes, firms provided blended rates across asset classes, mostly on the basis of trading strategy and assumptions of asset quality consistency. This proved to be inefficient for managing funding costs, so in turn, profitability went down.

Now, a detailed and transparent view of client asset quality is necessary to achieve efficient funding and maintain profitability levels within prime finance businesses. For many, the creation of asset- or collateral-based billing, which dynamically determines pricing, remains a manual process that doesn't scale, has high error rates, and contributes to revenue seepage.

In a dynamic asset-based pricing model, prime brokerage assets are allocated to buckets, based on the quality of the assets. This quality is determined by a number of factors and tends to vary from bank to bank. The key is to be able to monitor and efficiently charge financing to a dynamic portfolio of assets, in an automated and efficient manner.

What initially was priced as a liquid equity long/short portfolio, over time, may evolve into a portfolio made up of less liquid, more difficult to fund assets.

An efficient automated asset-based billing model removes the manual monitoring of client portfolios and therefore, drastically reduces administrative error. An automated system allows prime brokers to charge an appropriate financing spread for each bucket of allocated assets.

Implementing asset-based billing in an accurate, scalable way requires overcoming static data accuracy, across asset classes, and is a base requirement of allocating positions into appropriate buckets.

Ascertaining accurate indebtedness (the debt balance) and loan value (the actual loan amount based on an indebtedness calculation and margin rate applied by client and asset type) are critical.

Although these functions manually exist within most prime finance platforms, the accuracy of these data points and calculations is suspect. Additionally, the interpretation of these definitions varies greatly between providers.

Once these figures are calculated systematically and on an individual currency basis, the discussion turns toward a decision regarding the most efficient calculation for asset usage. Both pro-rata and waterfall calculation methodologies are often used across providers. However, the trend, based on client demand, is moving towards the waterfall methodology, where technically possible.

Pro-rata is often thought of as the easier calculation for providers, as a blended rate is applied across the entire indebtedness value, regardless of individual asset utilisation or loan value. This can drive up costs.Hedge fund participants are sensitive to this and generally prefer a methodology that allocates as much of their indebtedness to their cheapest assets to finance, before moving on to the next asset class.

In the waterfall methodology, the indebtedness value is applied to each asset type, beginning with the cheapest to finance, until the loan value of each class is exhausted. Indebtedness then spills over to the next category, until the total indebtedness is allocated. The waterfall methodology provides the most accurate representation of funding on a security-specific level.

Overall, a process that has been created over time, to accommodate one-off requests by clients and funding desks, and it has matured across the industry, into the market standard for client pricing in prime finance. All providers, big and small, are aggressively moving towards an automated solution across clients in an environment where technology budgets are reduced and resources continuously limited.

At PrimeOne, we provide our clients an out-of-the-box solution to handle asset-based billing, in high volumes, across an established or new client base. It is delivered as a service or as a fully hosted solution, with user-friendly interfaces and customisable setup screens. **SLT**

Overall, a process that has been created over time, to accommodate one-off requests by clients and funding desks, and it has matured across the industry, into the market standard for client pricing in prime finance

Thomas Benevento
Global head of synthetic equities
PrimeOne Solutions

When do we want it? The rise of real-time post-trade automation

Rajen Sheth of Pirum reflects on the journey that securities finance has taken in its search for automated post-trade processing

The world of post-trade automation in securities finance has moved on a long way since Pirum first started in 2000. At that time, the requirements were largely centred on visibility of positions versus the counterparty in the form of overnight reconciliations, with the focus on reconciling month-end billing. From the lender's perspective, this was because they would have to pay their underlying clients before receiving payments from their borrowers.

Having an automated reconciliation in place allowed more efficient dispute resolution and timely payment of bills. From the borrower's perspective, the reconciliation helped to ensure they paid the correct fees and were accruing the correct amounts prior to the monthly billing cycle. Without this independent reconciliation, as we all know, the lender is always right.

As the industry has evolved over time, so have the drivers and requirements for post-trade automation. When business was booming, it was all about efficiency, cost reduction and headcount costs not being sensitive to increasing volumes.

Following market events in 2008 and the subsequent requirements introduced by internal audit and regulators, the drivers shifted and became more heavily focussed on managing operational risk.

More recently, due to further regulatory changes, focus has shifted to managing risk-weighted assets (RWAs) and regulatory capital requirements. Post-trade automation has its part to play in managing these important factors that directly impact on profit and loss.

Back then, the uncollateralised exposures that unpaid bills created for the lender (for fees) and borrower (for rebates) were accepted as part of the risks associated with doing business. Today, there is far more scrutiny in this space and market participants are actively working on minimising these kinds of risks.

From looking at end-of-month billing, the industry quickly implemented a programme to standardise the use of daily reconciliations of all open positions, or contract compare. The idea being that as reconciliations were carried out daily and breaks identified and resolved, by the time it came to agree the monthly bill, both parties had the same accruals and would be able to quickly agree the payments.

The visibility and efficiency this provided to the industry was significant and led to the thought that, rather than asking what went wrong with positions yesterday, how can issues be stopped from arising in the first place? As the old adage goes, prevention is better than cure.

The answer was to be found in automating the functions and intra-day trade lifecycle events that caused the issues in the first place. Specifically, automation of the mark-to-market process, returns, recalls and exposure management was required.

In order to achieve the highest straight-through rates, there needed to be a shift in the market from reconciliation based on overnight batch files to post-trade automation providers starting to process in near real-time.

Pirum launched its first real-time automation services in 2008, and this brought a level of innovation not previously seen in the industry. The first real-time service automated the mark-to-market process for both cash and non-cash trades. For the first time, market participants had a mechanism to automatically mark every trade, every day, with minimum manual intervention and straight-through processing rates of more than 99 percent.

Since then, the real-time automation suite has moved on to automate many functions previously carried out manually, helping reduce the errors and associated costs inevitable within manual processing.

With regulatory initiatives such as the Central Security Depository Regulation being introduced, the argument for real-time services becomes even more compelling. Similarly, the move to a T+2 settlement cycle applies more pressure on the securities lending world to be more efficient and timely in its processing.

The ability to match trades within minutes of them being booked becomes even more compelling when faced with the possibility of fines and charges associated with settlement failures. This is another example where improved post-trade services will have direct profit and loss effects.

Exposure management is another area that has had a large amount of focus in recent times. In the non-cash world, this has largely meant the increasing use of triparty agents where previously collateral may have been moved bilaterally between lender and borrower.

From the agent lender's perspective, the ability to report accurate collateralisation and exposure to clients, and demonstrate strong controls and automation in this field, has become a key part on the demands that beneficial owners are placing on their agents. As many agents have reported, this has become as important an issue in requests for proposals as the details of revenue and utilisation projections.

For the borrower, the ability to pledge collateral to the correct value and avoid over-collateralisation is becoming increasingly important. Being over-collateralised increases the RWA for the borrower, and as a result, increases regulatory capital requirements. An example of yet more profit and loss impact that can be managed by improved post-trade automation.

As well as the level of collateralisation, market participants are increasingly looking at the type of collateral being pledged for borrows and the different cost associated with different collateral classes. As a direct result of this requirement, Pirum has recently implemented an option to book the collateral pledged on accounts with triparty agents into clients' own systems on a real-time basis.

