

securities lending times

The primary source of global securities finance news and analysis

Conference Special

Shape of things to come

Ana Ruxandra Iliescu of REGIS-TR explains that detail is starting to fall into place with SFTR



Possibilities of Peru | Evolution of the securities finance ecosystem | The rise of machines

**IS YOUR SFTR SOLUTION
MISSING A PIECE OF THE PUZZLE?**



EQUILEND
OUR INNOVATION. YOUR ADVANTAGE.

TRAX
A MarketAxess Company



Your securities financing partners

ABN AMRO UK Awards - 2018



Top Borrower in EMEA

Group 2 - ISF Survey Awards

Best Bank in the Netherlands

Euromoney Awards for Excellence

www.abnamro.co.uk/GlobalMarkets

Banking for better, for generations to come



NN IP: ESG principles to make difference in market

Securities lending is essential for market efficiency and can expose issues with fraudulent business practices, according to Xavier Bouthors, senior portfolio manager at NN Investment Partners (NN IP).

NN IP explained that the incorporation of sustainability principles in securities lending programmes has accelerated in recent years, as more stringent requirements in terms of regulation and transparency have led to a significant increase in the involvement of lenders.

In addition, NN IP said it is committed to integrating environmental, social and governance principles in its securities lending programme. By participating in the securities lending market in a

responsible way, NN IP said: "We believe that we contribute to better governance and oversight across the financial system."

On the subject of short selling, Martin Aasly, senior portfolio manager at NN IP, said that a common perception of securities lending is that it facilitates shorting, and that shorting is bad because it undermines the value of long-only portfolios.

He said: "However, the ability to borrow and lend financial assets is crucial to well-functioning financial markets; this fact is well established and documented."

Aasly explained that securities lending is "essential for market efficiency, as it provides liquidity by exchanging assets (efficient trade

settlement, financing, trading volume). He noted that it also leads to fairer pricing by reducing trading costs (tightening the bid/ask spread)".

Meanwhile, Aasly suggested that in recent years, multiple markets have introduced securities lending and short selling in order to increase liquidity.

He said: "One of the inclusion criteria for MSCI's developed market indices is that short selling should be possible."

According to Aasly, even the European Central Bank has launched its own securities lending programme and several Eurosystem central banks are making their holdings available for the securities lending industry.

securities lending times

The primary source of global securities finance news and analysis
Conference Special

Shape of things to come

Ana Ruxandra Iliescu of REGIS-TR explains that detail is starting to fall into place with SFTR

Possibilities of Peru | Evolution of the securities finance ecosystem | The rise of machines

IS YOUR SFTR SOLUTION MISSING A PIECE OF THE PUZZLE?

EQUILEND | TRAX

Publisher: Justin Lawson

justinlawson@securitieslendingtimes.com
+44 (0) 203 750 6028

Editor: Becky Butcher

beckybutcher@blackknightmedialtd.com
+44 (0) 203 750 6026

Reporter: Maddie Saghir

maddiesaghir@blackknightmedialtd.com
+44 (0) 203 750 6019

Reporter: Jenna Lomax

jennalomax@blackknightmedialtd.com
+44 (0) 203 750 6018

**Contributors: Barney Dixon,
Rebecca Delaney**

Creative Director: Steven Lafferty

Published by Black Knight Media Ltd
Copyright © 2019 All rights reserved



SFTR Outlook

Ana Ruxandra Iliescu of REGIS-TR explains that detail is starting to fall into place with the Securities Financing Transaction Regulation [page 22](#)



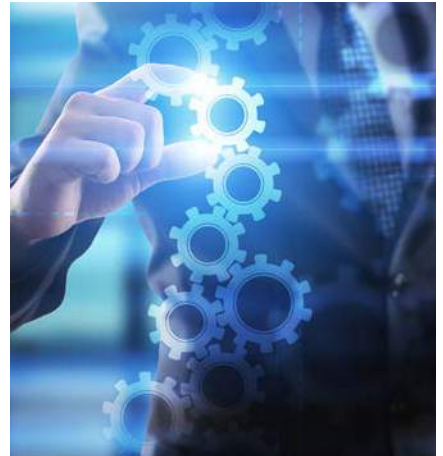
Peru Insight

Peru is one of the fastest-growing LatAm countries and with its new sec lending platform, the possibilities are looking very positive [page 26](#)



Technology Update

How is technology impacting the securities finance market and is it changing approaches to regulations? [page 30](#)



Industry Evolution

State Street industry experts provide a view of the landscape and evolution in the securities lending ecosystem [page 34](#)

transform | business

A range of apps that will transform your securities finance business

2016 and 2017
Best Software Provider



www.tradingapps.com

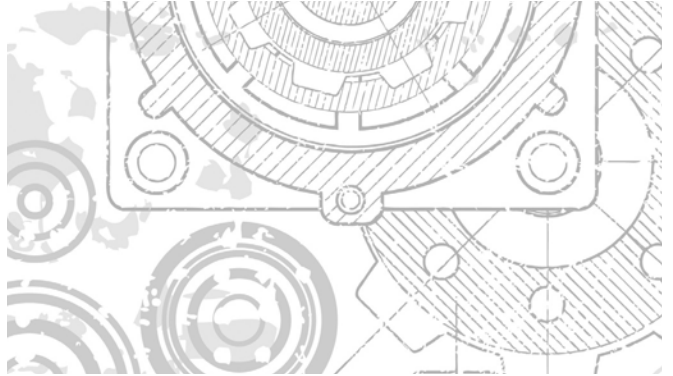
Get the Most From Your Lending Program

Securities lending can be an important source of return and a key part of overall portfolio and risk management strategies. We offer individualized service, technology and a commitment to transparency to help you achieve your goals.

For informational purposes only. Securities lending services are provided through State Street Global Markets, the marketing name and a registered trademark of State Street Corporation, used for its financial markets business and that of its affiliates. Products and services may not be available in all jurisdictions. ©2019 State Street Corporation.

statestreet.com/securitiesfinance





Analytics Insight

Robert Levy of Hanweck provides insight into cross-asset class analytics for strategies in trading and lending

page 38

CCP Outlook

Eurex Clearing's Erik Müller discusses why CCPs, in particular, are attractive as additional risk-mitigating mechanisms

page 42



Collateral Insight

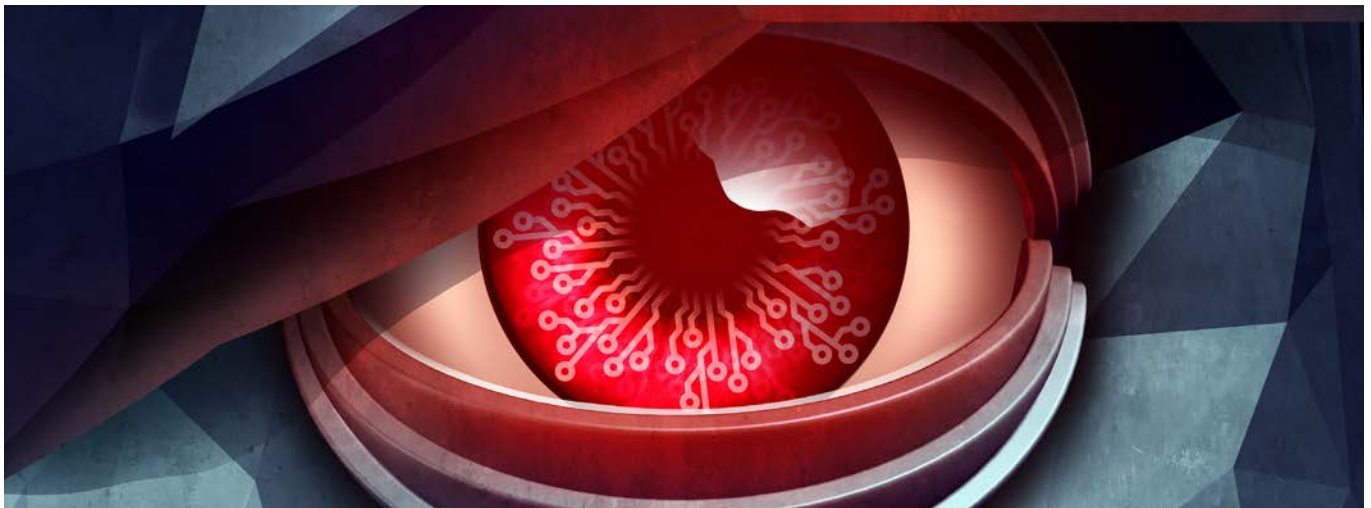
J.P. Morgan's Ed Corral explains that the choice of a collateral agent may help extract more value from collateral

