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Securities Finance Technology

MOSIUM

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ISLA 2018 Pledge vs 2010 Title Transfer | New SFTR working group formed | Technology update from TCS

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Delta Capita forms SFTR testing working group

Delta Capita has formed an industry working group to mutualise the costs of preparing for the Securities Financing Transactions Regulation (SFTR).

Delta Capita held various workshops involving 50 repo, stock lending and testing experts to agree on a strategy for SFTR testing.

The working group includes prime brokers and agent lenders and is in active discussions with the industry trade associations, service providers and trade repositories.

The first phase of preparations is to create a standardised test pack for user acceptance testing (UAT) covering 227 SFTR trade scenarios and 54 lifecycle events. The next

phase is to deploy the test pack to help coordinate industry-wide testing.

Commenting on the new testing group, David Field, head of the securities finance practice at Delta Capita, said: "The test pack will provide full traceability to the regulatory technical standards (RTS)/implementing technical standards (ITS), European Securities and Markets Authority guidance and industry best practices across repo, buy/sell back, stock borrow/loan and margin lending."

Field added: "It will provide users with the test data, test scripts and expected results they need to conduct their UAT and to test with their counterparts, trading venues, service providers, central counterparties, triparty agents and trade repositories. Consortium

members will be able to benchmark their testing run rates and pass rates to highlight areas of concern for review and remediation."

Joe Channer, chief executive at Delta Capita, added: "One of the lessons the industry has learnt from European Market Infrastructure Regulation is the need for both efficient testing within firms and industry level co-ordinated testing. With complex industry practices such as collateral treatment, life-cycle events and changes to disclosure mechanisms, the industry sees value in a robust, independent testing regime."

The working group got the backing of the International Securities Lending Association's CEO Andy Dyson, who said: "ISLA will support this initiative and work with it wherever we can."



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Broadridge acquires Rockall

Broadridge has acquired Rockall, a technology firm in securities-based lending and collateral management.

The acquisition expands Broadridge's core front-to-back office wealth capabilities, providing securities-based lending and collateral management technology solutions. Rockall provides a cloud-based wealth lending solution, and FASTNET, which automates the evaluation, monitoring and management of securities-based lending.

Additionally, Rockall's offerings include an enterprise banking collateral management solution, and COLLATE, which supports strategies and change levers that drive enhanced credit risk management. Rockall noted that they also provide regulatory reporting, process simplification and capital efficiency.

Michael Alexander, head of North American Wealth and Capital Markets Solutions for Broadridge, said: "The acquisition of Rockall is the most recent example of Broadridge growing our wealth franchise by expanding our core wealth offering for clients. securities-based lending and collateral management are key industry areas in need of innovation, and we look forward to leveraging next-generation technology to provide proven solutions to clients while mutualising key front-, middle-and back-office functions."

Hazeltree introduces new securities finance solution

Hazeltree has introduced Hazeltree Securities Finance Version 7, a portfolio finance solution integrated with new market colour, benchmark and intra-day rates and utilisation trends.

Hazeltree Securities Finance Version 7 offers full visibility of the global securities lending market to benchmark performance, efficiently execute, and optimise returns in one centralised solution.

It also enables hedge funds, asset managers and beneficial owners to identify and monitor treasury market inefficiencies and opportunities.

Meanwhile, it also obtains demonstrable best-execution financing rates, attributes and records financing accruals on a portfolio or strategy basis, and efficiently transfers securities with OneClick between prime brokers, custodians and banks.

Using Hazeltree Securities Finance Version 7, industry participants benefit from insight offered by Hazeltree's leading market data partners.

This includes daily and intra-day market rates and prices as well as intra-day activity displaying recalls and new borrows.

Hazeltree's president and CEO Sameer Shalaby commented: "Traders, portfolio managers and portfolio finance experts need to know

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News Round-Up

securities finance trends as well as have the best available market colour including important intra-day updates."

"Hazeltree Securities Finance Version 7 gives users a more complete, timely picture of activities in the securities finance market to improve their ability to monitor, obtain and demonstrate best-execution."

BNY Mellon selects AcadiaSoft's collateral solution

BNY Mellon has selected AcadiaSoft's end-toend collateral solution to fully outsource its non-cleared margin workflow.

The solution allows clients to access AcadiaSoft's initial margin (IM) risk suite

for margin calculation, reconciliation and messaging as part of BNY Mellon's collateral service offering.

This collaboration, in conjunction with BNY Mellon's existing bilateral margin capabilities, enables clients to meet their obligations under Phases 4 and 5 of the non-cleared margin rules, all in one place.

AcadiaSoft acts as a central repository for calculating IM, enabling market participants to use the utility as a single point of contact through which to conduct their messaging and calculations.

Jonathan Spirgel, global head of liquidity and segregation services at BNY Mellon, said: "Our aim is to streamline the collateral workflow for clients, making it easier for them to meet their regulatory requirements."

He added: "Adding the AcadiaSoft functionality means they'll only need to share their derivatives portfolio with us once daily, thereafter, we'll calculate their IM and instruct the movement of the collateral required accordingly."

AcadiaSoft's CEO Chris Walsh commented: "We're thrilled to be able to offer buyside derivatives market participants access to AcadiaSoft's IM calculation and reconciliation services for the very first time through BNY Mellon."

Bursa Malaysia tests blockchain in securities lending POC

Bursa Malaysia Berhad has started testing the opportunities afforded by blockchain technology in securities borrowing and lending (SBL) via a proof of concept (POC).

Bursa Malaysia suggested that blockchain technology will develop greater transparency and address other operational challenges associated with the SBL market in Malaysia.