The ability to calculate exposure in near real-time, taking into account all new loans and returns, as well as the collateral held against the positions, is essential to both ensuring the most accurate collateralisation and being able to calculate the real profit and loss of the trades.

The next phase of market development in Europe has seen the establishment of Eurex Clearing's Lending central counterparty (CCP), which is now seeing a huge amount of interest.

Trading by the initial handful of participants has started this year and this trend is expected to continue as more clients join the platform. The CCP continues the themes of reducing regulatory capital requirements, as qualified CCPs have a much-reduced risk weighting under Basel III, and improved efficiency.

Through Pirum's CCP Gateway—the only high volume flow provider to Eurex Clearing's securities lending CCP platform—all trades are automatically pre-matched and validated before being communicated to the CCP for novation.

Crucially, most of the post-trade lifecycle events, from initial settlement through to the daily mark-to-markets, returns and recalls, are also automated via the Pirum/Eurex Clearing partnership back to the end clients' own systems. This is about as straight through as a securities lending trade gets.

In addition, the industry's market data providers have developed analytics services that are now producing benchmarks based on real-time intra-day data supplied by Pirum.

Pirum has played a key part in bringing innovation to the marketplace by producing services that have not been seen before in the space of real-time post-trade management.

With a rich real-time integration to many participants in the market, Pirum has become the centralised processing hub for the industry.

This position has enabled clients to seamlessly connect through Pirum to triparty agents, the CCP and market data vendors. This has helped deliver efficiency, better management of operational risk and reduced capital requirements and Pirum is committed to continue providing positive profit and loss impact through innovative, real-time post-trade services.

As the securities finance landscape has changed the demand for more timely updates in every aspect of post-trade automation has only increased, and although predicting future developments can never be a certainty, what is clear is that those market participants that have real-time connections and automation in place will be best placed to deal with an ever-changing marketplace. **SLT**

> Market participants that have real-time connections and automation in place will be best placed to deal with an ever-changing marketplace

Rajen Sheth
CEO
Pirum

Welcome back: the business is a-changin'

As securities lending faces ever greater scrutiny, David Lewis of SunGard's Astec Analytics looks at the state of the business as it stands today

The securities lending industry has been through a great deal in the last few years, and there are more changes to come. Almost every aspect of the business has changed, from its position in the back-office settlements area to its very name and terms of business. It is no longer appropriate to refer to securities lending, but to be more accurate and up to date, it should be securities finance and collateral management.

The annual industry jamboree that is the Internal Securities Lending Association conference changed its name in recognition of this fundamental expansion of the humble securities lending business into a broad, and even pivotal, function within the capital markets.

With this promotion comes greater attention and, some would say, even responsibility. The industry today has never been so much under the microscope of the world's regulators and authorities, and as it will be in the coming years. From somewhat transitory short selling bans to Basel III and other more permanent and wide ranging regulations, the industry has often been described as being "under siege", which may well be an apt description.

Such regulations affect the market's participants in different ways, and even the regulations themselves can have contradictory effects, leaving the industry attempting to manage the juxtaposition of opportunities and challenges that these regulations can create.

So can market data help us understand what changes have occurred so far, and what can we expect to happen as further structural and regulatory changes take effect?

The securities finance industry, to use the more contemporary label, has shown its ability to morph around issues and changes, reinventing itself as the needs of the wider capital markets change over the years. However, such changes are rarely revolutionary—our industry prefers a slow evolutionary rate of change when it comes to modifying itself. Take the changes we have seen as maximum utilisation strategies were replaced by 'intrinsic value' programmes.

What was little more than a buzzword in sales literature at one time has become what some even refer to as an industry best practice. The market performance data certainly identifies this trend over time. Figure 1 shows the market value on loan split by fee bucket from 2009 to December 2014.

It is no surprise that the largest volume by far is the general collateral bucket (or less 20 basis points), but what may be a little more surprising is how little it has decreased over the period. In April 2009, general collateral accounted for 76 percent of the borrow value, while for the same month five years later it had reduced to 70 percent. The effect of the European dividend season is brought into sharp relief with the deep troughs showing across April and May each year, leaving general collateral to recover its relative importance across the remainder of the year.

Peak time for general collateral appears to be around year-end, with January 2010 the highpoint over the last five years, when 88 percent of the borrowed value was taken down at 20 basis points or less.

Figure 2 is all about revenue over the same period. General collateral is relegated to the smallest segment and only accounts for between 3 percent (May 2013) and 17 percent (August 2009) of the revenue generated by the industry. While the intrinsic revenue model has definitely taken hold, general collateral is certainly not dead.

The borrowing of high quality liquid assets (HQLAs) is another major factor fundamentally affecting borrower and lender behaviours—one side being constrained by capital and the other by leverage. Constraints being caused by the impending Basel III regulations are already changing behaviour as lenders concentrate harder on their more profitable clients.

As a result, balance sheet usage, particularly where indemnities are involved, will become an ever more expensive resource. The much lauded collateral upgrade or transformation trade has made its presence known as lenders get comfortable with term loans of their most prized assets. This has been expected to be a 'pinch point' for the market as pressure on liquidity coverage (the liquidity coverage ratio, or LCR, in particular) is driving change in the way banks finance themselves, increasing the need for finance with longer terms/durations.

On the supply side, this means that not only does the typically conservative holder of HQLAs have to get comfortable with taking lesser non-cash assets or cash as collateral, it has to commit to lending these assets out for set terms. Getting beneficial owners on board with such trades will not be the time to discuss taking away their indemnities, so with rising capital costs of supporting such facilities on the way, that will have to be a cost absorbed in the economics of the trade.

What is apparent is that the duration curve is steepening and will likely continue to do so as the new regulations take effect. Lenders that are willing to undertake these types of trades are expecting to be rewarded and the longer the duration, the greater that expectation. As a result, what had previously been quite a flat curve is turning northward as durations extend.

Figure 3 shows the weighted average durations for government debt instruments over the last 12 months, indexed to 1 April 2013. While it is a relatively choppy graph, a slow upward trend is discernible, particularly in Q1 2015. Overall, average durations have risen 1.6 points over the last 12 months—not much perhaps, but the regulations have not yet come into full effect and indeed won't for a couple of years yet. That does not mean that market participants are not making preparations or indeed flexing their muscles in readiness.

But what if you are a beneficial owner who either does not own sufficient quantities of HQLAs to make you a favoured client, or perhaps you just doesn't have the appetite? Anecdotally, it does appear that some clients are being gently guided towards the exit door on the basis that it is simply not possible to make them profitable. Will that create a squeeze on supply? Unlikely. With hedge funds sitting largely long and with world indices on a bull run achieving record highs seemingly every other day, the demand to short securities is at a low point.

The supply of HQLAs certainly seems to be more than adequate and a potentially rising fee curve will likely attract more lenders into the collateral transformation business, proving the maxim that everything does indeed have a price. Borrowers will always prefer to deal with those lenders who can be flexible on collateral, generous with term commitments and will provide them with the right fee levels as recompense for their flexibility.

