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CASLA's current agenda | Canada's reputation for stability and strength | Opportunities on the horizon

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Euroclear to onboard Deutsche Börse TTP

The Deutsche Börse Group owned Trusted Third Party (TTP) is in the process of becoming a client of Euroclear as a collateral receiver on the triparty platform.

This represents an important step for enabling Euroclear clients to mobilise collateral on the HQLAx platform.

Speaking at the Securities Finance Technology Symposium in London, Guido Stroemer, CEO of HQLAx, explained that a critical component of the HQLA^x -Deutsche Börse Group joint operating model is the TTP entity, which acts as an interface between the HQLA^x digital collateral registry and existing securities settlement infrastructures. The immediate goal is for the TTP to become a collateral

receiver at each of the major triparty real value but also for the onboarding process agents in Europe.

Stroemer explained: "The HQLAX value proposition is to enable improved collateral mobility across multiple siloed pools of collateral, so in order for HQLAx to deliver on its value proposition, we naturally need the TTP to become onboarded as a collateral receiver with each of these collateral pools."

Speaking on the panel, Stroemer highlighted that it is important to create a scenario where banks can easily onboard onto a new platform.

The banks that helped design the HQLAX platform clearly outlined that a critically important pre-requisite for early market adoption is not only for the platform to deliver to be relatively easy.

He noted that the initial rollout of the platform is quite basic, and this is by design. The goal was to keep the minimal viable product as basic as possible, while still delivering value.

He commented: "In terms of timelines, our simulation environment will be up and running for clients to use by the end of next month, and we expect to execute a series of live transactions later in the year."

"We are making some real progress in this space, and in my view, game-changing progress in laying the foundation to fuel market-wide adoption of the HQLAX operating model."



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Broadridge's Jerry Friedhoff emerging technologies and changes in the securities lending market and more

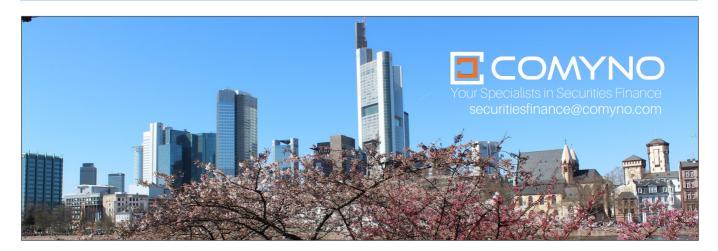
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Industry Appointments

discusses All the latest securities lending comings and regulatory goings at DataLend, IHS Markit, Wematch

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News Round-Up



EquiLend opens Tokyo office

EquiLend has opened an office in Tokyo to service its expanding client base in Japan and will be adding new positions in Tokyo in the short term.

Yuka Hasumi, vice president of sales at EquiLend, has relocated from Hong Kong to the new Tokyo office.

The new office allows EquiLend to extend its on-the-ground support, platform training and local expertise to its clients around the globe.

EquiLend's CEO, Brian Lamb, said: "Japan, which has the biggest securities finance market in the Asia Pacific region, has long been a key market for EquiLend."

He added: "Our presence in Tokyo allows us to provide unparalleled service to our custody bank, prime broker and e-broker clients in Japan and to continue growing our client base in the market. We look forward to working more closely than ever with our valued Japanese clients."

Banca IMI Securities fined over \$2 million for bid-rigging

Banca IMI Securities has pleaded guilty to an antitrust charge and was sentenced to pay a criminal fine in excess of \$2 million for its involvement in bid-rigging for certain financial instruments.

Banca IMI stated that from March 2012 until at least August 2014, it conspired with other institutions and individuals to submit rigged bids to borrow pre-release American Depository Receipts (ADRs).

Banca IMI pleaded guilty to conspiring to borrow pre-release ADRs from US depository banks at artificially suppressed rates.

During the conspiracy, a US depository bank began using an auction-style process for pre-release ADRs and invited Banca IMI and other broker-dealers to submit competitive bids for rates to borrow ADRs. In response, Banca IMI and its co-conspirators intensified its coordination in an effort to increase artificially their profits under the auction-style process.

On at least 30 occasions, Banca IMI reached an agreement with one or more co-conspirators as to the bids they would submit to US depository banks. Worldwide, thousands of publicly traded companies list its shares of common stock only on foreign stock exchanges, but most US investors are unable to purchase or sell such foreign shares. The US Securities and Exchange Commission, however, permits four

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News Round-Up

US depository banks to create ADRs, which represent foreign ordinary shares and can be traded in the US. Through the purchase and sale of ADRs, US investors are able to gain exposure to companies whose common stock is only listed on foreign stock exchanges.

Makan Delrahim, assistant attorney general at the Justice Department's Antitrust Division, said: "This charge represents the commitment of the Department of Justice and its law enforcement partners to uncovering and prosecuting cheaters who corrupt our financial and capital markets. Complex financial markets are not beyond the reach of the antitrust laws. The Antitrust Division will aggressively pursue criminals in technically complicated markets, including those that some wrongly presume may be beyond detection or the reach of antitrust enforcement."

Robert Johnson, assistant director of the FBI's Criminal Investigative Division, commented:

"The FBI is committed to rooting out corruption and fraud against the US wherever it occurs."

BlackRock acquires eFront

BlackRock has completed the acquisition of eFront, an end-to-end alternative investment management software and solutions provider.

The combination of eFront with Aladdin will set a new standard in investment and risk management technology. Additionally, it will expand Aladdin's alternative capabilities and provide a whole-portfolio technology solution to clients.

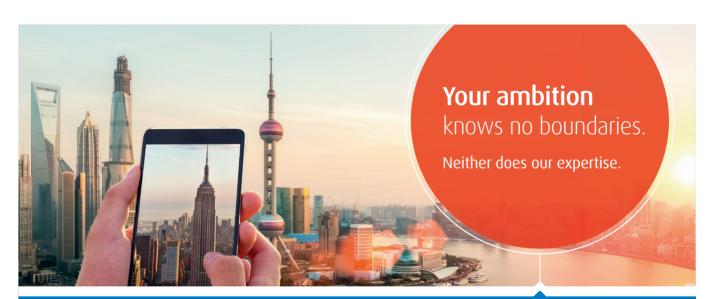
Rob Goldstein, COO of BlackRock, said: "As more investors incorporate alternatives into their portfolios, the ability to seamlessly manage portfolios across public and private asset classes on a single platform is critical. eFront will extend Aladdin's end-to-end

processing capabilities in alternative asset classes, enabling clients to get an enterprise view of their portfolio."

Tarek Chouman, CEO of eFront, said: "Aladdin has long been recognised as the best-in-class unified investment and risk management technology platform in the industry. Adopting [BlackRock's] user-provider model and integrating with Aladdin means that our investor, fund administrator and fund manager clients will benefit from constantly elevated standards and innovative product features."

Repos becoming the bedrock of market capital liquidity

Repos are the most widely and commonly used securities finance transactions and are fast becoming the bedrock of market capital liquidity, according to one speaker during a presentation at Vermeg's Annual Collateral Management Conference.



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News Round-Up

The speaker explained: "For those who remember the 'good old days', repos in conjunction with collateral management agreement where somewhat viewed as a backoffice function, an afterthought it many ways."

"However, the lowly securities based lending transaction is now viewed as an integral component of the banking industry."

It was highlighted that securities based lending transactions are "fundamental to the provision of the untapped global inventory of high-grade collateral for smaller institutions and buy-side clients. They are also simultaneously providing sell-side institutions with further profitable clients and revenue streams."

Meanwhile, delegates took part in a poll which asked if they think there is still an industrywide issue in relation to collateral certainty. In response, some 48 percent said yes, some 33

percent said no, and some 21 percent said that globally so that manual intervention is able to they weren't sure.

Discussing challenges, the speaker noted that proving efficiency in securities based lending collateral management, as always, provides a challenging task.

The speaker explained: "One of the biggest obstacles for this is IT complexity in a form of product silos, multiple systems, data touch points and a lack of technical integration. Significant initiatives in this space include a move towards single platform cross-margin product systems and electronic messaging."

On speaker concluded that securities based lending margining would benefit greatly from real-time integration to upstream systems and data sources. They said: "There is now a real need for automation in reconciliation. Firms need to be gifted with technological flexibility to support a wide variety of methodology

re-run calculations on a real-time basis."