page 44

Industry Appointments

Securities lending comings and goings at Pirum, FIS, OCC and more

page 50

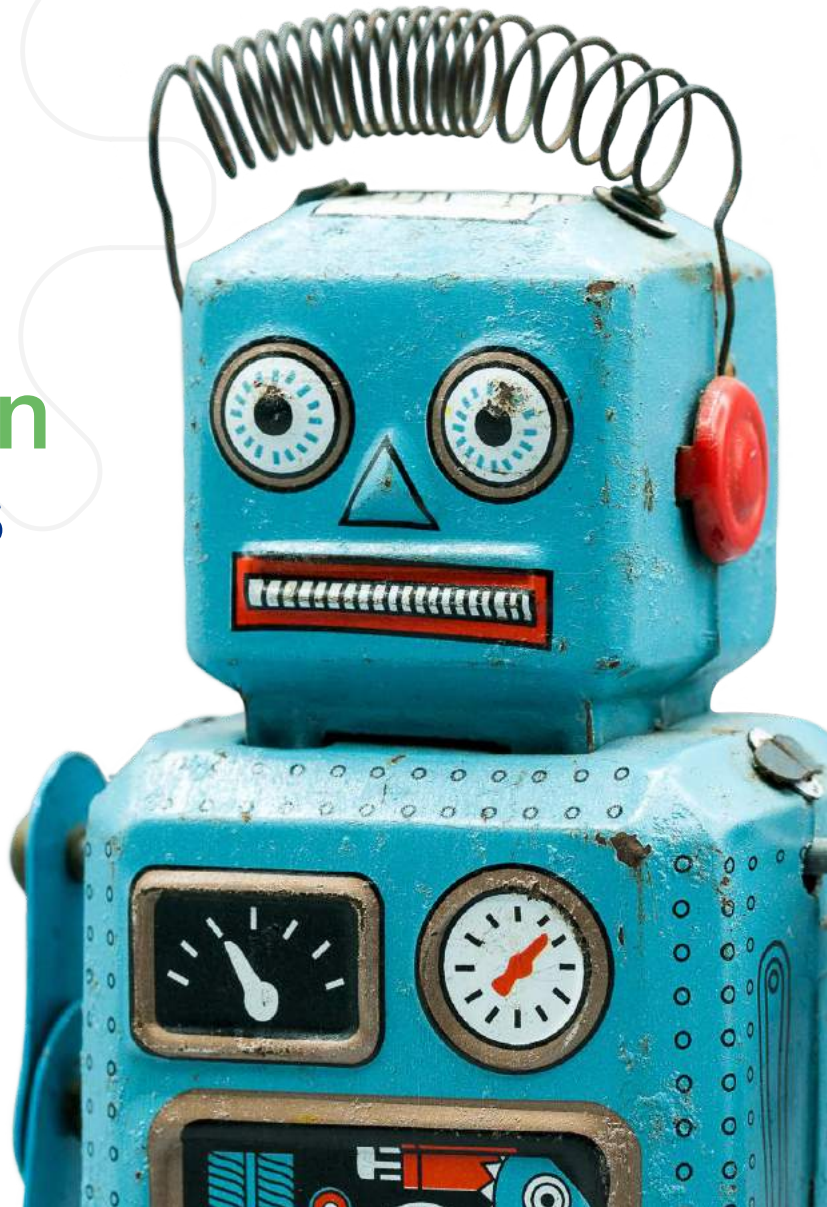


Data Analysis

David Lewis of FIS explains that while science fiction has represented the machines as a potential danger to humans, the reality is that without them, we simply could not function

page 47

SFTR solution No gimmicks



Pirum and IHS Markit, solving your SFTR requirement together

Securities Lending | Repo

Pirum & IHS Markit's SFTR Solution offers the securities finance industry the expertise and flexibility needed to meet the challenge set by SFTR. A modular, fully hosted reporting solution that combines IHS Markit's pedigree in regulatory reporting and data management, with Pirum's expertise in post trade reconciliation and automation.

For more information contact connect@pirum.com
or call: +44 (0)20 7220 0968 (UK & Europe)
+1 917 565 8575 (US)



www.pirum.com





Tradeweb reports record repo volume

Tradeweb reported a post-crisis record in repo volume in its March monthly activity report.

Average daily volumes (ADV) in repo of \$177.7 billion in March set a post-crisis record on further growth in bilateral electronic trading on the Tradeweb platform.

Total ADV in interest rate swaps and swaptions set a new monthly record of

\$186.7 billion, climbing 69.9 percent year-over-year. Likewise, record ADV in credit default swap of \$19.0 billion exceeded the record high set a year ago by 16.6 percent.

ADV for Tradeweb Markets was \$709.1 billion across rates, credit, money markets and equities during the month of March, an increase of 35.3 percent year-over-year and a new monthly volume record for Tradeweb.

CME launches ENSO Data Insights

CME Group has launched ENSO Data Insights, a community benchmarking tool that leverages ENSO's alternative data set to help customers make more informed investment decisions.

The new tool provides hedge funds, asset managers and banks with access to a diverse pool of global multi-asset class securities.

It also allows clients to evaluate how market dynamics are driving costs and demands to borrow stock, optimise counterparty management and seize alpha-generating opportunities.

Paul Busby, global head of ENSO, commented: "Until now, the market has had limited access to aggregated and anonymised long and short alternative data."

Busby added: "ENSO Data Insights taps into our derived data to provide the market with a unique insight into how trending securities are being positioned by alternative fund managers. This allows for an enhanced analytical process, driving better-informed investment and best execution financing decisions."

IBKR sees drop in securities lending interest income

Securities lending interest income saw a decrease of 12 percent in Q1 2019





... to the next level.

Let Securities Lending take you...

Make idle assets work harder with Securities Lending. Behind the scenes, we generate low-risk additional revenues on your securities. The only impact on your business is enhanced performance figures, and today, every basis point counts.

We offer tailor-made agency, principal and lending solutions with remote access to suit your precise needs.

CACEIS, your comprehensive asset servicing partner.

www.munier-bbn.com

Contact:
Dan.Copin@caceis.com



www.caceis.com

caceis
INVESTOR SERVICES
solid & innovative



Fidelity immune from stock lending lawsuit

The First Court of Appeals has deemed Fidelity Brokerage Services LLC immune from a lawsuit alleging improper stock lending activities based on an immunity provision in the Bank Secrecy Act.

William and Peter Deutsch alleged that Fidelity had improperly filed a suspicious activity report with the federal law enforcement agencies to hide improper stock lending activities.

At the US Court of Appeals for the First Circuit on 17 April, William and

Peter Deutsch along with their financial advisor, AER Advisors, had their complaint against Fidelity dismissed as there was “no reason to reverse the judge’s thoughtful decision”.

The provision cited that a “financial institution that makes a voluntary disclosure of any possible violation of law or regulation to a government agency [...] shall not be liable to any person under any law or regulation of the US, [or] any constitution, law, or regulation of any State [...] for such disclosure”.

compared to Q1 2018, according to Interactive Brokers Group (IBKR).

In its report of Q1 2019 earnings, IBKR identified that this reduction can be attributed to fewer hard-to-borrow names that investors wanted to short.

Paul Brody, CFO and treasurer of IBKR, added that a larger proportion of interest income in securities lending is now categorised as interest income earned on segregated funds.

Securities lending income has seen an increase of 4 percent, sequentially over Q4 2018, as the firm continues the optimisation of lending on market opportunities.

TradeChannel joins UnaVista partner programme for SFTR

TradeChannel has joined the UnaVista Partner Programme to support clients in meeting the requirements for the Securities Financing Transactions Regulation (SFTR).

TradeChannel’s regulatory transaction hub supports reporting under the European Market Infrastructure Regulation (EMIR), the second Markets in Financial Instruments Directive (MiFID) and SFTR, in a fully automated, integrated, end-to-end solution.

The hub extracts, normalises and formats data from client source systems. By integrating with other trading platforms and



consololtd.co.uk
info@consololtd.co.uk

EXPERIENCE

One collateral platform to manage tri-party
and margin

Optimized globally, across trades, assets
and custodians

Delivered by a trusted partner

Put our experience to work.

Contact your J.P. Morgan representative to learn how we can help.
jpmorgan.com/cfs

J.P. Morgan is a marketing name for the Investor Services businesses of JPMorgan Chase Bank, N.A. and its affiliates worldwide.

JPMorgan Chase Bank, N.A. is regulated by the Office of the Comptroller of the Currency in the U.S.A., by the Prudential Regulation Authority in the U.K. and subject to regulation by the Financial Conduct Authority and to limited regulation by the Prudential Regulation Authority, as well as the regulations of the countries in which it or its affiliates undertake regulated activities. Details about the extent of our regulation by the Prudential Regulation Authority, or other applicable regulators are available from us on request.

The products and services described in this document are offered by JPMorgan Chase Bank, N.A. or its affiliates subject to applicable laws and regulations and service terms. Not all products and services are available in all locations. Eligibility for particular products and services will be determined by JPMorgan Chase Bank, N.A. and/or its affiliates.

© 2018 JPMorgan Chase & Co. All rights reserved.

data vendors, the solution captures and consolidates data attributes.

Mikkel Mördrup, CEO of TradeChannel, commented: "With EMIR and MiFID II we have seen how regulatory changes affect our clients and their data needs."

"By partnering with UnaVista and benefiting from their regulatory expertise, we can support our clients in getting insights to how they can navigate this ever-changing regulatory landscape."