The project aims to improve efficiency, speed and capacity in securities lending supply and borrowing demand. Meanwhile, several SBL entities are collaborating with

Bursa Malaysia and FORMS to drive the development of the blockchain-enabled lending pool to suit the industry's specific needs, cost and efficiency pressure.

Those collaborating include Affin Hwang Investment Bank Berhad, CIMB Investment Bank Berhad, Citibank Berhad, Kumpulan Wang Persaraan, and Malacca Securities Sdn Bhd.

It was noted that this initiative is the first POC project designed to explore and address the challenges faced in SBL in Malaysia.

Datuk Muhamad Umar Swift, CEO, Bursa Malaysia, said: "Across different markets, empirical studies show that short selling helps provide additional liquidity and improves price efficiency. The growth potential of Malaysia's SBL market makes it a prime candidate where the power of blockchain technology can create a considerable impact."

"The collaboration also benefits the wider industry through new knowledge, insights and practical experience in harnessing digital innovation to support and drive the growth of the capital market."

OCC's securities lending CCP activity dips in April

OCC's securities lending CCP activity was down 1.6 percent in new loans from April 2018 with 109,141 transactions last month.

Year-to-date stock loan activity decreased 2.3 percent from last year with 447,595 new loan transactions in 2019. The average daily loan value at OCC in April was \$70,839,683,397.61.

Futures cleared by OCC reached 5,545,302 contracts in April, down 24.8 percent from April 2018.

Overall exchange-listed options volume reached 380,420,404 contracts in April, down 4.5 percent from 398,481,297 last year.

Total cleared contract volume in April reached 385,965,706 contracts, a 4.9 percent decline compared to last April.



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OCC's year-to-date average daily cleared contract volume is 19,200,350, down 12.8 percent compared to 2018's recordbreaking result.

SETL delivers on administration plan

SETL, the London-based institutional payment and settlement infrastructure provider using blockchain technology, has completed a corporate restructuring programme.

In March, the previous entity SETL Development, announced that it had appointed Quantuma as its administrators.

The newly-formed SETL has acquired the operating assets, the staff and intellectual property rights of SETL Development. SETL has reached an agreement with all its major clients to continue its support and development activities and expects to push ahead now with a number of core initiatives.

SETL has restructured its balance sheet and simplified its business model. As part of the restructure, SETL will now offer blockchain-based solutions across a broad range of commercial cases in partnership with existing financial service providers and will continue to support infrastructures powered by SETL blockchain.

Under the direction of its CEO, Philippe Morel, who joined in 2018, SETL has restructured its cost-base, refocused its operations in its London and Ipswich development centre and now expects "to deliver robust financial performance for its shareholders".

Sir David Walker, former chairman of Barclays, has been appointed chairman of SETL while Christian Noyer, honorary governor of the Banque de France, has been appointed as lead independent director. The newly restructured firm also welcomes Professor Philip Bond to the board, who previously headed SETL's

cryptography and cybersecurity committee and will now lead those activities from the board. SETL shareholders and executive directors include Anthony Culligan (chief engineer), Peter Randall (president), Nick Pennington (CTO) and Katherine Kennedy (general counsel).

Walker commented: "The objectives of the appointment of Quantuma by the board were twofold. Firstly, to act as a neutral party to represent the interests of all its creditors and stakeholders. Secondly, to help shape the future structure to enable the firm to balance its strategic infrastructure holdings and continue its software development activities."

Chawton picks Northern Trust for brokerage and custody services

Chawton Global Investors has chosen Northern Trust to provide its brokerage and global custody services.

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Chawton will have access to Northern Trust's Integrated Trading Solutions capability, offered through Institutional Brokerage, which delivers a range of services from trade execution to matching and settlement. Integrated Trading Solutions and Institutional Brokerage, part of Northern Trust Capital Markets provide foreign exchange, securities lending and transition management services.

Crawford said: "We selected Northern Trust to support this investment approach and meet our brokerage and dealing requirements primarily because of its innovative technology platform, demonstrable expertise and trusted approach in this area, plus significant global reach."

Guy Gibson, global head of Institutional Brokerage at Northern Trust, said: "By outsourcing the entire trade lifecycle, investment managers like our client can drive cost efficiencies, facilitate regulatory compliance, reduce risk and remain

competitive in today's challenging post-the second Markets in Financial Instrument Directive environment, helping future-proof their strategy for tomorrow."

Q1 2019 sees reduced earnings for major programme providers

Major programme providers have reported reduced earnings in Q1 2019 compared with the same period last year, highlighted by Andy Dyson at the International Securities Lending Association's (ISLA).

Dyson revealed the reasons behind losses include regulatory balance sheet constraints through to the absence of specials activity.

He explained: "While it is hard to judge what is the predominant factor that is depressing revenues, the industry is clearly under some pressure as trading desks and senior management look at budget targets for 2019, that was set against the strong performance seen last year."

When revenues are under pressure, Dyson suggested that firms look to reduce their cost base to maintain their bottom-line performance. Initial signs are not good either with Securities Financing Transactions Regulation (SFTR) and Central Securities Depository Regulation demanding attention and resource. He reflected that there are potential green shots of a real opportunity for the industry that will over time radically change the cost base of the industry.

He explained: "Much of the work we are doing at ISLA around SFTR is driving the market towards the adoption of a standard operating model, built around common data definitions and consistent interpretation of life cycle events. Once this work concludes, it will then be only a potentially small step to effectively codify these best practice parameters in the form of a common domain model (CDM)."