Lendingblock: Lending supply and borrowing demand remains strong

Lending supply and borrowing demand not only remains strong but is growing among the top crypto hedge funds, exchanges, market makers and trading houses around the world, according to a study by Lendingblock.

More than 50 percent of institutions surveyed said demand for borrowing is expected to be higher than lending, while 82 percent of firms expect to be taking at least one loan out at any given time, and of those, 30 percent expect to have more than five.

Some 50 percent of institutional participants expect to be lending or borrowing between \$1 million and \$5 million equivalent at any point, while 25 percent of respondents expect to be

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lending or borrowing between \$5 million and \$10 million and 25 percent above \$10 million.

LendingBlock said the opinions are likely correlated to calmer markets and a less bearish momentum that is likely linked to what seems to be a positive broader market outlook. Bitcoin and Ethereum remain the top two digital assets that clients are interested in borrowing and lending.

The study also found there is substantial interest to increase the use of stable coins entering into the lending market, specifically US-backed stable coins that institutions can use for both principal and collateral.

A further 64 percent of respondents said they want to use stable coins as collateral when they enter into a borrow. The report examined the borrowing and lending needs of leading crypto institutions between January and April 2019.

Steve Swain, CEO of Lendingblock, explained: "When our clients borrow, they are borrowing for very specific purposes, such as to access working capital, to hedge a portfolio or to execute a short sell. When our clients lend, they are happy to lend out multiple loans for longer periods of time as their goal is to generate yield on their passive investments."

Kelly Pettersen of Lendingblock, said: "Firms are now relying on digital assets for shortterm capital needs versus a borrow to short. This data tells us that the trend is shifting to reflect a reliance on and belief in crypto to support businesses everyday operations, rather than betting in the short term that the asset drops in value."

Better Finance raises concerns over compliance issues

Better Finance has raised "serious concerns" with regards to exchange-traded fund manager's compliance with the rule from the European Securities and Markets Authority (ESMA) that 100 percent of the net income from securities lending must be returned to the funds.

A research paper by Better Finance suggested that a significant part of the net income derived from securities lending is not returned to fund investors as it should be. It found that one manager's returns were 95 percent of the revenues to their fund, meaning they had designated just 5 percent to cover for the operational costs incurred. Other managers, however, have misappropriated up to ten times that amount (49 percent).

Better Finance said it urges national competent authorities and ESMA to investigate how operational costs incurred by securities lending can vary so dramaticallyfrom 5 percent to 49 percent of revenuesfrom one fund manager to the other.



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News Round-Up

Brexit to negatively affect collateral management harmonisation

Over half, 52 percent, of those surveyed thought of London being outside the EU will have a negative impact on collateral management harmonisation, according to attendees at Vermeg's Annual Collateral Management Conference.

The survey found that 15 percent of delegates said they didn't feel there would be a negative impact, while 33 percent said that they were unsure.

Discussing harmonisation, one speaker said that the main purpose of Eurosystem collateral management system (ECMS) is to harmonise and create cost savings. ECMS will see the national central banks move their 19 different national collateral management systems (CMS) into a single collateral management system, which will

cover the whole of Europe. The panellist banks of the 19 CMSs, it will not cause a explained that a single system for monetary policy will save costs.

Discussing the deadline of the ECMS implementation, the moderator asked that with the deadline to comply in 2022, how far are firms in terms of implementation and what do counterparties need to do to be ready?

One panellist suggested: "In order to have this single environment of securities, cash and collateral on the euro system bill we need first consolidate our securities."

The moderator also asked if panellists thought the deadline will be pushed back. One speaker said: "The CSDs are accepting this challenging calendar but for the rest of the industry it is not so easy as some do not yet know what ECMS is. ECMS is targeting the monetary policy of the central banks of the Eurosystem and will only heavily impact

direct impact for non-Euro banks."

TradeChannel partners with REGIS-TR on SFTR

TradeChannel has created a Securities Financing Transactions Regulation (SFTR) solution that is ready for early testing against REGIS-TR.

TradeChannel has expanded its partnership with REGIS-TR to provide the end-to-end reporting solution for SFTR requirements.

Mikkel Mördrup, TradeChannel's CEO, said: "We are happy to collaborate with REGIS-TR in providing a solution for SFTR."

Irene Mermigidis, managing director, REGIS-TR, cited: "TradeChannel is a long-standing partner since the early days of the entry into force of the EMIR reporting requirements." SLT

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Data: innovation vs human rights

The current milieu is seeing a tectonic shift in relationships—from citizens and state to international relations. Data captured or generated afresh due to technology is the cause.

Take the impending UK decision on whether to allow the Chinese firm Huawei to be involved in rolling out the UK's next-generation 5G network. The decision is causing a diplomatic spat between the UK and its relationship both with China and the US is centered on the security of data.

Sticking with politics, as Europe enters the European Elections, populist right-wing parties are set to hugely increase their representation in the European Parliament. A major factor in the breakdown of traditional parties is the advent of social media and data. Citizens lifestyles, inclinations, demographics, habits and other personal data can (and are) be churned through algorithms to target specific political messages that are likely to resonate with the individual. There are huge open questions to the extent that Facebook data analysis influenced the UK's Brexit vote.

Benefits of data-driven technology

There is no dispute that data-driven technology and the internet of things is a huge boon to convenience, productivity and comfort. As someone who travels around Europe a lot, applications such as Google Maps, Uber, AirBnB and flight booking apps are indispensable.

Google is currently building a smart internet city on a previously disused 12-acre quayside side in Toronto. It promises to deliver a unique twenty-first century living experience in a digitised, smart sensor Valhalla. Who can deny that the smart city will be the next generation in comfort, convenience and efficiency?

But at what cost?

We learned from the 2014 Edward Snowden disclosures, that the UK and US was engaged in mass drag-net surveillance of all internet data by tapping the transatlantic cables. Every email, SMS, saucy message, website visited and picture taken is stored and analysed by the government. George Orwell was only 30 years out.

When I raise these concerns there is a lack of appreciation of the ramifications of unchecked data creation and analysis. I used to be mocked for suggesting that the day was not far away when we would be obliged to be microchipped with the state able to quite literally track our every movement.

Alarmist sensationalism? Except that in November last year it was reported that certain employers in Britain were doing exactly this—microchipping their employees in Sweden and London on a 'voluntary' basis. The chips cost £150 and are the mere size of a rice grain.

The right to privacy and regulation

Article 8 of the European Convention on Human Rights states: "Everyone has the right to respect for his private and family life, his home and his correspondence." It is—by definition—a fundamental Human Right for which no justification is required. There is a growing legislative and regulatory fightback against untrammelled, dragnet data gathering and analysis.

Last week the UK Supreme Court handed down a landmark judgement in which it brought the Investigatory Powers Tribunal into the ambit of Judicial Review, thereby allowing its decisions to be scrutinised and challenged.

This ruling paves the way for the government's secret dragnet surveillance programmes to be scrutinised by the courts in a meaningful way.

Last year also saw the application of the General Data Protection Regulation (GDPR), which provides a robust legal framework for establishing rights of data subjects and subjecting data processors to detailed regulation. GDPR is set to be mimicked to varying degrees around the globe and, for taking the lead, the European Commission should rightly be praised.

Projects such as Google's Toronto smart city will gather an alarming amount of data on individuals' lives. Without robust legislation, our lives, our innermost sensitivities and personal secrets will be commoditised and sold to the highest bidder.

Regulation of technology giants is around the corner. The trick will be to encourage innovation that brings huge benefits to citizens' lives while taming aggressive commercialisation of individuals' data.



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Shaping the future

Donato D'Eramo of RBC I&TS, and president of CASLA, shares his insights on how participants can be best-positioned to extract value in an environment of rapid change

Maximising value from within

Adding value to a securities lending portfolio and improving efficiency are increasingly important and can take many forms. For example, structured lending on a term basis, collateral flexibility where permissible, corporate action optimisation and ensuring effective lending within restrictive security conditions. Given the wide range of options and strategies on the table, the first line of defence in optimising a lending portfolio is setting the right programme parameters.

In the search for efficiency, there are many avenues to pursue. Across the industry, the trend of growing fixed-income balances continues

to present opportunities to beneficial owners. At the same time as the demand for high-quality liquid assets increases due to regulated capital ratio rules such as the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR), beneficial owners can potentially capture additional alpha by lending for defined periods, at premium fees. Furthermore, term lending of assets allows full rights of substitution without impacting investment activity.