He added: "SFTR is a complex regime with many and fragmented data attributes. Together with UnaVista, we can offer a solution with full transparency and control."

Michael Leach, managing director of global business development at UnaVista, said: "We are delighted that TradeChannel has chosen to partner with UnaVista

to help clients fulfil a wide range of regulatory reporting obligations including the upcoming SFTR."

He added: "The partnership will leverage our knowledge and expertise in creating an effective and efficient regulatory reporting ecosystem alongside TradeChannel's strategic business advice."

BlackRock sees securities lending revenue decrease

BlackRock's revealed that its investment advisory, administration fees and securities lending revenue decreased \$142 million from Q1 2018, according to the firm's Q1 2019 report.

BlackRock explained that this was primarily driven by the negative impact of markets and foreign exchange on average assets under management.

This was also driven by the impact of strategic pricing investments, partially offset by the positive impact of acquisitions and organic growth.

The report also found that compared to Q4 2018, investment advisory, administration fees and securities lending revenue increased to \$26 million.

BlackRock noted that this was driven by the impact of higher average assets under management and higher securities lending revenue, partially offset by the effect of two fewer days in the quarter.

The Q1 results also showed that securities lending revenue of \$148 million in the current quarter compared with \$155 million in Q1 2018.

The securities lending revenue figure of \$148 million for the current quarter compares



Your ambition
knows no boundaries.
Neither does our expertise.

BMO  **Capital Markets**[®]
We're here to help.[™]

Our cross-border expertise was recently recognized with a **Top 10 borrower ranking in the Global, Americas, and Asia-Pacific categories**.^{*} So when you're looking to extend your global reach, turn to the proven prime finance solutions and seamless execution of BMO Capital Markets.

^{*} 2018 Global Investor International Securities Finance (ISF) Survey.

BMO Capital Markets is a trade name used by BMO Financial Group for the wholesale banking businesses of Bank of Montreal, BMO Harris Bank N.A. (member FDIC), Bank of Montreal Ireland p.l.c. and Bank of Montreal (China) Co. Ltd and the institutional broker dealer businesses of BMO Capital Markets Corp. (Member FINRA and SIPC) in the U.S., BMO Nesbitt Burns Inc. (Member Investment Industry Regulatory Organization of Canada and Member Canadian Investor Protection Fund) in Canada and Asia and BMO Capital Markets Limited (authorised and regulated by the Financial Conduct Authority) in Europe and Australia. "BMO Capital Markets" is a trademark of Bank of Montreal, used under license.

[™] Registered trademark of Bank of Montreal in the United States, Canada and elsewhere. [™] Trademark of Bank of Montreal in the United States and Canada.



Track, analyze, execute.

Know your risk and rewards.
Independent securities lending
performance and risk evaluation services
to take your business to next level.

- Unparalleled benchmarking tools for your securities lending performance
- Evaluation of revenue and risk
- Leverage extensive historic data covering \$21 trillion of global securities
- Independent management reporting of results versus framework and strategic objectives
- Research and thought leadership

Learn more @ markit.com/SecuritiesFinance

The global leader in securities finance solutions

Trusted. Innovative. Independent.

Contact us

E MSF-Sales@markit.com

AMERICAS
T +1 212 931 4910

EUROPE, MIDDLE EAST AND AFRICA
T +44 20 7260 2301

ASIA PACIFIC
T +65 6922 4220

with \$129 million in Q4 2018. Elsewhere in the report's highlights, BlackRock found that performance fees decreased \$44 million from Q1 2018.

This primarily reflects lower revenue from liquid alternatives and long-only products, partially offset by higher revenue from illiquid alternatives.

BlackRock added that performance fees decreased \$74 million from Q4 2018, primarily due to a seasonally higher number of funds with a performance measurement period that ended in the Q4 2018.

ICMA looks to minimise European repo disruption

The International Capital Market Association (ICMA) has explained that its working group is looking to minimise the potential disruption to the functioning and liquidity

of the European repo and collateral markets ahead of CSDR.

The ICMA Quarterly Report noted that its Central Securities Depository Regulation settlement discipline (CSDR-SD) working group will do this by looking to develop market best practice and request regulatory guidance.

This marks part of their broader work related to CSDR-SD measures as they apply to the European bond markets.

Working alongside ICMA to achieve this aim will be the ERCC and the International Securities Lending Association and other market stakeholders.

It was also noted that they are focused on the implications and practical challenges related to securities financing transactions, in particular with respect to the mandatory buy-in regime.

The regulatory technical standards (RTS) for settlement discipline under CSDR was published in the Official Journal of the EU in September last year.

The RTS, including all mandatory buy-in requirements, will start applying after a 24-month period, in September 2020.

Citi expands its ETF custody and fund services

Citi has expanded its exchange-traded funds (ETFs) custody and fund services to include Europe, the Middle East and Africa (EMEA) domiciled ETFs, following the expansion of its ETF services platform in the US, Latin America and Asia.

The expansion is supported by Citi's Advanced ETF System, a new platform that enables Citi to fully automate the entire ETF lifecycle, from basket creation to order processing

EXPERTS IN:

- SECURITIES LENDING
- RISK MANAGEMENT
- CLIENT SERVICING
- ALL OF THE ABOVE

ACHIEVE GREATER



NORTHERN
TRUST

To learn more, visit northerntrust.com/securitieslending

ASSET SERVICING \ ASSET MANAGEMENT \ WEALTH MANAGEMENT

DIRECTED TO PROFESSIONAL CLIENTS ONLY. NOT INTENDED FOR RETAIL CLIENTS. FOR ASIA-PACIFIC MARKETS, THIS MATERIAL IS DIRECTED TO INSTITUTIONAL INVESTORS, EXPERT INVESTORS AND PROFESSIONAL INVESTORS ONLY AND SHOULD NOT BE RELIED UPON BY RETAIL INVESTORS.

© 2016 Northern Trust Corporation, 50 South La Salle Street, Chicago, Illinois 60603 U.S.A. Incorporated with limited liability in the United States. Products and services provided by subsidiaries of Northern Trust Corporation may vary in different markets and are offered in accordance with local regulation. For legal and regulatory information about individual market offices, visit northerntrust.com/disclosures. Issued by Northern Trust Global Services Limited.

We're not just providing agency securities lending services.

We're generating yield and liquidity for institutional investors.

#PositiveImpact



Deutsche Bank

For more information, email: asl.global@db.com

Investments are subject to investment risk, including market fluctuations, regulatory change, counterparty risk, possible delays in repayment and loss of income and principal invested. This advertisement has been approved and/or communicated by Deutsche Bank AG or by its subsidiaries and/or affiliates ("DB") and appears as a matter of record only. Without limitation, this advertisement does not constitute an offer or a recommendation to enter into any transaction. The offer of any services in any jurisdiction by Deutsche Bank AG or by its subsidiaries and/or affiliates will be made in accordance with appropriate local legislation and regulation. Enhanced yield is not guaranteed, and agency securities lending services are not suitable for all investors. Deutsche Bank AG is authorised under German Banking Law (competent authority: European Central Bank) and, in the United Kingdom, by the Prudential Regulation Authority and in the United States by the Federal Reserve Bank. It is subject to supervision by the European Central Bank and by BaFin, Germany's Federal Financial Supervisory Authority, and is subject to limited regulation in the United Kingdom by the Prudential Regulation Authority and Financial Conduct Authority. Deutsche Bank AG is a joint stock corporation with limited liability incorporated in the Federal Republic of Germany, Local Court of Frankfurt am Main, HRB No. 30 000; Branch Registration in England and Wales BR000005 and Registered Address: Winchester House, 1 Great Winchester Street, London EC2N 2DB. Deutsche Bank AG, London Branch is a member of the London Stock Exchange. (Details about the extent of our authorisation and regulation by the Prudential Regulation Authority, and regulation by the Financial Conduct Authority are available on request or from <https://www.db.com/legal-resources> under the heading "Corporate and Regulatory Disclosures"). Securities and investment banking activities in the United States are performed by Deutsche Bank Securities Inc., member NYSE, NASD and SIPC, and its broker-dealer affiliates. Lending and other commercial banking activities in the United States are performed by Deutsche Bank AG, and its banking affiliates. Copyright© 2018 Deutsche Bank.

and settlement, reducing operational risk and processing time.

Pervaiz Panjwani, head of custody and fund services for EMEA, said: "We are committed to establishing the premier presence within the ETF servicing community."

"As ETF issuers and investors continuously require greater levels of efficiency, we are pleased to launch this comprehensive solution for European ETFs to help our clients navigate the challenges associated with a fragmented market environment via a truly global and fully automated platform."

Gareth Myburgh, EMEA ETF product manager at Citi, commented: "Citi's business model enables us to support all aspects of the ETF lifecycle agnostically, from index creation, dedicated research and content, sales, trading, market-making, derivatives and securities lending, all the way through to

traditional ETF fund administration, custody and common depository. The launch of Citi's ACES platform highlights our commitment to continuously strengthen our offering and support our clients' ETF needs holistically across products and geographies."