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ISLA 2018 Pledge vs 2010 Title Transfer

In March this year, the International Securities Lending Association (ISLA) published legal opinions related to its new pledge Global Master Securities Lending Agreement (2018 Pledge GMSLA). Given that GMSLA is the most widely-used master agreement for securities lending, and that this is the first new major version in eight years, surprisingly little has been written on the topic.

Recall that under GMSLA 2010, collateral is delivered on condition that "all right, title and interest, shall pass from one party, free from all liens, charges and encumbrances". Thus, security is taken by what is called a Title Transfer Collateral Agreement (TTCA). As the phrase implies, title is passed from one party to the other.

Subject to an obligation to return the collateral at a future date and other provisions such as manufactured payments, the lender counterparty legally owns the security and the borrower collateral provider does not maintain a security interest. In legal terms, transfer of absolute title 'free from all liens, charges and encumbrances' is the strongest form of taking security. In the event of default, the lender legally owns the security and can hence keep it and sell it without the need for litigation.

All very good, but the downside to a TTCA is that borrowers typically over collateralise (due to haircuts) thereby being a net creditor. Depending on the lender's credit quality, inadvertently, the borrower is stung by a Basel III regulatory capital charge as its claim on this excess collateral amount is considered a risk-weighted asset (RWA) on the entity's balance sheet and requires an allocation of capital. Hence, borrowers are currently favouring lenders without RWA—under Basel III, since January 2019, globally systemically important banks must meet a minimum total loss-absorbing capacity of at least 16 percent of RWA.

To use legal terminology, this is the 'mischief and defect' that the new 2018 Pledge Agreement seeks to remedy.

Pledge mechanism

Under the pledge agreement, collateral title is not transferred rather it is pledged to the lender/collateral taker into a segregated account at the custodian. The lender, hence, does not own the securities rather takes possession of them and maintains a security interest. With the 2018 Pledge Agreement's accompanying documentation, including a security agreement and tri-party custodian-borrower-lender agreement, the collateral is effectively segregated from the lender's assets thereby protecting it from being subsumed in the event of the lender's insolvency.

Validation of structure

There has been surprisingly little litigation where the dispute turns on an interpretation of the GMSLA. The last time GMSLA 2010 was scrutinised in the English courts was in a case between Landsbanki and Raiffeisen Zentralbank in 2016 (judgement handed down in 2017). The area of dispute was limited to the narrow point on whether the GMSLA allowed for service by fax (it does).

English courts have traditionally upheld the right of two freely contracting parties to decide the terms of contract. The International Swaps and Derivatives Association's (ISDAs) has been validated on this basis, despite—on the face of it (and as has been argued)—the idea that a master agreement with subsequent confirmations constituting one single agreement thereby allowing netting in the event of default being somewhat contrived.

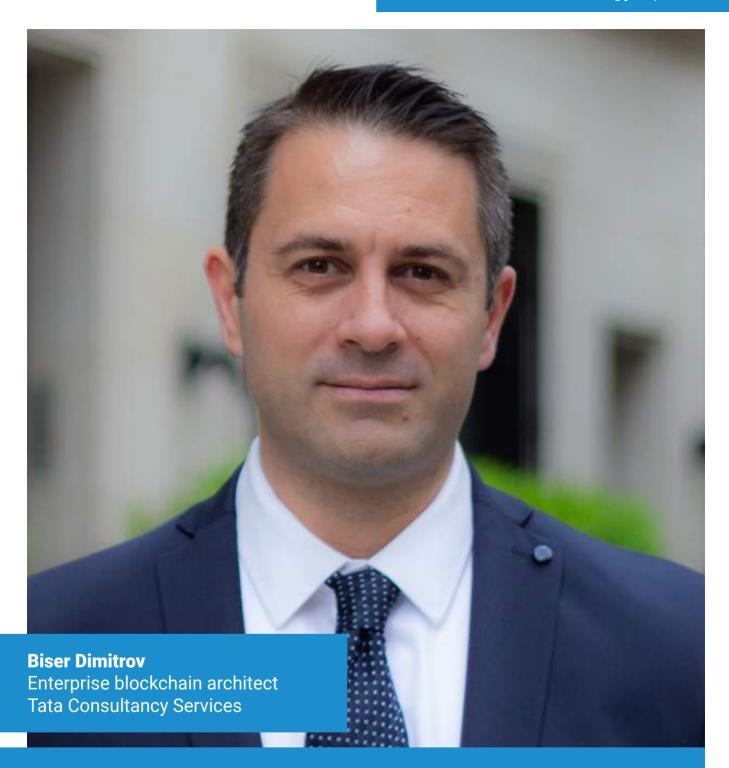
The pledge structure appears to effectively circumvent the regulatory balance sheet hit while not compromising too much on the integrity of security taken. There is no doubt the risk profile is altered due to a pledge—even with associated segregated custodian account agreements—is an inferior form of security than transfer of title.

But in structuring the transaction this way a reasonable balance appears to have been reached.

It remains to be seen whether lenders increase their rates due to an inability to re-use collateral (under TTCA by article 15 of the Securities Financing Transaction Regulation, lenders are allowed to re-use collateral).







Tackling technology head on

How can technology help manage collateral and improve market efficiency? Biser Dimitrov of Tata Consultancy Services explains more

Technology Update

Maddie Saghir reports

What are some of the main challenges with conducting a securities lending transaction?

We can clearly distinguish three main groups of challenges in securities lending transactions. The first group I would call structural, and the challenges there are related to the inherited complexity and multi-level hierarchy of transaction workflows with multiple intermediaries. We also have to deal with all the non-standard process interfaces with multiple entities, and lastly, there is a lot of fragmentation of collateral pools across counterparty and depots.