These trends go hand-in-hand with collateral flexibility, an essential element for this type of structured transaction. Higher willingness to accept collateral, such as equity against term loans, widens the scope of demand from borrowers. Collateral flexibility is not only important

for term lending but may also lead to higher loan balances, imperative in capturing value in today's environment.

A successful securities lending programme is one that is built to optimise with appropriate risk parameters set by the beneficial owner in consultation with the agent lender.

The role of data in empowering beneficial owners

Today, data-enabled tools are helping to fulfil regulatory requirements, but we're also increasingly using data to support strategic decision-making, as it allows us to draw on much deeper insights. We have certainly come a long way in the areas of data consolidation and transparency capabilities since the pre-crisis period.

Beneficial owners who are looking to their lending programmes as a means to both offset cost and extract alpha will need to ensure their agent lender can provide the data that is required to help make those strategic decisions. Data enablement can also deliver tangible insights into the cause-and-effect relationship illuminating how lending revenues are achieved, especially in an intrinsic value-only lending relationship.

Emerging markets on the rise

I see emerging markets as another area of opportunity in the coming months, whether that is expanding the range of assets to lend, or looking towards new markets as additional borrowing avenues.

Emerging-market equities were a key driver of lending revenue last year, and recent research from the World Federation of Exchanges has indicated that securities lending capability was the driving force behind an increase in portfolio investment in these markets specifically. For this year and beyond, I expect that leveraging emerging markets will continue.

European regulations on the horizon

Upcoming regulations within the EU are another focus for change, as the European Commission formalised its path for the adoption of the Securities Financing Transactions Regulation (SFTR) in December 2018. The regulations aim to increase transparency and reduce the risks associated with entering collateral arrangements. Article 4 of SFTR imposes significant changes, both in terms of risk and cost, on firms that will be required to comply with the new reporting regime. These changes coincide with other material regulatory changes required for firms, and their clients and counterparts to comply with, including the Central Securities Depository Regulation.

The implementation of SFTR, set for Q2 2020, will give rise to technology infrastructure development across all participants, which may be met in-house, or vendor-sourced. SFTR vendors will have a significant responsibility to ensure interoperability within the SFTR ecosystem.

D'Eramo cautions that participants cannot assume their counterparts and service providers will have SFTR solutions in place. As a result, participants who intend to comply should have an implementation strategy in place. On balance, the implementation challenges presented by SFTR are offset by the SFTR's objective to promote a more granular level of transparency across the securities lending industry.

Navigating a landscape of continuous change

There are also unknowns. Specifically, the potential impact of the global economy and the ever-changing geopolitical landscape.

Taking advantage of data insights and new technology will help to expedite strategic decision-making which will, in turn, further optimise performance and mitigate risk. Here, an agent lender's expertise can help guide and inform clients in order to best utilise opportunities within the securities lending market.

Key insights

- Diverse themes are shaping the direction of the securities lending industry, including data enablement, proposed new European Commission regulations, and the rise of emerging markets. This means the consultancy component role of an agent lender will be increasingly important in guiding clients in realising opportunities.
- The continuing rise in the importance of data enablement as a mechanism to both offset cost and extract alpha means clients must take care to ensure agent lenders can supply the data required for strategic decision-making.
- The coming implementation of new regulations, such as the SFTR, against a backdrop of current regulatory evolution requiring material change by firms, suggests firms will need to have regulatory implementation plans at the ready when required.







Changes for Canada

CASLA conference chair Mary Jane Schuessler explains what the association will be focusing on this year and discusses the main market drivers for the rest of the year

At CASLA, what is your main focus this year? What initiatives are you currently working on?

The Canadian Securities Lending Association's (CASLA) main objective is to promote the long-term viability of the Canadian securities lending market through enhancing the public's understanding of securities lending and the role it plays in Canada's financial markets.

Current initiatives include working with regulators to level the playing field for the Canadian mutual fund space allowing equities as collateral ,similar to insurance companies and pension plans. CASLA continues to work closely with its board members in order to table regulatory changes and remains engaged with other global industry associations where international regulations may impact Canadian participants.

What market drivers in Canada should people be aware of this year?

Regulatory pressures have and will continue to play a significant role in the securities lending landscape. Canada has seen some instrumental changes driving different sources of demand and supply over the past few years.

The mutual fund space introduced new rules commencing January this year allowing for a much broader investment space utilising alternative strategies, which in turn will increase the demand side.

The Investment Industry Regulatory Organization of Canada has laid out a framework for fully paid lending programmes in Canada which will impact the supply side of the equation.



What are the biggest challenges Canada's securities finance market is currently facing?

As you look across the value chain of participants in the securities finance space challenges would not be in short supply. The increased costs of funds due to regulatory ratios continue to work its way through all of the Canadian banks. The specials market in Canada has been heavily dominated by the cannabis industry creating and introducing some sector reliance and regulations like the Securities Financing Transaction Regulation (SFTR), which has major infrastructure changes due to the vast reporting it entails.

What can delegates expect from the conference this year? What will the main topics be?

This year has been an action-packed year for the Canadian securities finance industry with increased regulatory impacts to new entrants in the liquid alternatives space to new supply through the introduction of fully paid lending and of course cannabis.

In short, it is going to be hard to fit all relevant topics in one day. There is a robust line-up of panellists and speakers with topics including hearing from the buy side, regulatory updates/hurdles with a focus on funding as well as the technology and a leaders panel looking at what the future holds. The speaker line up will not disappoint, with a macroeconomist speaking, a cannabis economist and the Right Honourable Stephen Harper discussing his new book; Right Here Right Now.

What are you most looking forward to about the conference?

This is actually a very difficult question; the day offers many facets and making sure there is something for everyone is what I enjoy most about helping to put this conference together.

For me personally, I truly enjoy talking to the guest speakers and always gain insights and learn so much from them. This is the first year we are introducing a session on diversity through our partnership with the Women in Securities Finance group, which is another part of the day I am very excited about and proud to be a part of. **SLT**







Canadian confidence

Rob Ferguson of CIBC Mellon discusses Canada's securities lending market and how it continues to enjoy a well-deserved reputation for stability and strength and why the future remains very bright

With the Canadian Securities Lending Association (CASLA) hosting its annual conference in Toronto at the end of May, we are pleased to see interested stakeholders global and local coming together to discuss the latest trends in our market. In many ways, "the more things change, the more they stay the same"; Canada and its securities lending market continue to enjoy a well-deserved reputation for stability and strength, built on a foundation of experienced market participants, proven infrastructure, and a prudential regulatory regime that works in collaboration with market participants. These longstanding hallmarks of Canada's financial markets continue to drive value for market participants, even amid the rise of technology and market changes that are helping drive efficiency and results across the securities lending investment cycle.

Collateral is a central area of focus across the beneficial owner, borrower and agent lender communities. The demand for high-quality liquid assets (HQLAs) to backstop trading activities means that Canada's ongoing status as one of the few nations with a triple-A rating fosters a deep appetite for Canadian federal debt, as well as other high-quality instruments such as provincial bonds. There is an ongoing demand for collateral transformation activities as market participants seek to meet the rising needs of their stakeholders and counterparties. In keeping with this, growing sophistication among beneficial owners seeking to generate additional alpha has paved the way for expanding collateral flexibility—a key differentiator between owners seeking returns.

The Canadian securities lending market historically has almost entirely comprised sovereign debt non-cash collateral, but as market participants and regulators have evolved their positions and thinking over time, collateral usage has diversified across a greater spectrum of sovereign debt, equities and cash. Today the markets demonstrate a healthy appetite for equity collateral, a growing need for corporate bond collateral and demand for more global sovereign fixed income options. In one notable trend, many collateral flexibility conversations have turned to currency rather than asset class, and we are seeing expansion from collateralisation using traditional US Dollar, Euro and Canadian Dollar to include the British Pound, Japanese Yen and other global currencies.

We are pleased to say that beneficial owners seem more engaged than ever; working in close collaboration with their securities lending providers to identify new incremental revenue opportunities and other opportunities to unlock value from their securities lending programmes. The engagement goes hand-in-hand with rising inhouse expertise and comfort around securities lending activities, with beneficial owners participating actively in discussions regarding opportunities to fine-tune their programmes or to take on more complex opportunities as they arise.