If a reduction in participating beneficial owners is seen in the market, those that do remain are likely to be the larger, more sophisticated funds, and those that have the assets or the risk appetite that makes them attractive as lenders. More sophisticated lenders are also getting savvier about how they measure their lending activities. Benchmarking has now been around for some time and has become increasingly advanced, with regards to weightings and peer group definitions, but as the securities finance industry has moved into the mainstream, it should not be surprised when it is measured like an investment activity.

Revenue attribution for every activity is becoming ever more important as scarce resources, such as leverage and balance sheet, force market participants to focus on the best returns for their investments. As for securities lending, clients of ours are including lending returns in their fund performance figures, down to an individual security level.

For example, should you have held Sears Holdings (SHLD) shares in your funds over the last 12 months, you may well have been sitting on a $7.29 per share loss, so making those shares available for loan would have brought in around $2.74 (gross) over the same period, neatly offsetting just over one-third of the value lost. Sears has been a quite special stock over the year, but the principle remains that securities lending can make a meaningful contribution to a beneficial owner's returns, and it is these returns that are coming under ever greater scrutiny as new regulations take hold.

It is apparent to any observer of our industry that significant change is afoot. The next six to 12 months will bring greater clarity to the big issues facing the business, such as Basel III, and once again we will no doubt see the industry morph and adjust to its environment.

These changes will bring challenges to some and opportunities to others as the forthcoming regulations are implemented variously across countries, regions, and even different participant types. As the impact of these changes becomes more apparent, one thing does seem to be clear.

Our industry will face ever greater scrutiny, from outside as well as from within. Analysis, reports, data, and more importantly, what we prefer to call actionable information, will wield greater influence over the strategic decisions made by the business managers of today and tomorrow, as every efficiency is sought and every basis point squeezed from a vital market activity seeking to grow within increasingly tight boundaries. **SLT**

Figure 1: Market Value On Loan By Fee Group, 2009 to 2014

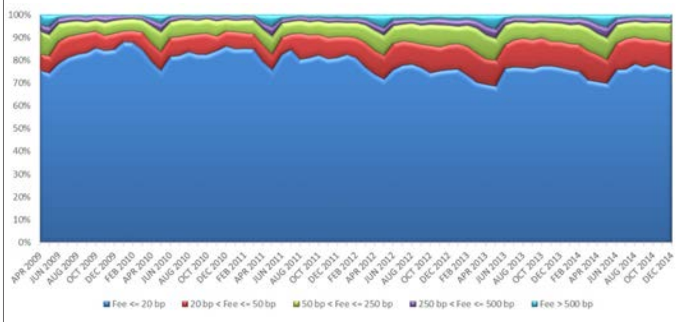


Figure 2: Proportion Of Revenue Generated By Fee Group, 2009 to 2014

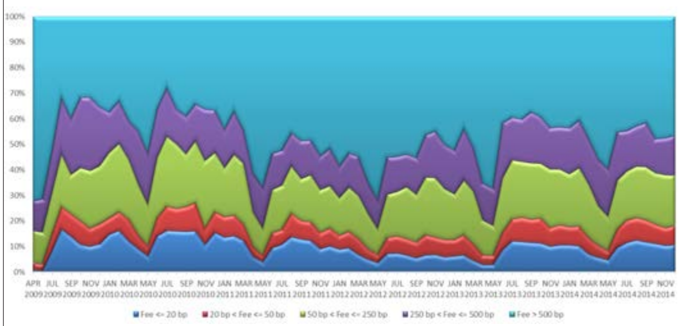
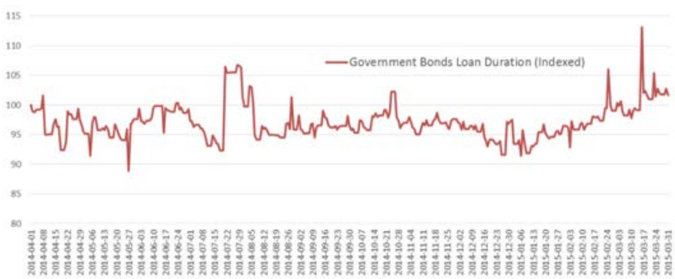


Figure 3: Weighted Average Loan Durations For Government Securities Indexed Over 12 months



Revenue attribution for every activity is becoming ever more important as scarce resources, such as leverage and balance sheet, force market participants to focus on the best returns for their investments

David Lewis
Senior vice president, SunGard's Astec Analytics

A market in itself

Gerard Denham explains how to connect to Eurex Clearing's Lending CCP

Eurex Clearing's central counterparty (CCP) service for securities lending, the Lending CCP, maintains the existing trading relationships and business structure, while a fully integrated operational process has been incorporated to assist the securities lending market transition towards centrally cleared transactions. The Lending CCP is designed for market participants to trade either bilaterally or via electronic markets for bonds, equities and exchange-traded funds (ETFs).

How to access the Lending CCP

With Eurex Clearing's Lending CCP, there are a number of options for the transmission of securities lending trades. One option allows traders using the Eurex Repo SecLend Market, an electronic communications network, to direct their loan transactions for novation to Eurex Clearing via the Eurex Repo SecLend Market trading screens.

This allows market participants to benefit from the advantages of screen-based trading backed by the service of a fully integrated qualified CCP.

Another route available to the market participants is via Pirum's CCP Gateway, which compares loan transactions between bilateral counterparties and performs a real-time validation to establish that the trade meets the criteria for central clearing.

Pirum's Real-Time Service directs the loan transactions via its CCP Gateway to Eurex Clearing's Lending CCP for novation.

These two connected flow providers subsequently communicate all loan lifecycle events such as re-rates and returns to the Lending CCP. The changes required to users' trading and technology systems are relatively low impact as Eurex Clearing's Lending CCP preserves the characteristics of bilateral trading and therefore minimises the effect of moving to a new trading model.

How the Lending CCP benefits the marketplace

A CCP for the securities finance market can facilitate the use of a cost-effective structure to improve and optimise securities finance activity through enhanced efficiency and safety for the entire marketplace. As well as helping to deliver an increase in supply to the market and improve liquidity, the CCP introduces standardised and transparent risk and collateral management methods.

By instigating the move to central clearing, efficiencies on trading and the operations of securities finance transactions can be achieved by market participants in addition to reducing their overall legal and documentation workload. The CCP's integrated cross-product service offers netting of regulatory capital across all cleared products, while being able to deliver collateral efficiency through a wide range of customised choice on collateral eligibility paired with re-use capabilities.

Overall, an increase in capital efficiency is achieved through lower risk-weighted assets (RWAs) and CCP-applicable capital charges.

Eurex Clearing has integrated both electronic markets and over-the-counter bilateral transactions within its Lending CCP service, and provides a central gateway to the central securities depositories (CSDs), international CSDs, triparty collateral agents and payment banks for securities, collateral and cash movements. A wide range of cash, bonds, equities and ETFs are eligible for the service as loan securities as well as collateral.