Short selling ban on Wirecard expires

The short selling ban on Wirecard expired on 18 April, following the halt put in place in February by the Federal Financial Supervisory Authority (BaFin).

Wirecard's falling share price caused uncertainty in the market, and they indicated the decrease in share price occurred between 30 January and 15 February 2019.

BaFin notified the European Securities and Markets Authority (ESMA) on 17 February 2019 of its intention to make use of its powers of intervention, introducing an emergency

measure, which bans opening or increasing net short positions on shares issued by Wirecard—either directly or through related instruments, for a duration of two months.

The ban received some backlash; Fahmi Quadir, founder and CIO of Saffhet Capital Management LLC, criticised it in a letter addressed to Jean-Pierre Bussalib, head of short selling section.

Quadir called the ban "bizarre" and "backwards", and noted that as a trading strategy, short selling is widely acknowledged as beneficial and a necessary countervailing force to maintain market efficiency.

Korea's FSC reg sandbox accepts stock lending blockchain platform

Korea's Financial Services Commission has accepted a stock lending platform based on blockchain technology offering stock lending



Transforming the world of Securities Finance.

At Stonewain, we understand the importance of being secure and agile, which is why we created a fully-integrated technology solution 'Spire'. Spire's architecture meticulously integrates with your organization's IT system, consolidates workflows and cohesively performs with other proprietary systems.

It's time to give your business the Spire Advantage.

- Global Stock Loans and Borrows
- Collateral Management & Optimization
- Repo/Financing
- Agency Lending
- Cash Management
- Regulatory Locates

400 Connell Drive, Suite 5300, Berkeley Heights, New Jersey 07922
info@stonewain.com | www.stonewain.com | 973-788-1886 | 973-315-3092



DEUTSCHE BÖRSE
GROUP

www.deutsche-boerse.com/GFF

Funding and Financing

Creating more efficient and secure markets

Deutsche Börse Group securities lending services include Eurex Clearing's Lending CCP; the first CCP globally to offer the safety and efficiency of central clearing to the bilateral securities lending market. The Lending CCP operates an integrated solution for your securities financing transactions, without changing the existing business relationships of all market participants.

The right funding and financing solution.

and borrowing services for individual investors onto its financial regulatory sandbox. The stock lending blockchain platform was one of nine financial service providers accepted into its financial regulatory sandbox.

The nine financial service providers were accepted out of 19 applications shortlisted for priority review and were allowed to test their services and products in the regulatory sandbox.

INTL FCStone has launched prime brokerage division

INTL FCStone has launched a prime brokerage division, which offers custody, self-clearing, multi-asset prime brokerage, execution and outsourced trading.

It also introduces clearing services for hedge funds, mutual funds, and family offices. The prime brokerage division will offer a flexible platform to more effectively execute trades,

custody, and clearing for the US and global equities, options, futures, foreign exchange (FX), and fixed income through INTL FCStone.

Based in Atlanta, the prime brokerage team within INTL FCStone will be led by Douglas Nelson, managing director and co-head, prime brokeragre, Michael DeJarnette, managing director and co-head, and Nicholas DeJarnette, managing director and co-head.

Nelson commented: "INTL FCStone has long been a leader in clearing and trade execution, and we are pleased to offer firms an accompanying multi-asset prime brokerage option."

State Street reports securities finance revenue drop

State Street has reported a 16 percent decrease in securities finance revenue compared to Q1 2018.

The revenue figure of \$118 million also marks a 1.7 percent decrease from Q4 2018, which saw securities finance revenue of \$120 million. State Street attributed the decline to its balance sheet repositioning and client deleveraging throughout Q3 and Q4 2018.

Securities finance revenue continued State Street's trend of total revenue, which, at \$2.9 billion, saw a decrease of 4 percent compared to Q1 2018.

Commenting on the figures, State Street president and CEO Ronald O'Hanley said: "Our performance this quarter reflects the continued challenging conditions in the industry as well as lower client activity. We have seen these conditions before and know that focusing on what we can control, including better productivity, process re-engineering and greater resource discipline, while also strengthening client relationships, will drive growth." [SLT](#)

FIS APEX

SECURITIES FINANCE AND COLLATERAL MANAGEMENT

- Automate, innovate and optimize with proven solutions.
- Reduce your total cost of ownership with managed services.
- Uncover market insights with global intraday market data and analysis.

Empower and optimize your business

FIND OUT MORE AT: [FISGLOBAL.COM](https://www.fisglobal.com)
CONTACT US: GETINFO@FISGLOBAL.COM

©2019 FIS and/or its subsidiaries. All Rights Reserved.

Discover a partnership for success on your terms

A man in a suit is seen from behind, standing on a balcony or in a large room with floor-to-ceiling windows. He is looking out at a modern, multi-story building with balconies. The scene is bathed in warm, golden light, suggesting sunrise or sunset. The floor is made of large, light-colored tiles.

WELLS FARGO PRIME SERVICES

PRIME BROKERAGE, MARGIN FINANCE,
AND SECURITIES LENDING

CUSTODY AND CLEARING SERVICES

CAPITAL INTRODUCTION

BUSINESS CONSULTING

Achieving success is easier when you have a relationship with someone who understands your unique needs. Our Prime Services group has the industry expertise to help alternative asset managers take advantage of a rapidly evolving marketplace. In addition, we offer financial, operational, and technical resources to help you succeed, today and over time.

Discover how a powerful relationship can help you achieve success. Visit wellsfargo.com/prime.

Regulation, technology and the cloud

Deloitte recently posited that there are a total of 299 regtechs, 11 percent are in regulatory reporting; 15 percent in risk management; 9 percent in transaction monitoring; 40 percent in compliance and 25 percent in identity management and control.

In the era of aggressive regulation, technology is fundamentally transforming regulation—and firms approach to it—like never before.

The nineties and noughties ushered in 20 years of unprecedented spend on technology in the financial sector. Financial institutions were suspicious of outsourcing technology, preferring to build large in-house IT departments. Investment banks hoovered up programmers, pinching and poaching from traditional 'technology shops'.

Then came cloud computing and software as a service (SaaS). Firms no longer need to spend vast sums of money on infrastructure and staff when cloud software can be utilised as a service for a fraction of the price.

Take the simplest example from Amazon Web Services (AWS). AWS currently charges a mere \$0.004 per GB/month to store long-term data. That's a mere \$4/month for one terabyte of data storage in a secure, highly durable medium. The data is directly queryable via structured query language—no infrastructure, hard-drives or security costs; no network engineers. The savings and increased reliability are staggering.

Storage is perhaps the simplest example. Low cost, enterprise-grade serverless databases with event triggers are commonly used that require no infrastructure or teams. I recall my time at a large investment bank. The in-house IT team struggled to procure servers and storage due to the high cost resulting in missing regulatory deadlines (as well as losing money). Now, with cloud computing, test servers together with the required software can be spun up in literally minutes. A powerful Windows server/machine can cost a mere \$5 for a working day. Billing is by the hour and you only pay for what you use. No lock ins. When you finish, press stop. When you no longer require the machine, press terminate.

We at Market FinReg extensively utilise AWS virtual machines to work on while travelling and liaising with colleagues in different countries. Not only is it more secure, it is unbelievably cheap. More indulgently, we have built a solution under the guidance of our CTO. The solution is an enterprise-scale setup that auto-scales and auto-heals, highly performant. Our total in-house physical infrastructure footprint? Nothing. Just a hand full of PCs to connect to the cloud, where everything resides.

Cloud computing and SaaS have allowed firms to refocus on their core business. Banks can focus on banking. In my day job, I visit

firms around European capitals and have noticed a shift in culture during the last 10 years. Today there is a far greater acceptance of utilising regtech companies. I see regtech companies in large institutions providing invaluable solutions.

Cloud regulation

Due to the prolific growth in cloud service providers, last year the EBA issued its recommendations on outsourcing to cloud service providers. The recommendations are addressed to Competent Authorities; the Capital Requirements Directive IV (CRD IV) firms (banks) and the second Markets in Financial Instruments Directive (MIFID II) investment firms.

While the recommendations currently have no legal force, they form the embryonic form of regulation. The European Commission is bound to take note and eventually propose legislation.

Firms are requested to perform an outsourcing assessment prior to adopting a cloud solution. At a high level it calls for consideration to:

- The criticality and inherent risk profile of the activities to be outsourced, for example are they activities that are critical to the business continuity/viability of the institution and its obligations to customers
- The direct operational impact of outages, and related legal and reputational risks
- The impact that any disruption of the activity might have on the institution's revenue prospects
- The potential impact that a confidentiality breach or failure of data integrity could have on the institution and its customers
- It also calls for outsourcing institutions to 'adequately inform' competent authorities

Securities Lending Times are hosting the Securities Finance Technology Symposium in London on 9 May. I would encourage all to attend and share views.