Increased engagement and sophistication among beneficial owners also brings a renewed appetite for robust reporting and collaborative communication to meet the needs of boards and other stakeholders

Canada Update

for confidence and risk oversight. This is a key area of focus as we support beneficial owners in their move up the sophistication spectrum; today we are providing tailored materials, relevant briefings and insights to help beneficial owner stakeholders deliver value for their organisations and educate their internal stakeholders. Certainly, at the aforementioned CASLA conference, we will see a strong mix of agent lenders, borrowers, owners and perhaps even a few representatives from Canada's regulatory bodies—who come to join the conversation, learn more about our industry and engage with participants in a collaborative manner.

The future of Canada's securities lending market remains very bright, and I think participants across the market continue to engage effectively with clients, regulators and one another

As with many global jurisdictions, we continue to see evolution in the Canadian regulatory environment. Canada has historically been a highly complex regulatory environment, with 13 provincial and territorial securities regulators. In recent years, however, the federal government and several provincial stakeholders have undertaken efforts to create a common securities regulator across Canada, the Cooperative Capital Markets Regulatory System. This initiative by the governments of British Columbia, New Brunswick, Ontario, Prince Edward Island, Saskatchewan, Yukon, Canada's federal government, and—as of April 2019—Nova Scotia, has the stated goal of helping protect investors, enhancing Canada's financial services sector, supporting efficient capital markets and strengthening the management of systemic risk.

Collateral is at the heart of one regulatory focus area, as current regulations—Canada's NI 81-102—do not allow mutual funds to take equities as collateral, nor can mutual funds go out more than three months on the reinvestment curve. Both of these provisions have the

potential to disadvantage mutual funds versus pension plan sponsors and insurance companies, which are not subject to the same restrictions. This is an area where the Canadian Securities Lending Association has been engaging with regulators to seek a more level playing field for mutual fund companies.

Another key regulatory development in Canada is the advent of liquid alternatives offerings with the liberalisation of regulatory controls to open up alternative asset classes (such as real estate, infrastructure, private equity, private debt and hedge funds) to a broader spectrum of investors—bringing in new participants as well as new providers into the market. As retail investors gain knowledge and confidence, there is potential for associated growth in the securities finance market over the years ahead. Key themes in the liquid alternatives segment include collateral diversification and collateral expansion, as fund providers move to meet demand. This collaborative engagement between market participants, regulators and other stakeholders is yet another example of the strong relationships that underpin Canada's marketplace.

On the equity front, Canadian equities have remained steady from 2018 as we continue to see demand from investors looking to shape their exposures to Canada's evolving healthcare sector. We have also seen some recent pickup in merger and acquisition activity in the resource sector—a key driver given the relative portion of Canada's economy linked to natural resources.

In the securities lending marketplace, just as in many other segments in the financial services sector, technology innovation continues to be a key focus area. Current efforts in the market include a heavy focus on driving efficiencies, including expanded auto-borrow capabilities that free traders from certain manual processes and enable them to focus on value-add alpha generation opportunities, activities and strategies. As in so many aspects of our business, we see automation as a "good jobs" strategy: the tasks most suited to automation are typically the most straightforward, predictable and repetitive tasks. For example, operational technologies such as auto-return features and contract compare help streamline processes and further mitigate the potential for errors while freeing traders to focus on client service and more complex activities where they can deliver value and impact for beneficial owners and borrowers.

This is perhaps the most important change and trend in our industry here in Canada—even as we drive new technologies, innovations and efficiencies through our business to benefit our clients, companies and stakeholders, the focus remains on the positive difference that talented people can make in delivering results.

Overall, the future of Canada's securities lending market remains very bright, and I think participants across the market continue to engage effectively with clients, regulators and one another. It's a great time for Canada's market and I am looking forward to what lies ahead for Canada.





The finest resources, assembled.

A unique perspective on your securities finance strategy.



MARKETS TRADING

FINANCING COLLATERAL LIQUIDITY





The sophisticated market

Industry participants discuss current trends in Canada's securities lending market as well as opportunities on the horizon over the next 12 months

What trends are you currently seeing in Canada's securities lending market?

Alexa Lemstra: It's good to be a Canadian. According to DataLend, Q1 2019 revenue is up 29.5 percent over Q1 2018, and that growth is driven almost exclusively by cannabis stocks in the health care sector.

Based on their strong home market foundations, the Canadian banks have invested in and developed beyond their Canadian presence, expanding to US and European markets to become truly global players. There is a strong drive of innovation and expansion to provide solutions for their clients and a "get it done" attitude. Strategic investment in collateral management, settlement efficiency and automation are paramount. Solutions for legacy systems still mandate considerable attention as the participants grow and the business expands.

Jarrod Polseno: We are now seeing some of the trends from the US taking hold in the Canadian securities lending market. A broader take-up of technology, as well as expansion in the appetite for a wider variety of collateral types, are primary examples. We are now in a position to price our entire universe of securities and both disseminate our book through next-generation trading (NGT) and consume lists with a bid to help automate flows outside of the general collateral sphere. We see Canadian borrowers beginning to have interest in facing us electronically to a greater extent and to realise the operational benefits of it. We also see increased interest in non-cash collateral—as the prime brokers look to be more efficient with their collateral, they will look to pledge a wider array, which is consistent with their peers around the globe.

Lisa Tomada: Canada is known for having a strong body of very sophisticated market participants, such as our large and mid-size pension asset managers. We are certainly seeing beneficial owners move up the sophistication curve in terms of their strategies as well as their need for advanced reporting to deliver confidence to their underlying stakeholders.

In addition, we're seeing an ongoing shift to implement an array of technology enhancements. For example, auto-return features and contract compare technologies can enable more efficient processes, as well as help, reduce risks by mitigating the potential for manual processing errors. The benefits also extend to client service, as these new tools help free up our team to focus on client service and more complex activities in support of clients, in turn delivering a stronger service experience for borrowers and owners in our programme.

Dave Sedman: A number of trends emerged over the past year, with one of the major ones being an increase in demand for fixed income securities, specifically high-quality liquid assets (HQLAs). Canada, with its strong credit rating, has many assets that qualify for HQLA which have benefitted from this demand. In addition to the increased xdemand for HQLA, there is interest in these assets in the term space. Whether it is one-month rolling maturity structures or longer-dated fixed and extendible structured trades, borrowers are looking to utilise their balance sheets in more effective ways. Along with the interest for HQLA, there is a continuous need from borrowers to pledge a wider array of non-cash collateral including equities and investment grade corporate bonds as borrowers look to better manage their long portfolios. Beneficial owners who can accept a wider variety of collateral that fits within their risk parameters will be able to participate in a larger number of trades.

In addition, the trend continues towards less general collateral, short term borrowing, while interest remains for high demand specials. While the specials continue to be very name specific, the Canadian specials market benefitted from continued directional trading in the speciality pharmaceutical sector, for example, cannabis stocks. Short interest in this sector will continue to fluctuate with further merger and acquisition activity forecasted as the industry matures and consolidation takes hold. Continued volatility in global commodity prices is also expected, furthering directional short interest across the oil and mining sectors.

One final continuing trend is the steady interest in dividend yield enhancement trades, coupled with the dividend reinvestment plan

We are certainly seeing beneficial owners move up the sophistication curve in terms of their strategies

Lisa TomadaVice president, global securities lending
CIBC Mellon



(DRIP) trade. There are opportunities to put liquidity into the market around the events.

Kyle Kolasingh: The Canadian securities lending environment is experiencing rapid change on multiple fronts—from evolving collateral management practices to accelerating technology enablement. In addition, regulation is driving increased demand for financing and balance sheet optimisation and, in turn, HQLA. This latter trend stands out in today's securities lending market where subdued levels of specials activity (for example, intrinsic value opportunities) continued into 2019. As global financial institutions look to bolster liquidity requirements, the demand for HQLA and, specifically, level-one assets on various term structures, is particularly strong. Coupled with beneficial owners' growing awareness of the alpha-generating potential of such transactions, HQLA lending is expected to continue trending upwards, contributing to overall outperformance of fixed income assets in the securities lending market.

Are we seeing a growing use of non-cash collateral?

Tomada: Canada runs counter to many jurisdictions in the world, in that many participants have historically made use of primarily non-cash collateral, with a particular appetite for Canada's own triple-A-rated sovereign debt. Beneficial owners, borrowers and regulators in Canada have shifted toward greater use of global sovereign debt, equities, cash and corporate bonds as collateral. Canadians using cash collateral have also expanded across a number of global currencies as well.