How the specific lender licence works

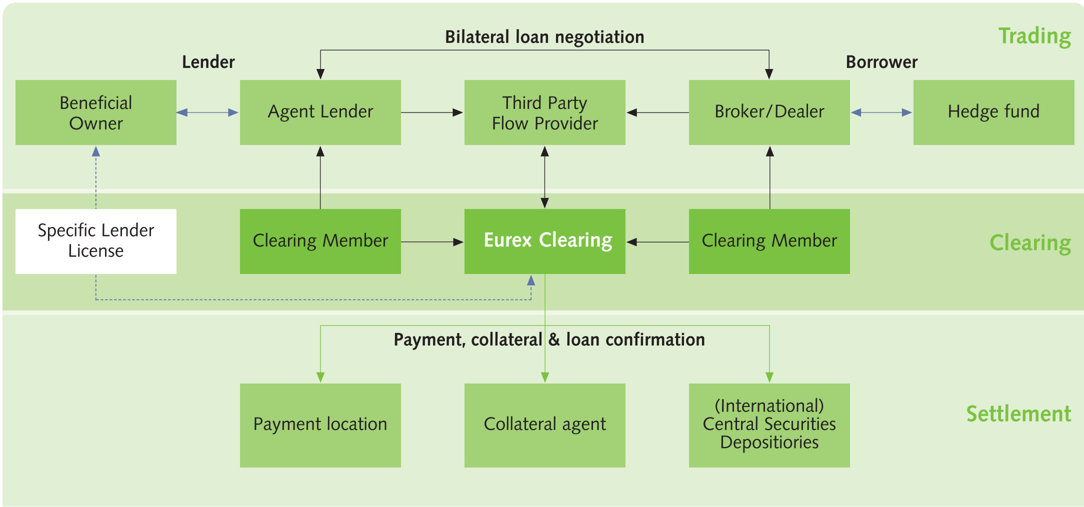
Eurex Clearing has devised a unique operating model that has been developed jointly with prominent agent lenders across Europe and the US. As a result, the beneficial owners and agent lenders are able to maintain their existing business relationships. By using a specific lender licence, which has a dedicated Eurex Clearing membership, the beneficial owners are able to remain acting as principal for their loan transactions while the agent lenders remain acting in their existing agency role. The agent lender continues to arrange loans for CCP eligible transactions and uses its existing market expertise, technical infrastructure and operational links with the specialised flow providers and trading networks connected to the Lending CCP.

The distinction between Eurex Clearing's Lending CCP and other models is that—for a pure lender—there is no requirement to clear through a (third party) clearing member, no margin requirements and no contribution to a default fund. The prerequisite for the Lending CCP and users of the specific lender licence is a collateral pledge model using the services of a connected triparty collateral agent. The non-cash collateral remains on account at the CCP on a segregated basis for the underlying beneficial owner. This innovative feature has been received positively by agent lenders as it enables their existing arrangements and structures to remain in place and lets them benefit from the advantages of a qualified CCP.

CCP connection

For connecting to the Lending CCP, the participants must be able to have connectivity in place as defined in the Eurex Clearing connection agreement. For admitted clearing members, the existing CCP infrastructure can be re-used. Participants are required to send and receive loan transactions to/from one of the flow providers, handle responses from the flow provider platform, process reports from the Eurex Clearing CCP system and flow provider, as well as have access the triparty collateral Agent environment. Clearstream Banking Luxemburg or Euroclear Bank for clearing members will utilise loans against non-cash collateral.

Process flows: the securities lending model



Technical requirements include the ability to connect to the desired flow provider (Pirum and/or Eurex Repo SecLend Market). Lending CCP participants have to fulfill the following pre-conditions: for connectivity to Pirum, usage of Pirum's Real-Time Service, including the processing of marks and returns components within the Real-Time Service; and for connectivity to Eurex Repo SecLend Market, admission as a participant to Eurex Repo SecLend Market and system connectivity.

As more participants come on-board, the momentum increases as the market migrates further towards the usage of CCPs for securities finance. It is important for all market participants to continue the process of assessing their strategic and functional model for transacting via a CCP in order to adapt efficiently to this evolving development for the securities finance market. **SLT**

> As well as helping to deliver an increase in supply to the market and improve liquidity, the CCP introduces standardised and transparent risk and collateral management methods

Gerard Denham
Senior vice president, clients and markets, securities lending
Eurex Clearing

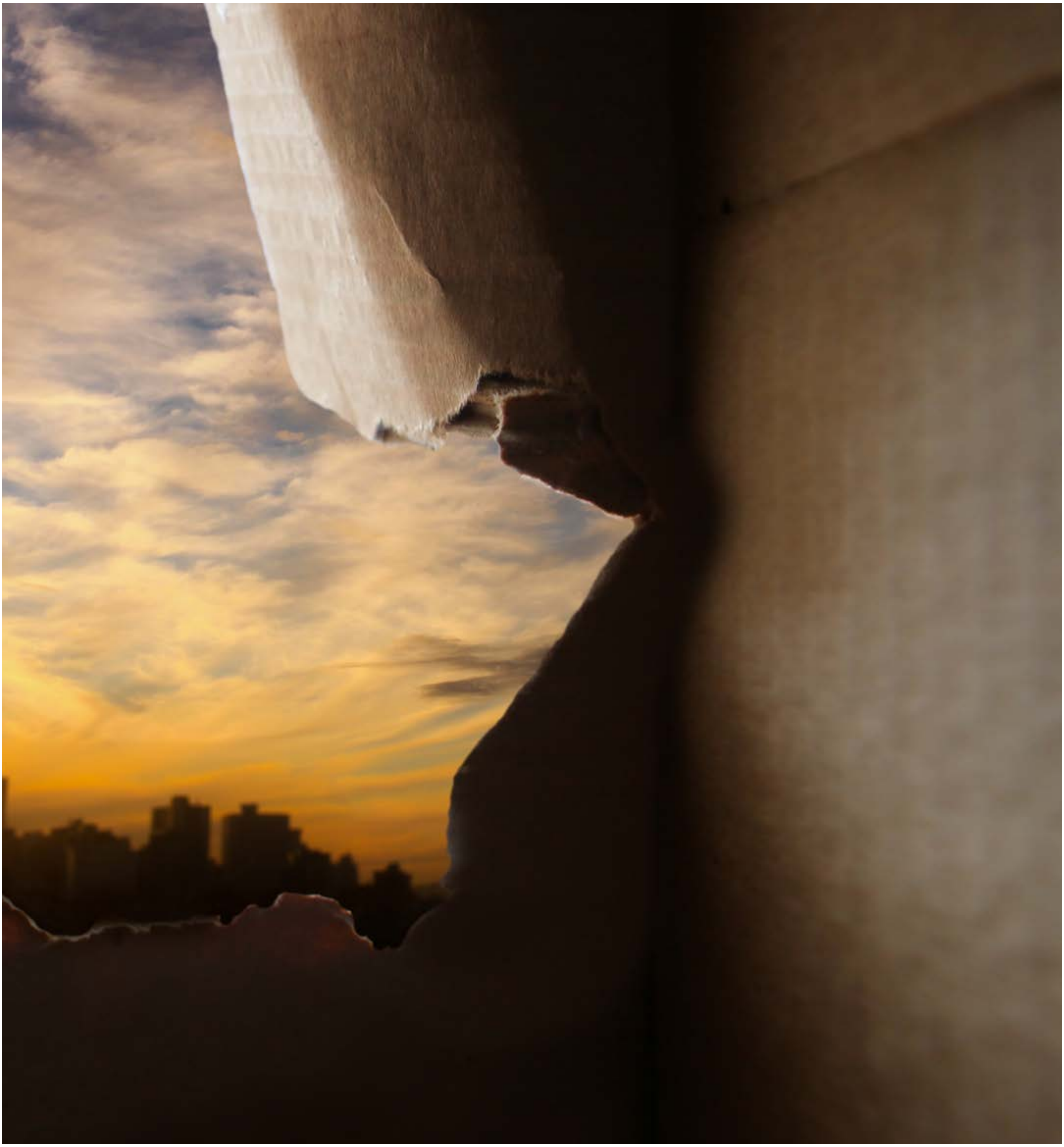
Lending outside the box

OCC has turned to non-banks for committed liquidity in times of stress. John Fennell reports