The second group I would call transactional, and here I would include the inability to track on near-real-time basis, the lack of straight-through process (STP), and timely exception management and enforcing restriction on re-use and re-hypothecation. The transactional inefficiencies result in higher costs and errors requiring manual interventions.

I would classify the third group as regulatory challenges where we have to deal with different levels of account segregation requirements and the difficulties achieving transparency and disclosure at all the levels.

How can technology help clients manage collateral in a securities lending transaction?

Due to the rapid growth of distributed ledger technologies (DLTs), blockchain technologies and the maturing of tokenisation concepts, we saw an opportunity to improve the way non-cash collateral is managed.

We have developed a system based on blockchain and smart contracts, which tokenises the collateral used in the securities transaction. We have replaced the collateral agreement with a set of custodial smart contracts that sit between the borrowers and lenders. Because of the efficient use of tokenised collateral, we have reduced the counterparty risks and complexity, lowered the costs and managed to achieve the following benefits:

- Increased visibility of the available collateral—the securities are made available for other transactions/usage immediately after settlement
- Made the collateral already available in case the borrower defaults, and it can be used to cover the lender's losses
- Overall improved efficiency
- Eliminated dispute management
- · Eliminated the need for reconciliation
- Enabled instant settlement
- · Enhanced regulatory transparency
- Reduced back-end functions, saving costs and enhancing efficiency
- Eliminated manual errors and associated risks, building confidence in the market

What are the opportunities to be had with non-cash collateral and what are the challenges?

Our latest research data shows that there is a general migration from a cash to a non-cash environment, accompanied by a decrease of corporate bonds as non-cash collateral. On the other hand, the non-cash collateral represents at least 60 percent of all transactions globally and as much as 90 percent of European government bond lending. One of the main challenges with non-cash collateral is that its availability depends heavily on the settlement dates. For example, non-cash collateral is not transferred to the lender until the settlement date, which prevents the lender from properly allocating those securities until they are received.



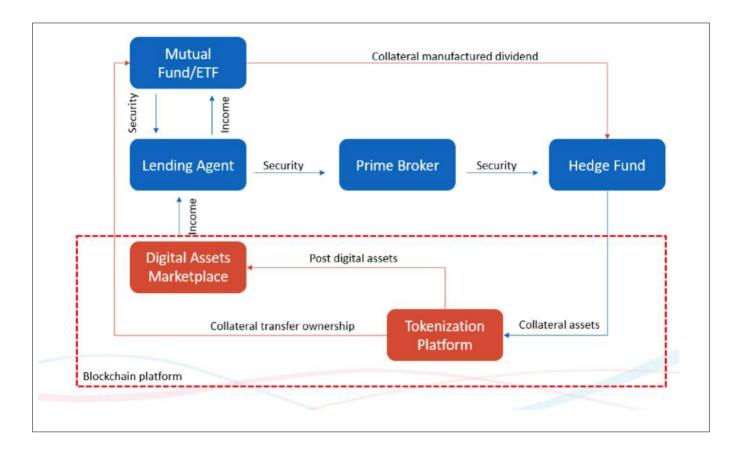
One of the main challenges with non-cash collateral is that its availability depends heavily on the settlement dates



How can technology help improve efficiency?

We have seen great benefits from implementing a DLT solution providing a single source of truth; it eliminates the need for reconciliation as well as plugging in a robust smart-contracts-based layer. Smart contracts are, in essence, software programmes that, once deployed on a blockchain, can store and record the terms of a contractual agreement or any predefined business logic. For our specific case of collateral management, we saw that smart contracts can replicate the existing central counterparties/collateral management/bilateral collateral framework and collateral agreements. We have embedded business and operational rules to enforce the required performance. The benefits we experienced from our DLT solution include:

- Event/rule-based triggering of transaction workflow and automated execution
- Linkage with securities accounts at central securities depository/ depots. Cash accounts are plugged in via Stablecoin frameworks
- A simplified and less hierarchical business process with an optimised interface



- Real-time/near-real-time transaction updates
- Privilege-based transactions and 'view only' access to involved entities

Some in the industry argue that blockchain is a solution looking for a problem, what are your thoughts on this?

We used to hear that a lot in early 2017, but not anymore. We are lucky enough that the CIOs and CTOs we work with are already past that stage and, through numerous proof-of-concept and pilot projects, are well convinced that there are huge benefits of a distributed trust system in an enterprise environment. These new systems are able to provide the disruption and thus the leadership in the financial services that everyone is looking for. The change of the paradigm is covering almost every aspect of the current operations, from governance, rules and oversight, through change in the regulatory frameworks, to enabling privacy, complexity and scalability.

The use cases where blockchain and DLT can be applied successfully are numerous and span over huge industries like telecommunication, aviation, supply chain, trade finance, custody, data storage, know-your-customer (KYC) and identity verification, travel and e-commerce. The important point is to fully understand the use case and estimate the trade-offs when

applying DLT and have a complete understanding of the problem you are trying to solve. At the end of the day, blockchain is not one-solution-fits-all, and for that technology to work it needs a deep understanding of the use case and to be applied by an experienced team.

What projects are Tata Consultancy Services currently working on in the technology space?

TCS is working on multiple blockchain/DLT implementations for the customer across multiple industry verticals. In the banking, financial and insurance services space we have helped our clients implement multiple proofs-of-concept/value, pilots and a few production systems in the areas of corporate actions, KYC, custody, commercial lending, securities lending, mortgage servicing rights transfer, loan origination etc.