Kolasingh: Yes. Balance sheet efficiency is taking on growing importance in today's environment. This is driving an increased focus on the impact of securities lending transactions on risk-weighted asset exposures and capital ratio requirements. As a result, we are seeing higher demand for non-cash collateral and the expansion of such collateral to include additional equity indices, American depositary receipts (ADRs) and exchange-traded funds (ETFs). Participants in the Canadian market have traditionally been

at the forefront of using non-cash collateral and, as the securities lending market continues to evolve, we see other markets, including Europe, trending closer to the Canadian collateral landscape.

Sedman: In Canada, there has always been a preference for noncash collateral with the likelihood that this trend will continue to be the case for the foreseeable future. As balance sheet efficiency and collateral management continue to be a primary focus for borrowers, non-cash collateral is a means for borrowers to optimise their long holdings and reducing their financing costs. As borrowers look to more efficiently utilise their balance sheets and long portfolios to collateralise various trading strategies, our expectation is that non-cash collateral balances will continue to grow going forward. Beneficial owners can put themselves in a position to take advantage of this preference by reviewing their collateral guidelines and ensuring they are aligned with the trend toward non-cash collateral.

Similarly, the US is seeing a rising amount of non-cash collateral, to the point where it has become a preferred option for many borrowers. The US is more restrictive in terms of the types of non-cash collateral accepted, but there are discussions to allow borrowers to pledge equities as collateral for securities lending programmes. Certainly, the Canadian model is a great example of diversified, non-cash collateral set for securities lending which can provide liquidity and diversification to both borrowers and lenders.

Polseno: Yes, we have seen interest growing in notional volume as well as the actual types of collateral that borrowers wish to use. Equity collateral is most in demand as prime brokers want to utilise their long book efficiently, but we also see interest in corporate and government securities as well.

Lemstra: According to DataLend, the cash versus non-cash on-loan breakdown has been averaging 17 percent cash and 83 percent non-cash for the last 12 months. Canadian beneficial owners are concentrated in the non-cash space, with 90 percent of them taking non-cash collateral and 10 percent allowing mixed collateral, inclusive of cash.

Canadian beneficial owners are concentrated in the non-cash space, with 90 percent of them taking non-cash collateral

Alexa LemstraDirector, head of Canada
EquiLend



What regulatory restrictions exist in Canada around collateral usage?

Kolasingh: In Canada, mutual funds are regulated by National Instrument 81-102-Investment Funds, which has a narrower scope of eligible collateral than Office of the Superintendent of Financial Institutions (OSFI) B-4, which provides guidelines for other market participants such as operating memorandum funds, pension plans, insurance companies and government institutions. As the market increasingly moves towards non-cash collateral and, specifically equities, the current limitations associated with NI 81-102 stand to reduce access to lending opportunities where collateral flexibility is paramount. It is important to note that discussions are continuing within the industry to help level the playing field for all participants.

Sedman: Beneficial owners should take the time to understand what types of collateral they want to accept. A programme that accepts a range of collateral provides benefits such as diversification as well as opportunities to participate in a wider range of loans. It is common practice for Canadian clients to accept equities and fixed income collateral in their securities lending programmes.

Polseno: The regulatory restrictions reside for the most part on the client side. Similar to the US, where changes in the collateral guidelines of Rule 15c3-3 are being sought from the US Securities and Exchange Commission (SEC), there are efforts to have equity collateral approved for Canadian mutual funds, which will allow them to participate in the changes in demand mentioned earlier. For Canadian borrowers, there are generally no prohibitions in what they can pledge and the environment functions guite similarly to the UK and Europe.

Tomada: Canada's investment industry rules restrict mutual funds from taking equities as collateral. Mutual funds are also prevented from pushing more than three months out on the reinvestment curve. These provisions can potentially disadvantage mutual funds versus pension plan sponsors and insurance companies in Canada as these types of firms are not subject to the same restrictions. This is an area where the Canadian Securities Lending Association (CASLA) has been working with regulators to flatten the playing field between the various beneficial owner classes.

How is technology impacting securities lending?

Polseno: Technology is making a marked impact on trading efficiencies within securities lending. We have the ability to trade our entire universe of assets electronically now and are seeing flows in warms and specials increasing over time as borrowers embrace that mode of borrowing. This automation takes the time pressure off of traders and allows for a much larger set of securities to be traded efficiently. There have also been good developments in post-trade systems that are allowing for greater transparency into collateral allocations and collateral management, income processing and contract management. This allows for more robust trading activity without increasing operational burdens and it also allows the market to operate in a more risk excellent environment.

Lemstra: The technology budget has to be a significant piece of a strategic business process to support the interoperability, connectivity and innovation needed to meet the new requirements being driven by regulation and key revenue opportunities on the horizon.

Where two years ago the market only automated the general collateral (GC) business, now their investment in trading and pricing logic, as well as system connectivity, has brought the market to a place where they are automating their non-GC business through the rate spectrum. We've heard some clients say they have up to 70 percent of their business trading systematically through automated trade execution.

Regulation is prompting the industry to implement technology solutions to those last brackets of legacy manual processes. Regulatory obligations turn into technology investment as the industry looks to near-real-time communication to effectively manage trade execution, intraday pre-matching and exposure throughout the trade lifecycle.

Technology and automation are primary focuses for both Northern Trust and the industry

Dave Sedman Head of Canadian trading, global securities lending



Sedman: Technology and automation are primary focuses for both Northern Trust and the industry and will have a large impact on the future of the lending business. There continues to be a focus on pre-trade, trade and post-trade automation to increase efficiencies. Borrowers and lenders are working together to try and reduce operational differences. Northern Trust has expanded its use of vendor platforms to significantly increase straight-through processing capabilities, and bring increased levels of transparency and efficiency.

Northern Trust is using machine learning to more effectively price trade activity. Keeping in mind that securities lending is not just about the individual trade, but a large, diversified book of loans, it is important to effectively manage rates with the borrowers.

CCPs are another area that continues to show promise for securities lending. There are several models that are being evaluated and would help bring additional transparency, operational efficiencies and diversification to the securities lending market. The challenge is offering a model that works well for the agency securities lending model so that we can benefit our beneficial owners.

Tomada: Too often people point to technology as displacing jobs, but we actually see automation as a "good jobs" strategy. New technologies help drive efficiency by automating most straightforward, predictable and repetitive tasks—these tasks are often not only the least engaging but also areas where the manual processing can introduce potential errors. Automating some of these tasks empowers people to focus on value-add activities, new solutions and client service and in turn help position us to deliver better results for our clients and stakeholders.

Kolasingh: Technology touches upon almost every aspect of the industry—from the way we transact to how we price trades, monitor risk and interact with our lenders. As a result of RBC I&TS' focus on connectivity, the majority of our transactions are automated. This supports a high degree of straight-through processing and allows our traders to focus on high-intrinsic value opportunities.

Additionally, technology advancements, combined with enriched data sets, are enabling beneficial owners to make quicker and more informed decisions. As lenders become increasingly involved in their securities lending programmes, powerful data visualisation tools are being developed to provide insights on performance, programme parameters and risk management. At the same time, application programming interfaces (APIs) are delivering meaningful data sets across organisations in an efficient manner. This has enabled lenders to take a more proactive approach to lending and uncover opportunities, such as corporate action optimisation, to quantify restricted or non-lendable assets and create further alpha generation.

What opportunities are on the horizon for Canada's securities lending market?

Lemstra: Emerging technologies such as machine learning, shared ledger, cloud management and API connectivity offer opportunities for the industry to explore. We see clients using data to achieve smarter logic for data-driven automated pricing and optimisation decisions, and they are exploring machine learning to add efficiency to the reconciliation and operational processes. EquiLend is also actively working in all these areas. Firms can leverage trends like a required regulatory investment to support strategic investment for their clients and the business.

As one of the world's largest securities finance markets, the emerging themes in Canada reflect the global trends. Firms are becoming much more sophisticated with their logic for pricing decisions. The tri-party model is becoming more attractive for some players. Market participants are also evaluating their legacy books and record systems as they recognise the value in investing in cutting-edge technology to be poised for future growth, part of the reason we have seen a strong interest in our EquiLend Spire solution. Finally, we are also seeing a growing commitment to diversity and gender equality across the industry, which we support and expect to continue. As a leading market infrastructure with a commitment to innovation,

Asset managers are increasingly looking to securities lending as a means to reduce fee structures and increase competitiveness

Kyle Kolasingh

Associate director, securities finance, treasury and market services RBC Investor & Treasury Services



EquiLend will continue to lead the way on future changes to the securities finance marketplace.