In January, Options Clearing Corporation (OCC) announced the establishment of an innovative, pre-funded, $1 billion committed repurchase facility with leading pension fund CalPERS and administrative agent eSecLending, increasing OCC's overall liquidity resources from $2 to $3 billion. OCC is the first major clearinghouse to diversify its source of committed liquidity to include a non-bank.

Through this effort, OCC has enhanced its access to committed liquid resources, diversified its liquidity resource exposure away from banks, and developed an access point to liquidity that does not place a greater burden on its clearing members during a period of stress (not pro-cyclical).

This programme diversifies OCC's committed lenders to include qualified pension funds in addition to its existing participant base of banks and broker-dealers. Committed liquidity facilities are a critical resource to central counterparties such as OCC, ensuring that sufficient capacity is maintained to fund payment obligations to clearing members in a timely way, and thereby promoting the uninterrupted flow of financial markets.



As the marketplace evolves, so do the clearing capabilities at OCC. Although OCC began as a clearinghouse for listed equity options, it has grown into a utility that is globally recognised as a key component of the financial community in the US, ensuring the uninterrupted flow of financial markets and supporting a multitude of diverse and sophisticated products. OCC provides market participants with innovative risk management solutions and industry leading efficiencies in clearance and settlement.

As the world's largest equity derivative clearing organisation, it operates under the jurisdiction of the US Securities and Exchange Commission (SEC), The US Commodity Futures Trading Commission (CFTC), and after its 2012 designation as a 'systemically important' financial market utility by the Financial Stability Oversight Committee (FSOC) under the Dodd-Frank Act, the Federal Reserve System.

OCC continues to observe solid growth in the markets it serves, with options volume in 2014 up 4 percent over 2013 marking the fourth consecutive year options volume passed four billion contracts (4.3 billion contracts traded in 2014). While exchange-listed options are the bulk of what OCC clears, it also observed record volume for futures, with 2014 futures volume reaching 67.7 million contracts, exceeding 2013 volume by 14 percent. Additionally, 2014 saw strong numbers in securities lending activity for the clearinghouse, with 1.2 million new transactions and an average daily loan value of more than $131 billion, twice that of what had been cleared a year earlier.

Given this tremendous growth, OCC consistently assesses its financial resources, ensuring its adequacy to support the future expansion of its products. Liquidity is one of the financial resources critical to supporting this growth. Based on projections of future growth in listed options and other observed trends, OCC decided to increase its resources and overall capacity to facilitate surplus growth in listed options. Having access to committed liquidity is critical to central counterparties such as OCC to make certain that they are able to meet their payment obligations at all times, and in a timely manner. These resources safeguard OCC's guarantee to satisfy all obligations, even if its largest clearing member fails, which promotes the uninterrupted flow of settlements within the financial markets.

With regard to the dynamic nature and growth of this industry, OCC's demand for liquidity is constantly being evaluated and combined with the delicate supply for committed facilities, especially in light of the liquidity cover ratio established under Basel III for banks, OCC is highly sensitive to both the demand and supply side of liquidity. Ensuring OCC has access to a sufficient supply of committed liquidity long-term to support the anticipated growth in derivatives and securities financing transactions, the exploration of new alternatives to source liquidity is ongoing.

Based on the strong relationships eSecLending has with pension funds lenders, it was tapped as the agent to explore the appetite for this type of arrangement from the pension fund side and was able to successfully workout a mutually beneficial alternative for both OCC and CalPERS.

Under this new programme with CalPERS, OCC will have a diversified pool of liquidity from both banks and non-banks. While the committed credit facility with CalPERS is a separate agreement, it serves to supplement OCC's existing liquidity resources.From a commercial perspective, the non-bank facility operates in a similar fashion to the programme framework with the banks with a commitment fee for undrawn balances and a separate rate used for when the cash has been drawn and is being used.

Operationally, both lines function in the same way in that if OCC should have to draw on the line, a request is made, securities are deposited and valued by the administrator/custodian, and when cash is received from the syndicate banks, the cash is delivered to OCC. However, with CalPERS the liquid resources are effectively pre-funded in that the fund contributes cash to an account up front that is visible to OCC. Once OCC delivers acceptable collateral (ie, US treasury securities) to the account, it triggers a cash transfer from the fund to OCC. It agrees to repurchase the collateral in the future at a premium to the price at which it sold them to the fund, which serves as an interest payment. Logistically, this is very similar to the bank facilities with the exception of the cash being deposited in an account and visible to OCC.

Nevertheless with the bank lines, they are commitments, that when drawn upon, the collateral is moved and then they source, which creates higher execution risk with the bank lines.

Given the changes affecting the way banks account for committed liquidity on their balance sheet, which would effectively reduce the supply of liquidity available to central counterparties moving into the future, it is important that OCC explores viable alternatives to securing access to liquidity in ways that enhance its diversification of counterparties where there is already exposure (ie, banks, broker-dealers and futures commission merchants, or FCMs).

In addition to meeting the Basel III requirements, global systemically important financial institutions (SIFIs) such as banks must have the capability to absorb higher losses, which lends to the greater risks they pose to the financial system and raises supply concerns for credit from banks moving forward.

This innovative plan is the first of its kind and allows for long-term access to liquidity, sources that are pre-funded and access to lenders that present right-way risk. This right-way risk is another attractive attribute of this programme because it allows OCC to obtain liquidity during a time of crisis from a lender that is less affected, from a liquidity perspective, to the same events that affect OCC and its members (for example, banks and brokers).

Working with qualified pension funds fulfills OCC's goal of securing liquidity in a way that is not pro-cyclical, which means the liquidity of clearing members during a time of crisis will be preserved.

OCC is the first major US derivatives clearinghouse to diversify its credit facilities through a non-bank. Through this effort, OCC's ability to meet settlement obligations in times of stress were enhanced, thereby reducing systemic risk and promoting safety and soundness in the financial markets.

This was the initial step in diversifying OCC's liquidity sources while promoting an alternative that will be viable in the long-term. As the model is validated and as more lenders enter the marketplace, it is anticipated that pension funds will become an increasingly attractive liquidity source to reduce concentration risk and overall pro-cyclicality, thus improving the resiliency of the markets OCC serves.