We have also helped our clients in aviation with implementations ranging from aircraft maintenance tracking to baggage tracking. Similarly, in healthcare and insurance space we have implemented cold chain, medical drug supply chain counterfeit detection etc. In the renewable energy space, a marque implementation we did is the trading and tracking of renewable energy certificates. SLT

Responses were written by Biser Dimitrov and Chak Kolli, Phd, CTO of the BFSI North America unit.

Technology's ticking clock

Machine learning and AI proved to be popular topics at the second Securities Finance Technology Symposium in St Paul's, London, but some suggest that technology is still not being used to its full advantage



Maddie Saghir and Jenna Lomax report

For the second year running, Securities Lending Times hosted its Securities Finance Technology Symposium in London. Hot topics included: data, machine learning, artificial intelligence (AI), collateral optimisation and management, liquidity platforms, and of course, the Securities Financing Transactions Regulation (SFTR). Technology was at the heart of the conference but the main consensus seemed to be that the securities finance industry is still not utilising technology to its full advantage and is perhaps behind in this area compared to other industries.

Kicking off the conference, speakers discussed data on a panel entitled 'Data - The Fuel for Automation'. David Lewis, senior director at FIS, noted that there is lots of interesting data out there, which gets our attention, brings innovation and drives competition. However, he pointed out that "there is a lot to be done in the basement, we won't get the basics right unless the industry sorts the foundations".

He argued: "We talk about AI and machine learning but until we strengthen the foundations of our basic data, we won't see transformational change."

Securities Finance Technology MPOSUUM



Lewis explained that the SFTR is a "helpful driver as purses are very much more open when you use a regulatory flag. People are investing in getting the regulations right which has the potential to dramatically improve the quality of data held and exchanged between counterparties".

"I would focus on getting the building blocks right; we can play with the fun stuff but we can't get the yield from the kind of automated efficiency that we are capable of without getting things like standard settlement structures right."









The moderator, Andrew Dyson, ISLA CEO, asked the panel if the regulatory agenda gets more focus from a budget perspective. Dyson said: "Is it a constraint that there is not the budget for some of these things?"

In response, Paul Wilson, managing director at IHS Markit, explained: "You can't avoid the regulatory agenda because by definition you have to otherwise you don't have a business. My challenge to all of you is that there has been a huge amount of automation that has occurred but we have tended to automate existing processes."

Wilson continued: "We have not stepped outside of the box and addressed Agency Lending Disclosure (ALD). The industry has spent vast sums on automation but we have missed a trick and ALD has the potential to drive some out of business."

Panellists also discussed how they use data, and Ed Oliver, managing director, product development, eSecLending, said: "eSecLending is a big user of data and it is a core element of what we do. Over the next two years, we are going to become a huge giver of data as well. As users of data, we need to find ways of finding it interesting and relevant for what we need."

In the SFTR Regulation and Reporting panel, Harpreet Bains, executive director, agent lending, global product head, J.P. Morgan cited: "The industry needs to keep the impact of getting SFTR wrong in sharp focus."

The moderator, Val Wotton, managing director of Deriv/SERV, DTCC, asked panellists what lessons can be learned from previous regulation implementation and how those can be applied to SFTR.

Bains highlighted that whilst it's understood that regulators have indicated they are sympathetic to challenges in the new regulatory environment, we can still expect to get severe fines for misreporting.

She said: "We have to be really careful that we are not copying or manufacturing data to make a fully matched report—a matched report is not necessarily an accurate or compliant report."

In another panel on SFTR, Mark Steadman, executive director of European head of product development and change management, DTCC, commented: "History tells us that trade repositories are much better prepared for SFTR than other regulations in the past."

Steadman discussed the difference in preparation to SFTR, compared to the readiness shown with the European Market Infrastructure



Regulation (EMIR), indicating that this time around, the regulators might not be so forgiving as they were under EMIR on day one, as the industry has had a long time to implement SFTR.

Regarding SFTR, John Kernan, senior vice president and head of product development at Regis-TR said he would like to take a slightly more optimistic view concerning SFTR, hoping that national competent authorities (NCAs) are pragmatic and give a six month grace period when reviewing data quality issues.

The moderator, Pierre Khemdoudi, managing director of global head of equities, data and analytics products at IHS Markit, asked panellists what kind of expectations there would be from regulators on day one of SFTR implementation and how their firms were preparing.

Kernan highlighted that Regis-TR had recently put out its user acceptance testing (UAT) environment and indicated the roll out of the trading module is scheduled in London, Luxembourg, Frankfurt and Madrid over the coming weeks.

Craig Laird, executive director of Morgan Stanley said Morgan Stanley's core repo and securities lending build is "progressing well", although there remains a number of open questions concerning

lifecycle events and specific fields that are pending regulatory clarification. He added: "We are learning from our individual data flows. We are also looking at the cross over with the second Markets in Financial Instruments Directive (MiFID II) reporting for ESCB trades and how SFTR fields will be mapped to MiFID II."

Although he indicated the relatively low volume and the complexity involved in switching eligibility between the two regulations should not be underestimated.

Khemdoudi then went on to ask how ready the industry is for SFTR implementation and what areas still need the most improvement.

Seb Malik, head of financial law at Market FinReg, said: "With UAT testing, some issues we are facing [as an industry] are to do with booking of repos. Repos, we quite often find, are booked to securities lending. But nothing will match if you're not booking it correctly."

Khemdoudi then asked what the panellist would advise market participants if they indicated they were not ready for SFTR. Laird emphasised the importance of reference data accuracy and control as well as the significance of a robust control environment and having the right team of people to work with.