Sedman: There are expanded collateral acceptability and increased term trade opportunities on both collateral upgrade trades and in demand specials for the Canadian securities lending market. As mentioned previously, there has been an increase in demand for fixed income securities, specifically for HQLA, which would include Canadian sovereign debt. This has been a theme over the last several years as borrowers have adapted to the new regulatory requirements. On the other side of this trade, borrowers want to pledge a variety of collateral including equities and corporate debt.

Another opportunity is the lack of liquidity in certain securities around proxy voting periods. The Canadian securities lending market tends to experience some cyclical demand based on proxy voting. Lenders should understand whether it makes sense to lend their securities over the proxy period and to gain additional income.

Polseno: There are opportunities to expand technologically that are exciting. Getting full buy-in by all market participants will take time but is well worth it. Expansion of collateral use will bring with it new trade structures, increased use of term non-cash borrowing for financing purposes, and opportunities in the HQLA space.

Ever growing participation by beneficial owners either directly or through agents will continue to help the market expand and evolve. This may help motivate regulatory change that allows for even further growth. Canadian banks have been taking a much more global view, both expanding the remits locally and also in their actual presence in countries around the world with growth in staffing levels. I think this is a positive and what was once a fairly closed market has opened up in a tangible way. This means an increase in trading counterparties, clients and products that will make the Canadian market truly a global one.

Kolasingh: We continue to see greater participation in securities lending programmes among our clients, combined with a shift to a more granular and consultative beneficial owner-agent lender relationship. The industry has experienced substantial change since the 2008 financial crisis and, concurrent with developments in technology and risk management, an increasing number of beneficial owners are either returning to securities lending or opting to participate in lending programmes for the first time. Whether it's to offset costs or to take advantage of leverage strategies, beneficial owners are looking for closer relationships with their agent lender and a deeper understanding of the dynamics of lending. At the same time, asset managers are increasingly looking to securities lending as a means to reduce fee structures and increase competitiveness. This is enabling managers to capitalise on greater intrinsic value opportunities, helping to dispel the traditional negative connotations associated with short-selling and securities lending. I should mention that, while these changes are occurring in Canada, many are being experienced globally as well.

Tomada: The rise of liquid alternatives offerings in Canada as a result of new regulatory approaches means the potential for an array of new fund offerings, new participants and new providers into the market.

Canada is also likely to see ongoing investment by market participants in technology solutions that help drive efficiency and effectiveness. The march of technology will be particularly powerful as beneficial owners such as Canada's pension complexes continue to sharpen their sophistication when it comes to securities finance—great news for providers who can deliver the advanced solutions, reporting and strategies to help them achieve their goals. I think it is also safe to say that Canada will retain one of its most central characteristics amid a wide array of change: the strong and positive engagement between market participants and regulators.

Ever growing participation by beneficial owners either directly or through agents will continue to help the market expand and evolve

Jarrod Polseno
Global head of agency lending trading
State Street Securities Finance

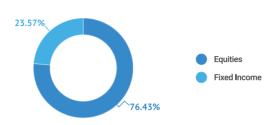






LENDABLE -\$1.31 Trillion ON LOAN \$164 Billion REVENUE \$534 Million FEES 32 bps

REVENUE BY ASSET CLASS



REVENUE BY FEE BAND

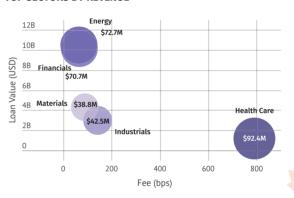


TOP EQUITY EARNERS

FIGURES ARE FROM JANUARY 1 TO DECEMBER 31, 2018, AND REPRE<mark>SENT LENDER TO B</mark>ROKER ACTIVITY ONLY. CURRENCY IS USD.

SECURITY	REVENUE
CANOPY GROWTH CORPORATION	39,097,210
ENBRIDGE INC	29,164,253
AURORA CANNABIS INC	26,430,376
BADGER DAYLIGHTING LIMITED	21,065,004
BROOKFIELD PROPERTY PARTNERS LP	14,667,884
APHRIA INC	11,118,521
EXCHANGE INCOME CORPORATION	8,894,160
CANADIAN IMPERIAL BANK OF COMMERCE	8,777,165
HUDSON'S BAY CO	7,391,551
ROYAL BANK OF CANADA	6,943,961

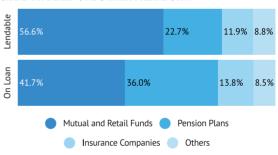
TOP SECTORS BY REVENUE



ON LOAN VS LENDABLE



CANADIAN BENEFICIAL OWNER BREAKDOWN



— 2019 TRENDS

CANADA		Q1 2018	Q1 2019	Δ YoY
	LENDABLE ON LOAN FEES REVENUE	\$541B \$41B 95.6 bps \$95.5M	\$536B \$44B 113.5bps \$123.8M	-0.9% 7.5% 18.7% 29.5%
	LENDABLE ON LOAN FEES REVENUE	\$796B \$130B 10.3 bps \$33.4M	\$797B \$120B 10.5 bps \$31.0M	0.1% -7.5% 1.7% -7.0%

Technology takeover

Jerry Friedhoff, managing director of securities finance and collateral management of Broadridge, talks regulatory changes and emerging technologies

What regulatory changes are currently impacting the industry?

The Securities Financing Transactions Regulation (SFTR) is currently high up on priority lists, along with Central Securities Depositories Regulation (CSDR) and Brexit in Europe. We also expect to see additional securities finance trade reporting mandates in other regions once SFTR is behind us. In the US, Regulation Rule SHO204 is a real concern that many brokers are seeking to address.

A recent International Securities Lending Association (ISLA) market report suggests that high-quality liquid assets (HQLA) driven trades remain prevalent due to liquidity coverage ratio needs and the slowing of quantitative easing (QE). As more firms fall under the uncleared margin rules in 2020, the role of securities finance in sourcing larger quantities of high-quality collateral should also become more prominent. The International Swaps and Derivatives Association (ISDA) is currently lobbying to reduce the number of firms that will

need to exchange bilateral initial margin. The amount of additional collateral required could, therefore, vary widely if this is successful.

In the repo markets, firms are evaluating their front-office trading tools to manage the complexity of increasing electronic trading and fragmented liquidity. This is linked to a broader role for repo in managing balance sheet, liquidity and capital, along with centralising the sources and uses of collateral across financing and margin-based activities.

Are you seeing new or different types of market participants, services and routes to market emerging in the industry?

On the buy side, more beneficial owners are recognising the benefits of securities finance. We are seeing a trend for some of the more active participants to consider lending directly and in some cases, setting up in-house stock loan and repo desks.

Technology Overview

This is largely driven by a growing awareness of the alpha generation opportunities provided by financing their assets. A desire for greater control over collateral and the value of central collateral desks is also a key factor for the buy side, as firms look at how to adapt to central clearing of derivatives and uncleared margin reform.

We are also seeing new sources of supply coming to market through clients engaging in fully paid lending in North America to unlock retail inventory in brokerage accounts. Likewise, in Europe, the provision of lending services to a wider market of investors is a trend to watch. More firms are seeking to add new revenue streams to their securities lending activities by reaching further into their relationships with retail/institutional clients and the assets they control.

How will new technologies affect the industry?

The impact of disruptive technologies such as blockchain and artificial intelligence (AI) is a topic for discussion at every industry conference right now. There is a growing understanding of these technologies in the market and various pilots, use cases and production ready systems are also emerging. However, we have not yet reached a tipping point in terms of widespread adoption. Electronic peer to peer/all to all markets and, in some cases based on blockchain platforms, are another area where innovation in market structure and technology is taking place.

There is a more general trend for firms to look at ways to reduce their IT costs. They're evaluating existing technology stacks and replacing ageing legacy solutions with a more modern front to back single system approach. This allows them to meet the new demands of the market environment while lowering total cost of ownership. This includes an increasing preference for vendor-hosted solutions as cloud and software as a service (SaaS) models become more widely accepted.