Depending on OCC's needs, diversification in committed liquidity through a mix of traditional and non-bank funding such as pension funds is the plan as we strive to make markets more liquid and secure. **SLT**

> "It is anticipated that pension funds will become an increasingly attractive liquidity source to reduce concentration risk and overall pro-cyclicality, thus improving the resiliency of the markets OCC serves"

John Fennell
Executive vice president of financial risk management
OCC

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CCPs

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Company description

Eurex Clearing AG is one of the leading CCPs globally, assuring the safety and integrity of markets while providing innovation in risk management, clearing technology, and client asset protection. The clearing house provides fully automated post-trade services for derivatives, equities, bonds and secured funding & financing as well as industry-leading risk management technologies.

As part of Deutsche Börse Group, Eurex Clearing manages a collateral pool worth around €50 billion and processes gross risk of nearly €16 trillion for more than 176 clearing members in 17 countries. In 2014, Eurex Clearing settled around 1.5 billion contracts.

Eurex Clearing pioneers the market by offering Europe's first central clearing service for the securities lending industry. It not only supports the safety and efficiency of the market but also combines it with the flexibility of the special bilateral relationship structure.

Together with Eurex Exchange, the International Securities Exchange (ISE), the European Energy Exchange, Eurex Bonds and Eurex Repo, Eurex Clearing forms Eurex Group.'

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Company description

Founded in 1973, OCC is the world's largest equity derivatives clearing organization. Operating as a utility clearinghouse, OCC provides central counterparty clearing and settlement services to 16 exchanges and trading platforms for options, financial futures, security futures, and securities lending transactions. It operates under the jurisdiction of the U.S. Securities and Exchange Commission as a Registered Clearing Agency, and the U.S. Commodity Futures Trading Commission as a Derivatives Clearing Organization.

As the central counterparty clearinghouse for the markets it serves, OCC assumes the counterparty risk of members involved in a trade: becoming the buyer to every seller, and the seller to every buyer. OCC manages its risk of member default by collecting margin or collateral. Clearing member margin requirements are calculated using OCC's proprietary System for Theoretical Analysis and Numerical Simulations (STANS) that uses large-scale Monte Carlo simulations to forecast price moves and correlations to make those margin determinations.

More information on the highly efficient and innovative solutions OCC provides to the markets it serves is available through its website at www.theocc.com.

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Company description

We formulate and deliver strategic business and technology change in financial services organisations. Our unique combination of advice, solutions and delivery provides an end-to-end consultancy service:

- Cross-discipline C-level Advisory
- IP-based Solutions to solve business problems and accelerate execution
- Delivery execution leadership and expertise

We develop service propositions with emphasis on tangible value creation for clients. Our focus is on solving real business problems and 'getting things done' rather than offer pure strategic advisory or generalist execution. Senior industry practitioners lead and deliver our work.

Our specialities are:

- Strategy and Business Operating Models
- Technology Advisory and Solutions
- Programme Management

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Company description

GFT is a specialist global consulting firm focused on delivering management consulting, programme and project management, user experience design, technical strategy and implementation services for financial services firms. Headquartered in Stuttgart, we support our clients with consultants based in key locations for capital markets, including: London, New York, Toronto, Boston, Barcelona and Frankfurt. We deliver technical design, implementation and support services from our nearshore facilities in Poland, Spain, Costa Rica and Brazil.

GFT specialists provide advisory, execution and support services to the world's leading financial institutions. Our domain specialisms include: securities finance, prime services, risk management, trading, legal and compliance and operations. Our delivery specialisms include: advisory and execution services in system development, user-centric design, software development, integration, testing, on-going support and IT outsourcing.

We offer our clients end-to-end solutions that solve their complex business and IT issues. Our specialists have a deep understanding of the pressures faced by financial organisations; many of our recent engagements have included strategic consultancy and large-scale change programmes driven by regulatory and compliance initiatives.

Goldspring Capital Markets

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Company description

Goldspring Capital Markets provides consultancy services, specialised in delivering change consultants within investment banks and financial institutions. We have a proven track record in derivatives, prime brokerage, securities finance and global custody. Our consultants are subject matter experts ensuring your strategic goals are delivered.

We specialise in:

- Business case definition
- Target operating model definition
- Develop and manage RFI/RFPs
- Programme and portfolio management
- Vendor management
- Business analysis expertise

Financial Regulation

Goldspring Capital Markets is fully aware of how the changing regulatory landscape will impact your business. We have experience of delivering changes in order to comply with the following:

- EMIR
- AIFMD
- BASEL
- FATCA
- Dodd-Frank
- Delivering changes as a result of structural reform

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Company description

Markit provides performance benchmarking, exposure calculations and structural analysis for securities lending programmes.

The consultancy team has many years of consulting and practitioner experience in securities finance and program analysis. The team draws on the most globally comprehensive daily stock loan database available dating back to 2002. It tracks $2 trillion on loan from a pool of $15 trillion of securities in the lending programmes of over 20,000 institutional funds.

Securities finance consulting provides fully independent research and advice to institutions already active, or considering becoming active, in the securities finance market. This includes repo, securities lending and prime brokerage activities.

With a reporting infrastructure built around the unique securities finance data set, the consulting team have a proven track record in providing:

- Performance benchmarking, covering periodical securities lending performance compared against a predefined, comparable peer group
- Programme evaluation, including indemnities, exclusives, fee splits and compliance
- Exposure reports, spanning counterparties, loan/collateral matching and peer group comparisons
- Collateral reviews and spotlight surveys

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Company description

SunGard offers a choice of deployment models and a comprehensive range of supporting services to complement its securities finance and collateral management solutions. This allows our customers to remain focused on their core business competencies, while SunGard adds value in supporting it solutions. Securities finance and collateral management product and market experts are available to support:

- Managed application services (on/off-site application support and development)
- Hosting and infrastructure management services (SaaS or hosting)
- Professional services—domain specialists are available to assist with:
    - Business process review
    - Training
    - Integration
    - Upgrade management
    - Testing
    - Tailored development, including reporting

SunGard is one of the world's leading financial software companies, with annual revenue of $2.8 billion. We provide solutions for financial services, the public sector and education. Our software is delivered via Software as a Service ("SaaS"), in the cloud and on premises, surrounded by an extensive suite of service offerings. Through the depth and breadth of our solution portfolio, global capabilities and domain expertise, we are uniquely capable of supporting virtually every type of financial organization, including the largest and most complex institutions in the world. SunGard's approximately 13,000 employees proudly serve over 15,000 customers in more than 100 countries, bringing fresh ideas and inventive solutions to help our customers adapt and thrive.

Vendors

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Company description

4sight Financial Software is an independent software solutions provider with nineteen years of experience.

4sight's customer base includes a full spectrum of buy and sell side market participants from smaller banks and asset managers through to global broker dealers. Clients in sixteen countries on four continents use 4sight's software to meet their business needs and 4sight offers the reliability and experience of a company with a proven track record.

4sight also provides project management, consultancy services and global support through its worldwide network of offices.