Seb Malik
Head of financial law
Market FinReg

Global Securities Finance and Collateral Management Solutions



Optimize funding and collateral decisions

Reduce counterparty and operational risks

Enable efficient and high-growth operations

Meet regulatory and market requirements

Ready for Next

Communications
Technology
Data and Analytics

broadridge.com





Ana Ruxandra Iliescu
Client relationship manager
REGIS-TR

Shape of things to come

With less than a year until the start of SFTR reporting, Ana Ruxandra Iliescu of REGIS-TR explains that detail is starting to fall into place

With the Securities Financing Transactions Regulation (SFTR) regulation now law and a year to go before reporting begins, the detail is starting to fall into place. At the end of March, European regulator, the European Securities and Markets Authority (ESMA) issued the definitive versions of the 155 fields that make up an SFT report, and ISO 20022 published the “candidate versions” of the XML message definitions—the formats for the SFT report fields—for final evaluation by the industry.

Testing time

Companies now have enough firm information to begin their testing in earnest. At REGIS-TR, we have built an early user acceptance testing (UAT) pre-test environment based on the latest ISO 20022 schemas and we have opened it to clients and other firms to start using now. It’s a small step, but vitally important—not only is ISO 20022 XML the only language for every aspect of SFTR reporting, but it seems likely that over time, it will become the only format for all trade and post-trade financial messaging, including the European Market Infrastructure Regulation (EMIR). It makes sense to get to grips with it as early as possible.

Pre-testing your XML is pretty straightforward. In the REGIS-TR system, you send your reports in files, each containing a single message. Upload the file in our UAT and our system sends it through the schema validation and immediately generates a response showing any errors in your XML. Our validation tool is an efficient and reliable way to iron out schema problems very early on and ensure XML compliance well before reporting starts for real.

Making ready

We will be adding features to our UAT environment over the course of this year, and this will give our existing and potential clients the chance to conduct progressively deeper testing as time moves on. Some elements, of course, will depend on ESMA. That said, we are fully aware of our clients’ most pressing concerns, and will be working with other trade repositories (TRs) to set up reconciliation testing as soon as this is practically feasible. Our overriding aim is for all our clients to be confident that their systems and processes are thoroughly tested and up and running well before their reporting start date.

The ISO messages

Meanwhile, REGIS-TR is fully involved in the finalisation of the ISO securities message definitions. We have several subject matter

experts on the ISO 20022 Securities SEG evaluation team, which includes representatives from the securities industry, regulatory bodies, connectivity providers, solution vendors and trade repositories. Final registration of the messages is set for the end of July.

The exchange of messages in ISO 20022 breaks down into three groups: reporting firm/TR, TR/TR and TR/National Competent Authority (NCA). Three of the new messages—transaction, margin data and collateral reuse data reports—are for firms submitting SFTs to their TR. TRs will use up to six message types for communicating to reporting firms: three are transaction state messages (securities financing, margin data and collateral reuse); the other three are for reconciliation statuses, collateral information requests and status reports.



Our overriding aim is for all our clients to be confident that their systems and processes are thoroughly tested and up and running well before their reporting start date



Planning notice

The evaluation team is currently reviewing the SFTR Report, which takes in all four SFT classes and eight action types. This message is larger by far than the other new schemas, and whether or not the team recommends any amendments, implementers would be well advised to start looking at it now. The sheer size of this schema may also require some planning for testing, both for the initial implementation and for any maintenance change in the future.

The same advice applies to the contextual and business validation rules—the reporting guidelines and technical standards—which

will inevitably be more complex than those for, say, EMIR. Market consultation for these rules is set to begin this quarter, and the final definitions should be ready in Q3. Again, we would strongly advise firms to draw up their analysis, implementation and testing plans now on the basis of the draft rules. In the long run, it should be more efficient to get the bulk of it out of the way as early as possible and retest where necessary when the final rules are issued.



The fact of the matter is, the SFTR reporting rules are exceptionally complex. If only for that reason, market participants should not simply throw their SFTR flows to their existing TR



The data, the data

There has been a significant focus on the sheer effort involved in SFTR reporting, especially around sourcing and coordinating the inputs for 155 SFTR data fields, capturing lifecycle events and keeping track of matching and reconciliations. Legal entity identifier (LEI) and unique transaction identifiers (UTI) protocols are firming up but may mean a headache for some, especially where previous identifying codes are hardwired into systems. Also, there are practical problems such as how to ensure that every piece of allocated collateral has an issuer who maintains a valid LEI. On the upside, the massive upsurge in data volumes offers the obvious potential for firms to gain greater visibility into areas such as trading patterns and collateral usage.

Cutting out the legwork

Automation, collaboration and interoperability are fundamental to making the most of SFTR, and REGIS-TR is setting up a number of partnerships with vendors and infrastructure providers in response to significant demand from clients looking to reduce their reporting burden. REGIS-TR is proactively collaborating with IHS Markit and Pirum, EquiLend and Trax and a number of other industry partners on full end-to-end reporting solutions designed specifically for SFTR.

End-to-end SFTR reporting solutions offer several highly customisable options and combinations of options—direct, delegated and fully or partially vendor-assisted—for clients. Opting for one of these can go a long way towards cutting out the legwork. Enriching data en route, these systems can pre-match trades, generate the all-important UTI, pre-validated and reconcile the records, convert them into ISO 20022 and transmit them to REGIS-TR already matched. REGIS-TR validates and responds within an hour, giving time for firms to correct any errors and send the trade back to the TR for reconciliation well within the reporting deadline.

Calls and responses

At REGIS-TR, we are developing a state-of-the-art web user interface, which will amalgamate all client reporting into a single view no matter how it was reported, and provide low- and high-level dashboards, management information and reports for your compliance and control functions.

Equally important is the suite of features we are developing for our clients to create and save custom queries on the submitted SFT reports and the key performance indicators (KPIs), management reporting and statistics. This will provide detailed insight into aspects such as trade volumes by type of SFT and reconciliation rates, timings and breaks. In addition, we are introducing automated scheduling of the saved custom queries, enabling clients to set these up to run at defined times. We are also giving clients—once contracts and security are in place—the choice of securely adding and managing their own accounts and users. All our reports and user management features will be available through our new reporting dashboard, in addition to a choice of connectivity channels for both uploads and downloads.

Expertise is non-negotiable

The fact of the matter is, the SFTR reporting rules are exceptionally complex. If only for that reason, market participants should not simply throw their SFTR flows to their existing TR. Regulatory reporting is not just machine-to-machine straight-through processing (STP)—there is exception management to consider as well as the fluidity in the regulatory environment. SFTR is a specialised niche and the best partners and TRs to handle it will be those with expertise and appropriate service support.

And finally

Our new UK TR, REGIS-TR UK LTD, has been accepted under the Financial Conduct Authority's (FCA) Temporary Registration Regime, put in place to enable EU TRs to offer continuity of service up to the point when the FCA begins to grant permanent registrations. We are fully live, operational and ready to provide UK EMIR services when and if Brexit takes place. For UK SFTR, we will apply for a licence as soon as the FCA opens the window for applications. [SLT](#)

BEYOND

GLOBAL SECURITIES FINANCING

More than just securities financing, together we can create the right solution



Voted most innovative Global Equity Borrower*, Natixis offers high quality solutions thanks to its in-depth knowledge of the Securities Financing market.

Collaboration || Financing || Solutions

*Group 2 - Global Market Lenders and Borrowers were split into 2 groups based on the volume traded

CREATIVE FINANCIAL SOLUTIONS THAT GO BEYOND

Contact: **Ian Beattie**, Head of Client Development Europe & UK
Tel: +33 1 58 55 83 08 - ian.beattie@natixis.com

www.cib.natixis.com



 GROUPE BPCE

 **NATIXIS**
BEYOND BANKING



The possibilities of Peru

Peru is one of the fastest-growing countries in Latin America and with its new securities lending platform, the possibilities for Peru are looking very positive

Maddie Saghir reports



Although Brazil and Mexico take the lead in Latin America's securities finance industry, Peru ranks as one of the fastest-growing countries in Latin America, and their new securities lending platform is set to enhance the Peruvian market's depth, liquidity, and efficiency. In the Latin America Securities Finance Guide 2019, published by EquiLend and the Risk Management Association (RMA), Peru is noted to have a USD\$215 billion economy and a long record of low inflation, a stable exchange rate, and manageable public debt.

Miguel Angel Zapatero, head of business, at Bolsa de Valores de Lima (BVL), anticipates a progressive adoption of securities lending in Peru, starting with stocks through the new facility put together

by the exchange. He says: "Peru is coming from behind as there are no local hedge funds and local securities have low liquidity, so there could be opportunities in trading and execution. Our target is making stock lending at least as important as it is in Chile, where it represents around 2 percent of the equity volume."

The new platform in Peru

Peru's new securities lending platform was introduced by BVL, along with Peruvian central securities depository, Scotia Bolsa, Citi Peru, and AFP Integra. It will enable non-Peruvian investors to borrow and lend securities in Peru and make available an additional USD\$4 billion in

the Peruvian stock to the market. Access to securities lending on the platform requires the services of a local broker-dealer, such as Scotia Bolsa, to execute the trade on behalf of the foreign broker.