How are you helping clients adapt to regulatory trends?

The acquisition of 4sight and Anetics in 2016 has greatly enhanced Broadridge's global front to back securities lending, repo and collateral solutions and increased our ability to help clients adapt to the changing environment.

Firstly, in Europe, we are working closely with customers to help them prepare for SFTR. Broadridge has in-depth expertise in both securities finance and trade reporting regimes such as European Market Infrastructure Regulation (EMIR), the first and second Markets in Financial Instruments Directive (MiFID I/II), and the US Commodity Futures Trading Commission (CFTC). This will enable clients to adapt to SFTR smoothly while minimising operational disruption and reducing the resource impact of complying with multiple concurrent reporting mandates.

From a CSDR perspective, helping clients to minimise the impact of settlement fails and mandatory buy-ins through the use of technology is also a key priority for Broadridge.

In terms of the buy side, we recently implemented our front to back office securities lending solution at both a large European investment manager and a sovereign wealth fund that both set up internal lending desks. We are seeing interest in this model from others, although it is not for everyone. Many beneficial owners continue to place a high value on the services provided by their lending agents and the indemnification they receive.

In the US, a large broker-dealer went live with our RegSHO 204 solution last month. This resulted in reduced regulatory risk and significantly less manual effort required to maintain RegSHO 204 compliance for the client.

In the repo space, we are seeing an uptake in our repo order quote market aggregation and execution solution. One of Europe's top 15 largest banks recently went live with the product, and more are in the pipeline as firms seek to maximise trading opportunities and make sense of increasingly complex data with the latest trading tools.

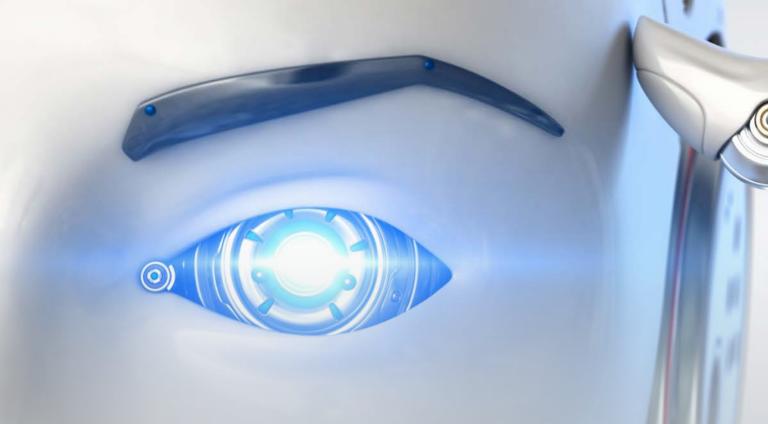
What's next for Broadridge in terms of emerging technologies such as blockchain and AI?

Broadridge has been actively investing in emerging technologies. We recently conducted a blockchain pilot with Natixis and Societe Generale to transact bilateral repo and found the solution resulted in several operational efficiencies and a more streamlined process. In the securities finance industry, there is still widespread debate over the benefits of blockchain versus the current market infrastructure and there are pros and cons to either side of the argument. While there are a number of hurdles that must be overcome, we expect to see more blockchain-based platforms appear over time.

With regards to AI, there are myriad use cases for these technologies such as trading automation and decision support, collateral optimisation and streamlining back-office processes. We believe AI has the potential to greatly benefit the industry and our clients in the long term. We are therefore actively investing in AI, including machine learning (ML) and robotic process automation (RPA) to assess where we can combine ML and RPA to drive benefits for our clients.

All of this means it is an exciting time for the industry. While we may not see a radical change in the next two years, in 10 years' time the market and technology landscape could look surprisingly different than what it looks like today.

In 2008, Google started its self-driving car project and the iPhone had recently launched. By 2018, Google's self-driving cars have clocked over two million miles and are being tested on the streets of major cities across the US and there are around two and a half billion smartphone users globally. Perhaps we will see similar leaps forward in the securities finance industry. SLT



The buy side are doing it for themselves

David Lewis of FIS explains that automation is not just the key to facilitating changes, it is also the product

At a recent industry panel, hosted by Securities Lending Times at their second annual Securities Finance Technology Symposium, we discussed the proposition that "data was the fuel of automation". It was a discussion rather than a debate looking to reconcile opposing views, as few would argue that automation cannot exist as a concept without the fuel of data to keep it running. However, the conversation did morph into examining our thoughts on what the original question perhaps should have been. Instead of asking what the fuel for automation might be, we should have asked what sparks it in the first place?

Two broad themes emerged as drivers for automation, splitting drivers between discretionary and non-discretionary. The latter focused mainly on the regulatory imperatives facing the securities finance industry at present, forcing market participants to ensure compliance with new rules, or shut up shop. Being compliant is not always just about reporting, of course; it may extend to significant projects of process reengineering, including redesigning everything from trade booking systems to settlement procedures and trade confirmation messages. In a market where investment is always tight, there has to be a strong underlying theme of automation simply to ensure that these changes can be made efficiently and economically.

When it comes to discretionary drivers, however, the regulatory shackles of compliance come off, and any process or practice

becomes fair game for automation. Further than that though, and arguably more transformational for an organisation, is using automation and new technological capability not to automate the pressing of a button, but to remove the need to press that button in the first place. With this kind of new capability, many organisations are looking at improving their internal processes and capabilities as effective ways to boost their returns.

Combining these two drivers of automation and innovation gives an extra boost to the potential results, and some buy-side firms are taking that step. Securities lending has been a valuable money maker for many firms over recent decades, but as the market around it has adapted, it has become a vital component of a wider securities finance and collateral management system—driven into existence by both the need to improve efficiency as well as meet increasingly complex regulatory demands. Large buy-side firms are meeting increased competition in their own industry, forcing a rush to the bottom for management fees which is, in turn, driving them to streamline their offerings and operations. One way to do this and raise fund income is to bring certain disciplines in-house, such as securities lending. Fidelity Investment Management, the mutual fund giant locked in fee price wars with its peers, has recently brought securities lending in-house, taking it from their agent lenders.

Data Analysis

With zero management fee funds on the market, asset managers need to look to other activities to cover their costs, and securities lending income is an obvious vehicle to fill the income gap. Bringing that in-house gives the asset manager direct control over their lending activity while giving them access to 100 percent of the income raised. Much has been written over the years about the appropriate level of any fee retention by any asset manager, and it has become a hot topic again recently. But if that asset manager is undertaking the lending activity themselves, it may well be more easily justified in retaining a reasonable proportion of those fees to cover its costs and replace its lost management fees. Firms such as Fidelity Investments may not have considered this an option even a few years ago had the system capabilities been available, technically and economically speaking, to make it viable for them.

However, lending your own securities is just one part of the jigsaw. Others are going even further and reflecting the sea changes seen elsewhere across the securities finance and collateral industry. By combining the management of their own lendable assets with their need for funding other market activities, the demands being made for intraday liquidity or collateral required to meet margin calls on uncleared derivatives, large buy-side firms are taking control of their own end-to-end enterprise collateral management and financing businesses.

Such bold moves can only be undertaken with significant investment in the necessary technology, systems and expertise, but are increasingly seen by large sophisticated firms as a viable alternative to outsourcing those requirements to intermediaries and service providers. Disintermediation of the financing market is being combined with the need to meet organisations' growing internal demands for collateral management and regulatory compliance, with the benefit of reducing costs and protecting net earnings.

These changes cannot happen without the significant advances that are being seen in the provision and management of data, be that intraday lending fees, asset prices or credit ratings of issuers and counterparties. Interoperability and connectivity must play their parts as well. Enterprise collateral management can only occur if the enterprise is engaged; all the assets and liabilities must be managed across the business, in real time, in order to achieve the potential, these changes promise.

Automation is, therefore, not just the key to facilitating such changes, it is also the product. The spark that ignites the process is the need to meet ever-increasing demands for intraday data to satisfy intraday needs. These complex demands might include calculating and recalculating positions and exposures throughout the trading day, ensuring all liabilities are covered, assets are utilised in the most efficient way and net returns are maximised, and they will continue to rise, irrespective of how low the fees that the end user is being charged go.