4sight's product range includes:

- 4sight Securities Finance (4SF)—a software solution for lending, borrowing, repo, and swaps
- 4sight Collateral Management—software for enterprise wide collateral management and optimization. Xpose provides cross product collateral management for securities lending, repo, and derivatives in a single solution.
- 4sight Swap—a user-friendly solution for managing the complete equity derivatives lifecycle

These solutions provide front to back office support and help 4sight's customers to

- Boost revenues
- Reduce costs
- Increase trading volumes
- Reduce manual effort
- Improve customer service
- Control risk

For further information, please visit: www.4sight.com

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Company description

The team at Anetics have developed and host a suite of software tools that handily connect borrower with lender and automate the workflow associated with securities lending. Any of the functionality listed here can be deployed for your firm on-demand.

- Collate all known sources of both supply and demand into one central utility enabling immediate lookup and cross-referencing of inputs from counterpart availability feeds, email lists, in-house needs and excess available to lend.
- Real-time, online sharing of your current needs and availability, financing and locate requirements without having to blast e-mail requests.
- Track Locate requests by customer and trading counterpart with full history, audit trail, and customer authorisation to pre-borrow or pay-to-hold.
- Manage all your open contracts with capability for bulk rate-change, return, recall, refinancing, and counterpart credit/risk monitoring.
- Auto-borrow and auto-loan using commercial and open-standard interfaces.
- Rebate/fee allocation tools allow you to distribute stock borrow/loan cost and benefit to your customer—with special handling for collateral mismatch and micro-transactions.
- Link directly to your customer and trading counterparts with open-standard web-services and FIX messaging.

Please feel free to contact us with inquiries. Always a pleasure to arrange a demonstration. No cost or obligation if you wish to try an evaluation instance of any of our service offerings.

BONDLEND

OUR INNOVATION. YOUR ADVANTAGE.

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Company description

BondLend is a securities finance technology platform created specifically to support the fixed income borrowing, lending and repo community. BondLend's Trading and Financing Services provide straight-through processing automation for borrowing, lending and repo using a common standards-based protocol and infrastructure processing eliminating manual processes, freeing up valuable resources.

BondLend comparison services add efficiency and reduce the risk of potential collateral management errors. Comparison services are security type agnostic and support global usage for cash and non-cash records. BondLend's trading and post-trade services help drive down unit costs and increase efficiency. It allows firms to free up resources to expand their market presence, increase trading volumes, and reduce error rates all without additional cost.

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Company description

Broadridge Financial Solutions, Inc. (BR) is the leading provider of investor communications and technology-driven solutions for broker-dealers, banks, mutual funds and corporate issuers globally. Broadridge's investor communications, securities processing and business process outsourcing solutions help clients reduce their capital investments in operations infrastructure, allowing them to increase their focus on core business activities. With over 50 years of experience, Broadridge's infrastructure underpins proxy voting services for over 90% of public companies and mutual funds in North America, and processes more than $5 trillion in fixed income and equity trades per day. Broadridge employs approximately 6,700 full-time associates in 14 countries.

Broadridge Securities Financing and Collateral Management Solutions offer global, multi-asset systems designed to enable global investment banks, asset managers and service providers to optimize their regional and global collateral management, repo and securities funding operations. Used together, or as standalone solutions, traders and collateral managers have real-time access to collateral inventory positions, and can easily navigate screens and enter information for quick deal entry, collateral allocation and transaction maintenance. Advanced reporting and workflow options provide users with a streamlined approach to managing large amounts of complex data.

For more information about Broadridge and our proven securities financing and collateral management solution, please visit our website.

CloudMargin

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Company description

CloudMargin was formed in 2013 by a group of professionals with over 30 years experience in collateral management, OTC derivatives, technology and capital markets to bring a new approach to OTC derivatives collateral management.

Collateral Management is full of products built for the sell side (banks, brokerages etc) which end users of derivatives such as corporate treasurers, hedge funds, insurers and pension funds often see as over-complicated, over-specced and over-priced for their needs. Costly and complex hardware and software infrastructure, lengthy implementation projects, on-going training needs and inflexible pricing models prevented widespread adoption by sectors of the buy-side. For much of the buy-side the only option was spreadsheets.

The founders of Cloudmargin identified the need for a new approach.

OUR INNOVATION. YOUR ADVANTAGE.

EquiLend

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Company description

EquiLend is a leading provider of trading services for the securities finance industry.

EquiLend facilitates straight-through processing by using a common standards-based protocol and infrastructure, which automates formerly manual trading processes. Used by borrowers and lenders throughout the world, the EquiLend platform allows for greater efficiency and enables firms to scale their business globally.

Using EquiLend's complete end-to-end services, including pre- and post-trade, reduces the risk of potential errors. The platform eliminates the need to maintain costly point-to-point connections while allowing firms to drive down unit costs, allowing firms to expand business, move into different markets, increase trading volumes, all without additional spend. This makes the EquiLend platform a cost-efficient choice for all institutions, regardless of size.

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Helix

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Company description

Helix Financial System's newest product, HelixSL, is the future of Securities Finance technology. We offer a suite of modularised, web based, applications built to support the daily activities of domestic and international stock loan and repo desks. Each of our eight modules, can function together as a robust, integrated whole or can be deployed independently for firms with more unique needs. Your company wins by paying only for the features it needs. Not only does this make HelixSL the most cost effective solution but the method of delivery improves the relevance, usability, and performance of our product allowing you to get the most value from your technology budget.

All Helix products and modules can sit on top of the same technical architecture so we are able to easily, and in real-time, aggregate specific shared data points across all your business lines, such as equity stock loan and fixed income repo. This technology and its inherent flexibility also allow Helix to offer a scalable solution from large multi-billion dollar stock loan and repo desks down to the independent and specific needs of a single department within a firm. Regardless of the size of your business and selection of modules, we are always providing big picture reporting regarding firm funding, collateral pool, market and credit risk, and profit and loss. This ability to give both detailed and big picture information in a single solution is unprecedented in today's securities finance and lending landscape.

Lombard Risk

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Company description

Lombard Risk (London Stock Exchange: LRM) is a leading provider of integrated collateral management and liquidity, regulatory and MIS reporting solutions—enabling firms in the financial industry significantly to improve their approach to managing the risk in their businesses. Founded in 1989 and headquartered in London, Lombard Risk has offices in Cape Town, Hong Kong, Luxemburg, Mumbai, New York and New Jersey, Shanghai, Singapore and Tokyo.

Our clients include banking businesses - 30 of the world's "Top 50" financial institutions - almost half of the banks operating in the UK, as well as investment firms, asset managers, hedge funds, fund administrators and large corporations worldwide.

Lombard Risk's COLLINE is a state-of-the-art, web-based solution designed by experienced business practitioners for end-to-end, enterprise wide collateral management (OTC derivatives, Clearing, Repo, Securities Lending and ETFs).