The platform also includes a formal legal structure incorporating industry standard documentation, Peruvian Appendix to the Global Master Securities Lending Agreement (GMSLA). This is an operating platform that allows for US Dollars and equity collateral as well as full visibility into the Peruvian central securities depository's Wari platform via Citi Peru's custody and clearing services.

Zapatero highlights that the new securities lending platform is friendlier to international players, particularly borrowers. He explains that this is important as there is little expertise in this activity at a domestic level, so Peru needs borrowers and lenders from abroad.

He cites: "First, the lending transaction process has been largely improved within AFP Integra; which brings lower costs, less risk and better speed. Second, BVL and Scotia Bolsa have drafted a GMSLA available at BVL website, which makes the model a little bit more familiar. Third, Cavali will soon accept international stocks and exchange-traded funds (ETFs) as collaterals. Finally, and more importantly, Citi Peru, the largest of the two international custodians in Peru, and the central security depository (CSD), Cavali, have improved the collateral management and information flow."



Currently, the BVL and Cavali are working to create a CCP model, expected to launch next year, which is set to bring further opportunities



However, although work has been done to make the model friendlier to international leaders and borrowers, Zapatero says that, put simply, the Peru model is still not standard.

He asserts: "The lending transaction needs to happen at the exchange, through a local broker-dealer acting as an agent. In any case, the final lender and borrower have a lot of control in terms of the transaction, counterparties, and collaterals like in an over the counter transaction."

Zapatero continues: "Also, the collateral is managed by the CSD, but it is not pooled, instead it is separated and ring-fenced. Also, there is no counterparty risk with the CSD, unlike central counterparty (CCP)-based models. Still, it is not standard."

"On the positive side, the CSD function could be beneficial once you realise that local pension fund administrators (AFPs) participate directly in the deposit without third-party custodians and hold most of the float in the market. Notably, the Peru model brings many positive aspects such as compliance with local and AFP regulatory environment, stronger legal and risk protections and tax efficiency."

Possibilities of Peru

The possibility for growth and attracting new participants in Peru is looking positive. Peru has already seen development in the market following the launch of its securities lending mechanism in 2016. According to the Latin America Securities Finance User Guide, since the launch, short-selling transactions have totalled USD\$1.4 million, along with USD\$250,000 in stock lending transactions using pension fund assets.

Discussing the effects that this has had on the market, Zapatero indicates that it is important that the main institutional investors in Peru support the initiative. He said it is critical as they own about 50 percent of the blue chips free float (USD\$4 billion of USD\$7.1 billion, 2018).

In contrast to 2016, Zapatero says: "AFP Integra has improved its lending process making it more streamlined and scalable, which will certainly benefit its lending agent (a local broker-dealer, per regulation). Another positive effect is that short selling activity is slowly becoming less unusual to local broker-dealers, although it may be a long learning curve given the Peruvian market configuration."

Currently, the BVL and Cavali are working to create a CCP model, expected to launch next year, which is set to bring further opportunities. Zapatero explains that the scope of this project is to implement a new CCP institution that will oversee the clearing and settlement process in the Peruvian market.

He notes: "It is too early in the process to provide more colour, but ideally, this could boost not only securities finance activities but also derivatives and the exchange itself."

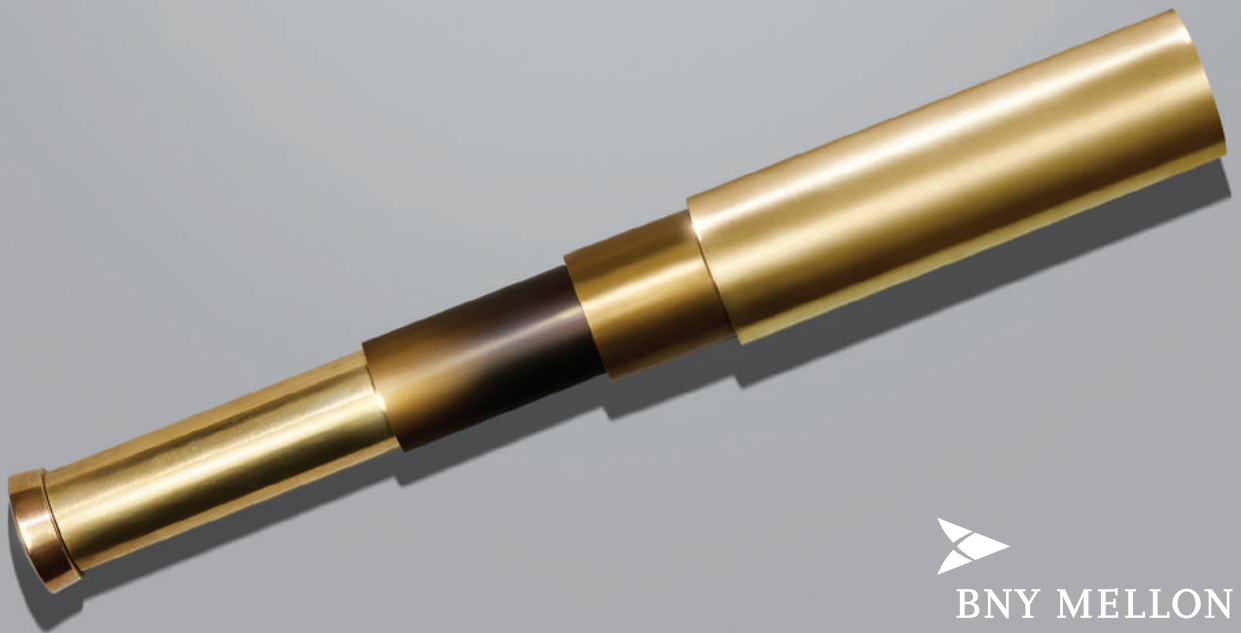
Looking to further developments in the future, Zapatero adds: "On the fixed income side, Cavali is working with the government and other players to develop a PEN government bond lending and repo market."

"We should see some developments in the coming months. In equities, we have been working with the two international custodians present in Peru, Citi Peru and BNP Paribas, to bring true delivery-versus-payment to the market. It has been a longer process than we projected but we expect some positive development very soon." **SLT**



The finest resources, assembled.

A unique perspective on your securities finance strategy.



BNY MELLON

MARKETS
TRADING
FINANCING
COLLATERAL
LIQUIDITY

bnymellon.com/markets



Do androids dream of SFTR?

As technology continues to advance, securities finance experts share views on how technology is impacting the industry and how it is changing approaches to regulations such as SFTR

Maddie Saghir reports

Technology has come a long way since the days of Alan Turing, although it is largely thanks to him that the computer exists today. Today, technology can recognise your face to unlock your smartphone, it can save your grocery list and order groceries to your house, it can also help you park your car. Technology can perform a

variety of advanced tasks across many industries and it is almost always under constant development, with the US taking the lead in the technology space.

However, something that technology lacks is common sense. Imagine a robot being given the task of frying Quorn burgers all day long. It could do this well without tiring or getting bored, it would consistently

fry each burger for the same amount of time to perfection. But if you swapped the quorn burger with a beef burger, a piece of lamb, or a chicken burger, for example, the robot would lack the common sense to recognise that it is no longer frying a Quorn burger and boom your robot has just served your vegetarian friends meat and they're not speaking to you anymore. When thinking about this concept in relation to large amounts of money in the securities finance industry, it is perhaps not surprising that some are still wary of technologies such as artificial intelligence (AI).

Philippe Seyll, CEO of Clearstream Banking S.A, asserted earlier this year that technology will not disintermediate the whole financial industry. He pointed out that we are dealing with large amounts of money in a highly regulated environment and that everything has to be bulletproof and robust. This is why there will be radical changes but no complete disintermediation.

Phil Morgan, COO at Pirum, says that for technology to be a major disruptor, it also needs market participants and regulators to adopt the behavioural changes required for disruption.

He noted: "Most technology solutions that have come to market and been successful in recent years have been more evolutionary to the markets. I think you have to question for what value is revolution. We believe in most cases processes are not completely broken and therefore do not need a revolution but rather enhancement and evolution."

Technology transformations

Discussing some of the opportunities that technology can provide, Morgan said that more than ever, market participants are looking to utilise technology solutions not just to meet regulatory and capital requirements but also to create efficiencies and manage risk.

He comments: "In the past, technology was viewed as a way to do things faster and with more efficiency. While in some cases this still remains the case, participants are now looking for technology to change how the industry as a larger system operates as well as how things are processed. This improves not only human efficiency but also financial resource efficiency, allowing firms to do more with less capital and balance sheet utilisation."

"Technology therefore increasingly plays a huge part in reducing the friction associated with bringing real-time essential data to decision makers quickly, but also improving overall decision making by suggesting a more efficient use of collateral, or identifying a failing trade that is creating a significant profit and loss impact."

Matt Wolfe, vice president of product development at OCC, adds: "Even in the face of the constant evolution and advancement of technology, the right investments and resources can enable firms to increase their revenue, decrease their costs, improve their compliance, efficiency and client experience."

Do androids dream of SFTR?