Equity lending revenues on a high

IHS Markit's Sam Pierson explains why the cannabis sector is driving Canada's equity lending revenue

The growth in the Canadian cannabis sector has been impressive in the year following the June 2018 legalisation of recreational use. The total market capitalisation of Cannabis firms with primary listings in Canada has more than doubled over that time from just under \$20 billion to over \$40 billion. The expansion was not on a straight line, with the emerging sector realising far greater volatility than the overall market. Investors in the space were compensated for the additional risk in year one, with the average monthly total return on ETFs tracking the sector, HMMJ and MJ, being just over 3 percent with a standard deviation of 20 percent.

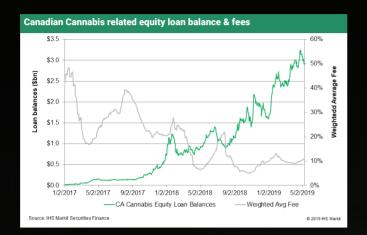
For comparison, the EWC ETF, which tracks large and mid-cap Canadian equities, had an average monthly return of 0.4 percent with a standard deviation of 5.7 percent. In other words, investors in the Cannabis sector were able to generate approximately eight times the return with three and a half times the volatility.

The volatility has also attracted short sellers. The total loan balances in the sector increased from \$1.3 billion on the eve of legalisation to \$2.9 billion at present. The short side has had some success, for example, Aphria has declined 24 percent since legalisation amid concerns voiced by activist short sellers around acquisition values. The largest short positions in dollar

terms, Canopy Growth and Aurora Cannabis, have returned 18 percent and 42 percent since legalisation. Those returns haven't dampened the demand from the short side and short positions in both firms are just below the post-legalisation peak. Merger and acquisition (M&A) activity has also been a driver of demand, with the most significant example in revenue terms being Aurora Cannabis acquisition of MedReleaf, which closed in July last year.

Merger and acquisition activity has also been a driver of demand, with the most significant example in revenue terms being Aurora Cannabis acquisition of MedReleaf, which closed in July 2018. The increase in fees for Aurora loans generated just over 10 percent of 2018 revenue for Canadian Cannabis equities. On 18 April Canopy Growth announced plans to acquire US firm Acreage Holdings for \$3.4 billion. The primarily stock-based deal involves a unique contingency regarding the legalisation of Cannabis in the US at a federal level. There has been a marginal decline in the borrowing of Canopy shares since the announcement and the price of Acreage remains well below the offer price, suggesting a lack of confidence in the deal getting done.

A consideration of the returns to long and short investors in the Cannabis space must include the borrow fees paid by short sellers,



which have been substantial. For example, the average borrow cost for Aphria over the last year was 13 percent, more than half of the short seller profit from the price decline. Overall year-to-date Canadian cannabis equity lending revenues are \$95 million, or 47 percent of all Canadian equity lending revenues. Last year, the total was \$140 million, or 29 percent of Canadian equity revenues. That revenue growth has offset declining revenues for non-Cannabis Canadian equities, which would have been down 14 percent for 2018 relative to 2017 excluding the impact of Cannabis; including Cannabis total revenues were up 8 percent. The nascent industry only generated 9 percent of 2017 revenues.

The number of shares in lending programmes in the Canadian cannabis sector has more than doubled post-legalisation, a measure of increased institutional investment in the space. The increased supply of shares in securities lending, along with the

significant share issuance by the firms in the sector, has caused a general downtrend in weighted average fees over the last 2.5 years as the sector has matured. At present, the weighted average fee in the sector is 11 percent, down from 40 percent in early 2017. It is worth noting that Canopy and Aurora still make up 80 percent of balances, so they are the primary determinant of weighted sector fees.

Nearly a year into legalisation the stakes have been raised in the sense of increased market cap and increased short positioning. Taking into account the share price return along with securities lending fees it would seem the long side has gotten the better of the shorts so far; however, short sellers have shown no desire to give up on the trade. Regardless of which side of the trade, the borrow fees should be taken into account when considering an investment in the space.



Sam Piersor Director of securities finance IHS Marki



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Industry Appointments



Comings and goings at DataLend, IHS Markit, Wematch and more

Gareth Vass is set to leave EquiLend as associate director, DataLend, and join AllianzGI, effective early June.

Vass will join the newly established and growing securities lending desk at AllianzGI, led by Rory O'Connor.

He has a great deal of experience from working in agent lenders investment banks and most recently EquiLend.

Previously, Vass also served at Euroclear, RBS and Citi.

Will Cutts has joined CIBC Capital Markets as product manager: synthetic prime brokerage and delta one products.

During his career, Cutts has been engaged in consultancy assignments in the delta one, derivatives, prime finance and corporate treasury business.

Previously, Cutts has also held roles at BNP Paribas, Citigroup Global Markets and Salomon Brothers.

IHS Markit Securities Finance has hired Monica Damas-Shaw as product manager.

Reporting to Kabin George, global head of product management for IHS Markit Securities Finance, Damas-Shaw will be overseeing the firm's solutions and services



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Industry Appointments

for beneficial owners in the Americas. She will manage various product management initiatives in line with the firm's securities finance roadmap.

Previously, Damas-Shaw served at J.P. Morgan as vice president, directing securities lending programmes for clients. She also served as vice president at Credit Suisse, managing institutional client relationships.

In addition, Mark Klein has been promoted to the role of buy-side product manager, from his role as product specialist.

Klein will also report to George, who commented: "We are excited that Mark Klein's global knowledge and expertise will help drive our long-term buyside product strategy and road map."

"He will work closely with our sales team and product specialists to identify opportunities for greater product innovation and smart collaboration with third-party vendors."

Also commenting on the appointments, Paul Wilson, managing director and global head of IHS Markit Securities Finance, added: "We continue to invest heavily in all aspects of the business and are delighted to share this news."

"Monica Damas-Shaw and Mark Klein will serve in strategically important roles as we work towards growing our beneficial owner and buy-side client segments."

BNY Mellon has promoted James Slater to co-head of BNY Mellon Markets and global head of securities finance, segregation and liquidity.

Slater has worked at BNY Mellon for nine years, most recently he was managing director, head of securities finance, liquidity and collateral segregation. He also worked at CIBC Mellon between 1996 and 2010.

Wassel Demmak 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.

Andrew Rae-Moore has joined GPP's prime brokerage team, after serving 18 years at Morgan Stanley.

Rae-Moore will work alongside GPP's COO Todd Johnson, and he will report to the CEO, Julian Parker. Working alongside Johnson, Rae-Moore will drive the growth of GPP's prime brokerage business.

He will be responsible for building new client relationships to support the industry's emerging hedge fund managers with GPP's comprehensive prime broking solutions.

Prior to GPP, Rae-More spent more than 18 years on the prime brokerage desk of Morgan Stanley's institutional equities division, rising to COO of client coverage.

Thomas Materson has joined Cowen's prime services sales team as managing director.

In his new role, Masterson will report to Jack Seibald and Michael Rosen, co-heads of prime brokerage and outsourced trading.

Materson will be based in Dallas, Texas, leading the firm's business development effort in the Southwest and Central states.

Most recently, Materson was director and head of sales for Texas with Wells Fargo Prime Services in Dallas, where he worked since 2011.

Commenting on his appointment, Materson said: "I am excited to join the Cowen team and look forward to working with my new colleagues to further extend the reach of the firm's global prime brokerage offering, its distinguished outsourced trading solution, and investor-oriented capital introduction programme throughout the vast region I've called home for a very long time."

Seibald commented: "Thomas Materson is a terrific addition to Cowen's team. He not only brings a wealth of prime brokerage experience acquired from both introducing maddiesaghir@blackknightmedialtd.com

and bulge bracket firms, but also an exceptional reputation with investment managers and other industry service providers for the service he's delivered to his clients."

"The Southwest, and Texas, in particular, is a key territory in our growth plan, and we believe Materson's considerable experience and qualifications make him the right person to represent our firm's prime brokerage and outsourced trading offerings in the region."

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. During his career, he has 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. Frochaux started his career in securities lending at UBS Switzerland.

He also worked for AXA Investment Managers in London, Singapore and Hong Kong before moving back to Switzerland to Bank Vontobel Investment Banking, and later joined Bank Julius Baer Switzerland.

Wematch.live has appointed Richard Booth as director.

Booth will lead sales for the interest rate derivatives asset class.

Based in London, Booth will report to David Raccat, CEO and founder of Wematch. SecuritiesFinancing.

He brings with him more than 20 years of experience, having previously worked at Deutsche Bank, Credit Suisse and Mizuho.

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