Malik mirrored: "Training is key, whoever you use is absolutely fundamental, from your IT team all the way up to management. Make sure everyone understands what is going on."

He added: "Work with the working groups, such as the ISLA and International Capital Market Association."

"We want to make sure we are all working to the same set of industry standards. Across every corner of Europe we want to be working to the same interpretation of fields."

The conference also had a panel on post-trade, in which Rob Frost, global head of product development, Pirum Systems, argued that Distributed ledger technology (DLT) may solve individual problems in post-trade, but it won't replace all current systems in the medium term.

Frost indicated that DLT cannot survive on its own and will need to connect with existing systems, especially when concerning the navigation of regulations such as the Central Securities Depositories Regulation (CSDR) and SFTR.

The moderator, Dan Barnes, editor of The Desk, went on to ask the panellist who would drive the adoption of DLT and similar technologies.

Laurence Marshall, COO at EquiLend, suggested that the adoption of technology is better today than it has been for the last few years.

Marshall said: "With new technology coming out all the time, and more and more data becoming available, there is an important requirement to look at different infrastructures."

Frost explained that new technologies can offer a lot to help avoid fines and solve regulatory reporting issues. He said: "There was a struggle to get adoption of technology in post-trade in the past, but now the back office and front office's obligations are converging, that is what we are seeing at Pirum, anyway."

Marshall cited it was important to understand that "answers are not always found in technology".

He highlighted: "The marketplace is becoming more complex and difficult with a wider variety of solutions available within post-trade, whether it's to help with structures or digitalisation. But things are never as quick as you would like them to be."

Barnes then went on to ask the panellists what were the main pressures that the post-trade sphere was facing in terms of technology.

Dave Grace, head of post-trade for the UK at Capco, said that CSDR will help "harmonise and standardise market practices, while it has already allowed T2S to survive and thrive."

Grace explained: "The more the European Union regulations such as EMIR and CSDR foster a competitive environment, the more competitors there will be entering the game."

He added: "In terms of technology, there will come a point where legacy technology will become horrifically old and unmanageable. Firms will have to decide if they want to continue spending money maintaining them. There are currently a lot of legacy systems holding back-offices together across the industry."

Grace cited that regulation should be used as a catalyst for business model and technology change, specifically regulations such as SFTR and CSDR.

When asked what they would advise firms to prioritise in preparation for the growth of technology, panellists suggested treating coming regulations like CSDR and SFTR as an obligation to duplicate industry requirements.

Frost suggested to leverage connectivity and projects that are already underway, as well as to participate in working groups and make sure that all teams across post-trade lifecycle are aware of the tools that are available to them.

Later in the day, Tammy Phillips, founder and CEO of Asterisk Network Solutions, said: "Our peer to peer network enables beneficial owners or hedge funds to achieve direct market access or access via an agent. We have provided the opportunity for prime brokers to alter their legacy structure to move from a principal in a securities lending transaction to becoming an agent. One of the key reasons we did this was because the market has evolved in such a way that the vast majority of outstanding GC transactions are loss-making transactions for prime brokers."

"The market has continued to recover since the financial crisis and we have adjusted to 100's of new regulations, we have been doing well and there were collective pats on the shoulder... it's often difficult to encourage an organisation to do something new when times are good and revenues are up year on year. However, over the course of the last year, that peak stopped, we have to change the status quo from a year ago today, the market is changing quicker than we are. We need to have the determination and courage to deliver something for the market, not for an individual organisation."

Meanwhile, Matt Wolfe, vice president, business development, OCC, predicted the industry is moving towards a more open network if the proper privacy and protocols are in place. He emphasied that it is challenging because many in the industry have legacy systems, including OCC but they are working on an initiative to replace it. In terms of SFTR, Wolfe explained that the regulation is highlighting the problem that many beneficial owners "are not comfortable having their identity disclosed by their counterparty, which is a big challenge that needs to be addressed."

Turning to technology, he said: "DLT has a lot of opportunities and areas that can be addressed. Standardisation is where everyone on the network agrees on a standard process as well as on the inputs. The results of that agreed upon set of inputs and processes are always going to reach the same results."

Another speaker said that they are pessimistic about DLT: "There are a lot of challenges to implementing it. Think about how much effort there would be in trying to get everyone to that progress. There is also environmental concern around DLT—they are not efficient. The network itself takes up a lot of powerful engines. I think the adoption rate of DLT will be slow."

Towards the end of the panel, Wolfe referred to a quote which suggests that computers are incredibly fast, accurate and stupid, while humans





are incredibly inaccurate, slow and brilliant, and only together can they work really well.

Wolfe highlighted that there is a role for humans to be involved with machine learning, especially when the costs of the results being wrong are high or when data is sparse.

He concluded: "Change is happening faster and we need to take it upon ourselves to do a bit of self-learning [for technology]. I would encourage you all to pursue and investigate these ideas." **SLT**

Hooray for exchange offers

IHS Markit's Sam Pierson discusses how exchange offers reflect the key role that securities lending plays in the plumbing of global financial markets

When Eli Lilly (NYSE:LLY) announced it would spin off the remainder of its stake in Elanco Animal Health (NYSE:ELAN), ears perked up on securities lending desks. Exchange offers reflect the key role that securities lending plays in the plumbing of global financial markets, which we'll discuss in some detail here. This corporate action type is also boon to the securities lending industry itself, driving significant loan balances and fees. One industry veteran recently quipped that an advocacy group ought to be formed to raise awareness of exchange offers in corporate boardrooms.