Not all superheroes wear capes—and technology is set to help overcome regulatory challenges but, as Morgan notes, it has been widely reported recently that existing tools in the market are not always fully utilised. Real-time contract compares with SSI matching is one example.

Francesco D'Agnesi, global head of securities finance technology at State Street, says: "Technology is allowing the industry to approach regulation not just as a compliance requirement, but as an opportunity to create efficiencies through rationalisation of legacy infrastructure as well as the potential to create new products to drive growth. For example, many firms are using the implementation of Basel's Fundamental Review of the Trading Book (FRTB) to drive an overhaul of their market risk analytics capabilities broadly."

Morgan advises that the first approach from the industry should be to collectively agree, adopt and utilise best practices for avoiding fails by using existing solutions. He says: "Vendors should then engage with their clients and industry associations to ensure that enhancements can be delivered before the September 2020 go live. But there should be no doubt that Central Securities Depositories Regulation (CSDR) will absolutely present a significant challenge for elements of the industry."

As well as CSDR, firms need to be ready to tackle the complexities of SFTR, which is due to come into force on 11 April next year. Discussing technology and its relationship with the industry's approaches to regulation, Wolfe remarks: "The industry has always taken compliance with regulations very seriously, regardless of technology. I do think there is an interesting relationship, though. Both regulators and technologists are continually looking to improve upon their individual missions and often influence each other."

"For example, the growth in algorithmic trading led regulators to implement new requirements to ensure that those algorithms were not harming investors or disrupting markets. In this case, new regulation was the result of technology changes."

Wolfe continues: "In other cases, regulation drives technology change. The Markets in Financial Instrument Directive (MiFID) and SFTR are good examples where change was initiated by regulation and then technology had to adapt to achieve compliance."

"This dynamic has led to safer, more secure, and robust markets. It also highlights the importance of an open dialog between regulators and market participants, so that regulations and technology advances stay in sync. Otherwise, you may have situations where technology can have harmful impacts upon the users of the markets, or where regulatory changes result in unintended negative outcomes."

Fran Garritt, director of securities lending and market risk of the Risk Management Association, highlights that SFTR is requiring

all market participants to analyse and update their trade reporting capabilities. He affirms: "This regulation has effectively forced agent lenders to develop SFTR reporting capabilities to continue to continue operating its business because both borrowers and lenders must rely on agent lenders, as the intermediary, to provide much (if not all) of the trade reporting data to complete their respective reporting obligations."

"Agent lenders must also build systems to assist clients with their specific reporting and oversight responsibilities. SFTR's impact is vast given the volume of reporting requirements, timing deadlines and potential costs to the industry to comply with these reporting obligations. On a positive note, this regulation has also created opportunities for vendors to develop products to alleviate much of the operational burdens to satisfy these trade reporting requirements."

D'Agnese explains: "As far as SFTR's impact on technology goes, it is all about the data. In preparation for the go-live date of SFTR reporting, firms have been focused on ensuring they are able to access and enrich the 153 fields of data required by the regulators. The regular production and distribution of this data is resulting in some firms reevaluating their data and reporting strategies, both for internal as well as external consumption. This reevaluation goes to the most foundational aspects of each firm's systems infrastructure, with much discussion of streaming data capabilities, data lakes and a focus on open source technologies that facilitate these big data tools."

According to Morgan, many industry participants are also being proactive and looking to enhance legacy systems to not only meet upcoming regulations, but also to become more efficient and reduce costs in the process.

So in this regard, Morgan continues, it could be argued that regulation has been a positive catalyst for change in the industry and technology is the facilitator of greater efficiency.

Challenges

In an ever-changing ecosystem that is becoming more complex and fragmented, connectivity is more important than ever and the industry is looking for low touch, easy-to-integrate solutions, Morgan explains.

He comments: "Software as a service (SaaS) based platforms are becoming increasingly popular with clients as they are easier to integrate without the need to install, upgrade and maintain a software asset. Service providers that are agile and evolving will be best able to support the constantly changing industry landscape."

In terms of whether there needs to be more education around technology, Morgan says: "I think there is a widespread appreciation of the benefits of adopting new technologies, so education is not necessary, what is challenging for firms is understanding how best to utilise and implement solutions to ensure the intended benefits are achieved."

Nick Delikaris, global head of algorithmic trading for securities finance, says: "One of the biggest challenges firms face is talent acquisition. Identifying, attracting and retaining workers with the necessary skills in our technology-enabled world is a much different proposition than in the relationship-driven world of the past. And emerging technologies like machine learning and natural language processing are being used in sectors outside of finance which takes away skilled talent from the candidate pool."

D'Agnese adds: "Governance is also a challenge. Talent must be brought in that can understand and audit the systems. It is not good enough for models that leverage these techniques to produce results if they cannot be understood by humans. There must be a framework to define how the results are derived and help people interpret these results so that controls can be installed and ensure risks are mitigated."

Rise of the machines

Looking to the future and how technology will shape the industry over the next five to ten years, Morgan states that it will certainly change for the better.

He summarises: "Accurate, timely data will be critical as regulations go live and firms are required to be more efficient and accurate with their reporting obligations, collateral management, and trade executions."

"Connectivity will also be essential for firms that have a diverse client base and diverse requirements to move assets and fulfill collateral obligations. Hopefully in addition, within ten years the use of fax machines will truly be a thing of the past."

Delikaris highlights that with the increase in computing power, abundance of data and new technologies, innovation is taking place at a pace never before seen. They added that new products are being designed and implemented faster and traditional products and operations are becoming more efficient.

He reflects: "There are many places where firms can create operating leverage by creating a wheel and spoke model to share technology resources. Sharing the cost over a bigger base allows business units to try out new concepts and ideas quicker while also improving the monitoring, maintenance and governance of the implementation."

Indeed, technology has the potential to create opportunities especially in efficiency, and it will undoubtedly remain a hot topic in the industry due to its ongoing developments.

It also attracts a mixed bag of opinions; some say it is a major disruptor, others disagree. The majority of industry participants suggest to embrace technology while others approach it with a somewhat reluctance. But as Alan Turing asked, consider the question: "Can machines think?" **SLT**

INTRODUCING

The Hanweck Borrow Intensity Indicator

Delivering new levels of
transparency into the
securities borrow market

By mining rich data from the options market in an understandable way, the Hanweck Borrow Intensity Indicator provides:

- › Real-time transparency into securities lending rates
- › Rapid signals on rising shorts and squeezes
- › Unique insight into multiple financing rates across time
- › Valuable data for risk estimation and factor models, portfolio construction and smart beta approaches

› NEW YORK › BELFAST › CHICAGO

Hanweck™

Hanweck is a leading provider of real-time risk analytics on global derivatives markets, focusing on the large-scale risk problems of banks, broker/dealers, hedge funds, central counterparties and exchanges.

Hanweck.com



The ecosystem approach

State Street industry experts provide a view of the landscape and evolution in the securities lending ecosystem

Why do you talk about the 'evolution' of securities lending? What does that mean?

Adaptation is critical for growth. The securities lending market is no exception. In its roughly 40-year existence, this business has changed dramatically. The changes have come from multiple dimensions: externally, in the form of regulation, and internally, in the expanding complexity of needs represented by the main stakeholders in a securities lending transaction.

There is a vast difference in the business value proposition. The business is now multifaceted and supports a number of trading strategies, emphasising evolution beyond what was once simply back-office activity.

Why is that important?

The market is an ecosystem and there have been numerous influences upon it. Making State Street the most efficient source from which to borrow is ultimately a key to growth and expansion. In this sense, responding to the needs of our borrower base and understanding the various collateral types and trade structures that allow them to do more business with our clients is paramount. Changing regulation has made this efficiency an absolute necessity. As such, evolution in collateral and the growth of the various trade structures has been a key focus. And, of course, one of the most important of those is the needs of our clients. Over time, we have expanded the kinds of clients we service. In a traditional agency lending context, this has meant providing greater flexibility and breadth of service with respect to collateral and structure type under which to lend. Traditional long-only clients then moved into the leveraged space, and it became important to offer solutions which catered to lending out long positions, as well as lending to these clients for shorts. Facilitating client demands for financing through a securities lending arrangement is becoming a consistent request as well. And importantly, these services are not mutually exclusive: clients are demanding that these services be offered in tandem. The number of clients who use multiple services in combination has grown dramatically, and shows no sign of abating.

What key regulations have changed the securities lending ecosystem?

Following the financial crisis in 2008 to 2009, regulators have overhauled the financial regulatory rules with the introduction of Basel III. Prior to Basel III, the primary regulatory tool for bank regulators was the risk-weighted assets (RWA) and risk-based capital (RBC) ratios. While this

continues to be a key tool for regulators, Basel III has introduced the supplementary leverage ratio (SLR), liquidity coverage ratio (LCR), net stable funding ratio (NSFR) and large exposure rules.

To date, the SLR and LCR have been implemented within the US, and the RWA measurements have been revamped to increase conservatism. In the US, the SLR complements the already existing leverage ratio and prevents banks from becoming excessively levered even if the assets are low risk. The LCR requires banks to maintain sufficient liquidity to fund operations under a 30-day stress environment. Additionally, the Dodd-Frank Act requires large banks to measure their RWA under both the advanced and standardised approaches. For securities finance transactions, this results in substantially higher RWA on the magnitude of 20 to 30 times.