COLLINE provides a consolidated solution for mitigating credit risk, providing cross product collateral management, aggregation and optimization. Through its functional flexibility, COLLINE enables clients to manage their own requirements according to individual priorities and regulatory obligations:
COLLINE OTC—market leading functionality including legal agreement repository supporting CSA, SCSA and umbrella agreements, flexible margin calculation and configurable workflow, reporting and reconciliation.
COLLINE REPO and SEC LENDING Module supports front-to-back margin operations for all of an institutions REPO and SEC LENDING agreements including optional mark-to-market calculation and exposure profiling.
COLLINE CCP/Clearing Workflow—supporting both house and client clearing requirements. Validation of CCP and broker calculations with configurable margin process definition and cash flow management to support multiple clearing house models on a single platform.
COLLINE Optimisation provides configurable technology to enable real-time algorithmic calculations, according to user-defined rules, goals and evolving priorities.

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Company description

Since its creation in 1986, Murex has played a key role in proposing effective technology as a catalyst for growth in capital markets, through the design and implementation of integrated trading, risk management, processing and post-trade platforms. Driven by innovation, Murex's MX.3 Front-to-Back-to-Risk platform leverages the firm's collective experience and expertise to offer an unrivalled asset class coverage and best-of-breed business solutions at every step of the financial trade lifecycle.

MX.3™ for Collateral Management and Securities Finance is an enterprise collateral management solution for bilateral or cleared OTC, repo or securities lending, and exchange-traded derivatives products.

Key features include:

- BCBS/IOSCO WGMR and CCP margining
- Real-time inventory with a flexible optimization engine
- Powerful STP workflow manager providing connectivity to TriResolve, MarginSphere and Swift.

Pirum Systems Limited

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Company description

Pirum provides highly innovative, functional and reliable electronic services specialising in automating post-trade processes in the equity and fixed income securities finance markets globally. With a focus on service excellence, Pirum is invariably regarded as the users' service provider of choice.

Pirum's Classic Service delivers:

- Contract compare
- Billing compare
- Billing delivery
- Daily position reporting
- Income claims

Pirum's real-time service delivers new levels of automation and straight-through processing to the industry, streamlining manually intensive and time-critical processes throughout the day and covers the following:

- Marks automation
- Exposure reconciliation
- Automated returns
- Automated payments
- Real-time contract compare and pending compare
- Automated triparty RQV processing
- CCP gateway

PrimeOne Solutions

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Company description

A Complete & Cost Effective Platform for Managing Prime Finance

PrimeOne Solutions, a CoreOne Technologies company, is a gateway into the world of prime finance. Our API-driven platform expands your product set, increases your speed to market, improves revenue and all at the lowest possible cost. This battle-tested and superior technology reduces operational and market risk, enhances transparency while maintaining a panoramic business perspective with detailed trading information.

PrimeOne Solutions is the world's only full service prime finance suite of software. Through corporate acquisitions and platform lift-outs from major investment banks, PrimeOne offers state of the art, secure, hosted technology across cash pb, synthetic pb, securities lending and client reporting.

A low-cost value proposition of 80 percent less than internal build / operating cost combined with ultra-fast time to market and a global team of prime finance industry professionals available 24/7

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Company description

Stonewain Systems Inc. provides innovative software and solutions for the securities finance industry. Our multiplying customer base is a testament to deep domain knowledge, extensive functionality, cutting edge technology and value pricing. Our proven product platform, reliable services and progressive technology are defining a new industry benchmark.

Software Platform spire

- Comprehensive fully integrated front, mid, and back-office solution
- High level of industry specific functionality
- Scalable, seamlessly-integrated solution
- Reduced cost, higher operational efficiencies, accelerated workflows
- Improved risk management and control.
- Open and flexible architecture integrates with preferred technology choices.

Services and Solutions:

- Customized enhancements and software solution development
- Implementation and integration
- Software support services

SunGard

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Company description

SunGard provides best of breed solutions for all aspect of securities finance and collateral management. We help a broad range of participants address all aspects of their securities borrowing and lending, repo, synthetic finance, and enterprise collateral and optimisation needs.

Whether you are on the supply or demand side of the securities finance business, SunGard helps you maintain agile growth and run smarter operations by supporting you in:

- Increasing profitability, improving transparency and making smarter decisions throughout the global trading day
- Expanding your business through support of a broad range of product types and markets
- Controlling operational cost and increasing the efficiency of your business
- Managing risk and holding down the cost of collateral/capital usage

SunGard's solutions for securities finance allow you to automate your entire operation: from enterprise collateral management, collateral optimization, order routing, trading, real-time positions management, operations, accounting, settlement, trade analytics to trade automation services. Our solutions are used by more than 140 of the world's leading financial institutions, including the world's 10 largest banks.

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Company description

Trading Apps has a track record of success in developing and deploying cutting edge software to meet the demands of global investment banks, hedge funds and other wholesale financial institutions.

By leveraging our robust application building platform known as Glass, Trading Apps brings immediate return on your investment and tangible results, whether it is identifying opportunities in your trading book or reducing operational inefficiencies.

Contact us to learn more.

Data Providers

OUR INNOVATION. YOUR ADVANTAGE.

DataLend

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Company description

DataLend is the securities finance data services division of EquiLend, providing the market with global data across all asset classes.

This offering extends EquiLend's position as the standard of excellence in the securities finance industry.

DataLend builds on EquiLend's strengths in technology and benefits from its economies of scale. EquiLend, as a regulated trading platform, is a trustworthy repository for sensitive securities finance data.

Our innovative approach enables our clients to have a direct hand in shaping the evolution of the securities finance industry by producing market data that is best suited to serve the needs of industry participants.

The DataLend mission is to be the leading provider of securities finance market data.

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Company description

Securities finance

Markit is the leading provider of securities lending data, tracking short selling and institutional flow across all global markets.

Through its history spanning over 10 years the company has brought transparency to the market, helping beneficial owners and custodians benchmark the effectiveness of their securities lending activities. Our analytics are used by lenders and borrowers to assess rates, availably, squeeze risk and make better informed investment decisions. Content is sourced directly from market participants including prime brokers, custodians, asset managers and hedge funds.

The database covers:
- Over 3 million intraday transactions with $2 trillion on loan
- $15 trillion of securities in the lending programs of over 20,000 institutional funds
- Over 10 years history

The service is available through datafeeds, an API, web applications and an Excel toolkit with integrated datasets including Markit's dividend forecasting and ETP and US dol¬lar Repo data. The securities lending data is available on the major market data platforms including Bloomberg, FactSet, S&P CapitalIQ and Thomson Reuters.

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Company description

SunGard's Astec Analytics offers the most up-to-date rate and volume information on securities lending transactions globally through intraday transactional data. It also provides analytics and benchmarking tools for trading, performance measurement and program management to global financial institutions involved in investment management and securities finance.

Astec Analytics customers are able to see on-screen streamed and analysed data for the previous 48 hours, backed up by online trend analysis of up to seven years.

Astec Analytics new Reporting Services web solution provides securities lending reports specifically designed to allow managers to evaluate their programme, quickly understand its strengths and weaknesses, and benchmark performance against accurate and relevant peer-groups.

Astec Analytics unique intraday data offering allows you to:

- Access continuously updated information on global securities throughout the trading day
- Be alerted to stocks movements and adjust strategies in real-time
- Maximise opportunities and spot securities as they become hot
- Reduce risk by predicting stocks with potential recalls or short squeezes
- Make sure supply/demand channels are available and rebates/fees represent the best execution possible

www.sungard.com/securitiesfinance