Elanco Animal Health was spun off from Eli Lilly in September of last year, at which time \$1.5 billion of ELAN shares were floated. On 8 February, seeking to complete the divestiture, Eli Lilly offered their shareholders an opportunity to tender LLY shares in exchange for ELAN shares, the latter offered at a 7 percent discount to incentivise participation. This type of incentive also attracts arbitrageurs who will buy shares with the intention of tendering them. In theory, this position could be hedged by shorting ELAN shares, which would lock in the 7 percent discount. There's a catch. Not all tendered shares will be accepted, so arbs need to estimate the percentage of their tendered shares which will be accepted and hedge those shares with a short position in ELAN. That leaves their position in LLY shares which aren't accepted, so they need to hedge that as well by shorting LLY shares, or "boxing" their position. The hedging could also be affected by put options.

The hedging activity on the part of arbitrageurs causes borrow demand for both securities to increase. The real driver of lending revenue comes from the LLY shares; in forgoing the opportunity to tender shares, lenders can charge a premium to lend their holdings. These shares are referred to as "take no action" or TNA shares and are typically auctioned off to borrowers.

The scale is massive. Fully 44 percent of the outstanding shares of LLY were tendered, reflecting a market value greater than \$57 billion. The corresponding borrow in LLY shares to hedge that position reached \$33 billion, while the ELAN borrow balances reached \$2.7 billion.

In the press release announcing the exchange offer, Eli Lilly noted that the maximum exchange ratio would be 4.5262 ELAN

shares per tendered LLY share, with the aim of exchanging all 293 million shares of ELAN. That ratio suggested that there would be approximately 65 million shares of LLY accepted, or 6 percent of all outstanding shares. For an arbitrageur, that 6 percent reflects the minimum proration or percentage of tendered shares which they can be sure will be accepted.

An estimate of minimum proration could be further refined through analysis of shareholder filings. For example, one could reasonably assume that the Eli Lilly Foundation would not tender their 118 million shares. Similarly, index holders would most likely be precluded from tendering by investment mandate, which accounted for 170 million shares. Removing that 288 million shares would suggest a proration factor closer to 8.5 pecent. Further refinement could have been achieved by estimating the portion of shares which would be tendered out of the 220 million shares not accounted for in public filings, along with consideration of non-index 13F holders. In the event, the actual proration factor was 14 percent. For this analysis, we've used public filings aggregated by IPREO.

To simplify the profit and loss associated with the arbitrage transaction, consider a shareholder who tendered 100 shares. Fourteen shares would have been accepted, for which the shareholder would receive Elan shares at a 7 percent discount. At a price of \$127 per share of LLY that would imply a \$124.5 profit (\$127 x 0.07 x 14), less \$2.5 to borrow the ELAN shares to hedge, so net \$122. For the 86 tendered shares which weren't accepted the borrow cost of 72 cents per share would be paid for the TNA shares, for a total cost of \$62. The difference of \$60 would be the arbitrage profit or \$0.6 for each share of the original LLY holding. That's an idealised version, as it would mean that the proration was perfectly estimated, and both sides of the trade were fully hedged. This example also belies the opportunity for trading the spread between LLY and ELAN in the days ahead of the final exchange ratio being set-calculated using the volume-weighted average prices for the three days ending 6 March.

The preceding example, \$0.72 was used for the LLY per share cost for take no action (TNA) shares. A thorough accounting of the lending revenues associated with TNA shares is challenging,

owing to differing mechanics across the industry for recording these transactions.

For some lenders, these trades are booked as traditional securities lending transactions where the fee or rebate fully captures the payment for borrowed shares. Other lenders run these transactions through a separate system, in some cases a legacy process from a time when securities lending software was unable to process fees of such magnitude. Bearing in mind some reporting inconsistencies, there is enough data to meaningfully estimate the total revenue and how that relates to per-share payments, which is how these special situations are typically priced.

Breaking the LLY transactions into bands by fee and date suggests a weighted average fee to borrow for 12 March at \$0.72 per share, which was paid either just for the 12 or split between the 12 and 13. There was a small block of transactions done at \$1 per share, but that equates to just 13 percent of balances with fees which could reasonably be expected to fully reflect the payment for borrow. It's worth bearing in mind that many shareholders are precluded from lending 100 percent of their holdings of a given stock, so returns across actual portfolios were likely lower. The observation of near parity between arbitrage profits, \$0.6, and returns to lending LLY TNA shares, \$0.72, suggests that both sides of the trade effectively handicapped the proration and resulting profit opportunity.

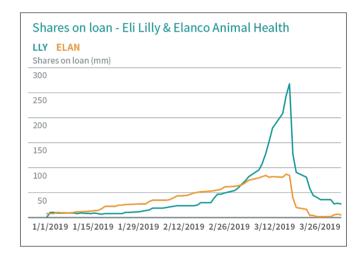
Exchange offers reflect one of the critical roles securities lending plays in capital markets, facilitating a smooth execution for corporate actions. This process also allows shareholders who do not tender to benefit by lending their shares. Eli Lilly paid a Q1 dividend of \$0.65 per share, so revenue from lending TNA shares could have roughly doubled Q1 income. If all 245 million shares on loan for 12 March achieved the observable \$0.72 per share average, that would imply \$177 million in Q1 revenue for LLY (based on the fees reported, LLY Q1 revenues were \$48 million).

In recent years, there has been roughly one exchange offer per year which delivered outsized lending returns.

Most recently Fortive's exchange offer for Altra in September of 2018, preceded by CBS exchanging shares for CBS Outdoor in November 2017 and duelling P&G and Lockheed Martin exchange offers in the fall of 2016. P&G was divesting part of it's holding of COTY, shares of which are currently subject to a tender offer from investor JAB Holding prompting an increase in borrowing ahead of the 15 April deadline and may also result in short-term demand for TNA shares.

The broad market rally year-to-date has created a challenging environment for equity short sellers, which has, in turn, kept a lid on borrow demand, particularly for hard to borrow shares. Against that backdrop corporate action related securities loans have received significant diligence by traders seeking to maximise returns.

Our view is that having the most complete and up to date securities lending dataset is a key component to that process.







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Industry Appointments



Comings and goings at Vermeg, Pirum, MarketAxess and more

Wassel Dammak has re-joined Vermeg as director, product strategy, based in Paris.

Previously, Dammak has held roles at Murex including senior back office consultant and head of presales team.

He first joined Vermeg in 2000, where he served in various roles for seven years before leaving to join Murex.

Justin Thiron, previously head of North Thiron has also served at EquiLend as vice American business development at Pirum, has joined S&P Global Platts as new business director.

Based in New York, Thiron served at Pirum from 2017 to 2018 where he was responsible for new client sales, relationship management and expanding the global product offering to the US and Canada.

president of business development from 2008 to 2016. In addition, he has worked at JPMorgan Chase and Northern Trust.

LCH has appointed Alex Krunic as head of equities, effective May 2019.

Reporting into Bruce Kellaway, global head of RepoClear, collateral and EquityClear, Krunic

Industry Appointments

will be responsible for EquityClear's strategy within LCH and managing relationships with clearing members and trading venues.

Krunic joins LCH from Société Générale, where he served as head of global broker-dealer services sales and relationship management. Previously, Krunic held roles at the National Settlement Depository, Citi and J.P. Morgan.

Michael Baker has joined MarketAxess as CTO, effective immediately.

Reporting to Nick Themelis, Baker will have global responsibility for all software development, which will include strategy, architecture, development and deployment of the trading system.

This includes continuing to build innovative trading solutions, as well as supporting the firm's internal architecture.

Most recently, Baker served as head of enterprise cloud computing at Fidelity Investments where he was responsible for Fidelity's transformation to the cloud.

Themelis commented: "Baker's experience at both investor and market-making firms make him ideally suited to help support our global institutional buy- and sell-side client base. His knowledge gained from his more recent work on cloud computing will be a valuable contribution to MarketAxess' development process."

Commenting on his appointment, Baker said: "I'm thrilled to be joining a firm with such a solid track record of technological innovation. MarketAxess is at the meeting point of the entire fixed income market, supporting the needs of all participants across the trading lifecycle. The technology that MarketAxess is developing is driving greater efficiency and automation in fixed income and I'm looking forward to being a part of that evolution."

Consolo has appointed James Langlois as a Securities Financing Transactions Regulation (SFTR) analyst.

Previously, Langlois served as project manager and business analyst at Santander

from July 2017 to September 2018. Prior to Santander, Langlois served as lead business analyst at MetroBank from February 2016 to May 2017.

He has also held senior roles at Anchura Partners, Capco, Credit Suisse and Deutsche Bank.

Tiffany Roberts has joined GPP, the prime broking, investor services and wealth solutions firm, as head of compliance.

Most recently, Roberts served as a senior compliance officer for three years at a hedge fund.

Her appointment is the latest in GPP's expansion of its leadership team, following the recent hires of Todd Johnson as COO and James Parker as CRO.

GPP is building out its management structure as it enters a new phase of growth after celebrating ten years in operation.

Julian Parker, CEO of GPP, commented: "Tiffany Roberts' appointment signals our ongoing commitment to growth. Since the start of the year, we have added exciting talent and experience to our management team in Roberts, Parker and Johnson, and I look forward to working alongside them through an important phase in GPP's life cycle."

Morgan Stanley has appointed Claire McKinlay Reilly as vice president of securities lending.

Previously, Reilly served as vice president of trading at BNP Paribas from December 2014 to April 2019.

At BNP Paribas, Reilly was responsible for reinvestment for global institutional investor clients, equity and fixed income trading as well as borrower relationship management.

Reilly also served at DataLend within client relationship management and sales.

Morgan Stanley has also appointed Carmen Arguedas as executive director of bank resource management.

Prior to Morgan Stanley, Arguedas held senior roles at Citi and Barclays.

Simon Davies has joined the business development team at Pirum and will be responsible for representing all products.

In particular, Davies will have a special focus on Securities Finance Transactions Regulation (SFTR) and repo.

Davies is experienced in all facets of the securities finance industry and most recently he served as a senior consultant at The Field Effect. Prior to The Field Effect, he was vice president, global equity services at Deutsche Bank.

He has also held roles at Brown Brothers Harriman and Morgan Stanley.

Davies said: "Having worked closely with the industry around managing the extensive impacts new regulation is having on firms, I'm looking forward to supporting clients in leveraging Pirum's award-winning services to help them deal with the challenges ahead".

Phil Morgan, COO at Pirum, commented: "Given the technical requirements and subject matter expertise demanded by the SFTR project, we are excited to secure someone with the breadth and depth of knowledge that Simon Davies has."

Morgan added: "He has an excellent track record of developing strong trusted relationships and I look forward to him continuing to do this with Pirum's clients".

Roland Schoch has resigned from his role as head of collateral trading and collateral management at Bank Julius Baer to pursue new challenges.

Schoch has more than 30 years of experience in the securities lending industry.

Schoch also served at Swiss Bank Corporation, UBS Switzerland and Bank Vontobel.

Jong Frochaux will replace Schoch as head of collateral trading and collateral management with immediate effect. SLT



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