Additionally, the US Comprehensive Capital Analysis and Review (CCAR) requires large banks to test their leverage and RBC ratios under a period of significant stress over nine quarters. There are three stress scenarios each year: an adverse, severely adverse and bank scenario. Under the Dodd Frank Stress Test (DFAST), banks are required to run the bank scenario twice a year.

These regulations have impacted lending agents from a return on risk based capital perspective, as the increased RWA has led to significantly more capital required to support the business. This has resulted in a significant increase in the cost of indemnifying clients. Borrowers have also seen an increase in RWA and associated capital required for the business. However, they have also seen an increase in capital costs associated with the SLR and greater funding requirements for short term cash transactions.

How has the market reacted to these regulatory changes?

Key changes to the market include a greater use of non-cash collateral, which may reduce the leverage, and liquidity impacts of the regulatory changes for borrowers. However, non-cash collateral can result in an increase in RWA for both lenders and borrowers. Additionally, the use of the term transactions both on the lending and reinvestment portions of the business have increased. This is being primarily driven by the LCR and the NSFR (when implemented) requirements.

The industry has also explored new transaction structures such as using collateral pledging rather than transfer of title, which could reduce RWA impacts for some participants. The use of central counterparties (CCPs) continues to be explored, but some hurdles remain before wholesale utilisation of a CCP model is enacted.

Are there any other changes coming down the road?

The big changes still to come include the implementation of Single Counterparty Credit Limits (SCCL) in the US. The SCCL regulation has been finalised and will go into effect on 1 January 2020. Fortunately, the final rule is not as draconian as the prior proposal and the disruption to securities finance markets should be minimal.

The NSFR is yet to be implemented in the US. This is a complement to the LCR and focuses on liquidity requirements over the course of 12 months. The NSFR will impact borrowers; however, it appears that most market participants have already adjusted their business models in anticipation of the NSFR.

Finally, Basel III has finalised a new method of calculating the standardised method for securities finance RWA. The new method will account for correlations of loans and collateral, as well as diversification across the portfolio. Once adopted in the US, this should reduce the cost of capital impact for agent lenders and borrowers.

Can you tell us more about what you're doing on the quant side in securities finance?

We are changing the operating model in securities finance by leveraging new methods, cutting edge technology and increased automation to rethink how the core functions of the business work. The algorithmic trading team integrates business and technical knowledge to drive novel, efficient solutions in the business. This mixture of expertise—business insight, technical knowledge (computing and hard sciences), and the right talent to facilitate—is increasingly important in the industry given the trends both in securities lending and the broader financial services landscape.

On the research side, we take a similarly integrated approach, leveraging academic partnerships, use of alternative data and sophisticated quant methods, and close collaboration with the business to ensure a high-value, differentiated product. With the combination of academic and business considerations, we find research angles—such as one of our current projects, modeling stocks going special using some alternative factors—that are both meaningful and impactful.

With the 'ecosystem' idea that the industry is composed of interdependent parts, how do these quant methods and research fit into the securities finance ecosystem?

The algorithmic trading team has partnerships at various levels of the firm as well as external counterparties. These relationships allow us to see a more holistic view, tap into talent pools and integrate with bigger initiatives more freely. Given the speed of transformation at State Street and the industry at large, it is impossible for business units to work in silos. The value this operating model creates and the implicit knowledge and familiarity it brings is what ultimately drives innovation and speeds up the delivery of new products.

On the research side, the 'ecosystem approach' is one of our major differentiators. The State Street Associates office, our academic arm, is located in Harvard Square, allowing us to frequently interface with our academic partners from Harvard, MIT, and other area universities. That said, the research team also sits with the business several days a week, understanding what we're seeing internally, what clients need, and fostering shared ideas and collaboration. In that sense, we're able to integrate into the ecosystem seamlessly.

It sounds like there are some great initiatives in securities finance broadly at State Street. How do you ensure you have seamless integration? What are the key components to the strategy?

For us, talent management is critical to ensuring success. One way we've formalised our efforts in this space is by launching the Numerates Network. This is a firm-wide initiative where we bring together talent and encourage the further development of quantitative skills through workshops, training programmes, mentorships and other initiatives. The direct implication for securities finance is that we are constantly sharing ideas throughout State Street, leveraging best practices, fostering creativity and collaborating on quantitative initiatives to deliver cutting-edge products.

Another great example of integrating new ideas into the financing landscape is our Direct Access product, which provides enhanced custody (demand) clients the ability to borrow directly from agency lending (supply) clients in a managed peer to peer structure. This not only provides economic benefits to borrowers, but also allows State Street's agency lending clients greater utilisation of their lendable securities.

Any closing thoughts?

Regulatory constraints on both agent lenders and prime brokers has led to an evolution of the securities finance ecosystem. New solutions that meet clients' needs from both a lending and borrowing perspective are being developed. Work is being done on a number of fronts and in a number of areas with the goal of providing a unified, holistic solution to our clients. Having great individual products is not enough anymore. Many clients no longer need simple securities lending—they need a securities finance solution. Each client's solution must be tailored to their specific needs, and the ability to seamlessly integrate multiple products together optimally to meet those needs will be the key to success in the new securities finance ecosystem.

Francesco Squillacioti, global head of client management for securities finance
Glenn Horner, chief regulatory officer for State Street Global Markets
Nick Delikaris, global head of algorithmic trading for securities finance
Stephanie Lo, head of securities finance research

Disclaimer: The material presented is for informational purposes only. The views expressed in this material are the views of the Authors, and are subject to change based on market and other conditions and factors, moreover, they do not necessarily represent the official views of State Street Global MarketsSM and/or State Street Corporation and its affiliates.

Are you ready to report for SFTR? COME AND TALK TO US



www.regis-tr.com sftr@regis-tr.com

REGIS-TR, the European Trade Repository, is the G20 reporting specialist and the only TR who can service EMIR, FinfraG and SFTR obligations. Our unique expertise in Securities Finance and Regulatory Reporting means we're the natural choice for your TR partner for SFTR. Find out more about how we can help you meet your reporting requirements by scanning the QR code.



REGIS-TR
EUROPEAN TRADE REPOSITORY

Hidden analytic gem

Robert Levy of Hanweck provides insight into cross-asset class analytics for strategies in trading and lending

Hanweck Trading Indicators include Borrow Intensity Indicators (BII), launched in March last year, and the most recent offering, Issuer Volatility Risk (IVR). BII generates synthetic lending rates on a real-time basis for the optionable universe of listed equities (OPRA coverage), describing term rates with maturities from roughly one month to one year. BII originates in real-time implied borrow data that is part of the core Hanweck Options Analytics.

An additional area of research and development for Hanweck has been debt-equity models entirely based on market data (for example, no dependency upon reported financial statements). By not requiring less frequently reported corporate information, the model can react with the speed of financial markets.

IVR has evolved from deployed analytics that Hanweck has provided on a customised basis since 2007, and intraday updating dataset. Both these trading indicators extract information from entire option chains in order to deliver signal compressed into more compact indicators. In the case of IVR, we condense information across strikes and time to generate either an implied probability of default based or an implied (synthetic) credit spread by assuming a fixed recovery rate.

The motivations in using debt-equity type models for cross-asset class hedging and arbitrage are straightforward. For example, a high-yield bond trader may wish to hedge credit risk with equities or equity derivatives. But why would anyone care in securities lending?

We would argue that by relating information in the more liquid and transparent exchange traded markets to less transparent markets, it provides another channel of information to equities collateral management areas to more rapidly anticipate greater intrinsic value in securities such as fixed income exchange-traded funds (ETFs).

Overview

In this article, we will apply both IVR and BII measures to the iShares iBoxx High Yield Corporate Bond ETF (HYG), looking at equity collateral value through Borrow Intensity, and relative value to credit through IVR. Both speak to liquidity and flows that impact execution, trading, and investment in this ETF, of direct concern to market participants with shorter-term focus. Also, longer-term investors can find these metrics valuable, for example, when evidence arises that short term market dynamics may be causing the ETF to overshoot on either rich or cheap directions, departing from fundamentals and creating a better entry opportunity.

Cross-asset class ETFs present a special challenge to collateral traders in terms of predicting liquidity and borrowing costs since the constituents are not equities. But if a securities lending desk notices, for example, the HYG ETF overshooting cheaper than the IVR levels, this is another indicator of trading momentum that will create shorting and increasing need for locates.

Issuer volatility risk, analytic approach

Trading indicator impact

Equity participants:

- Short term: informs estimates of market impact and liquidity
- Long term: rich/cheap view across the capital structure (Credit ETF) versus its equities counterpart

Collateral trading:

- Momentum and trends in valuation and implied term rates inform overnight rates

IVR derived implied probability of default in real-time from the equity derivatives market. It is in some respects similar to a 'single-name' VIX in the manner it reacts to a wide range of strikes and skews, but the measure is particularly sensitive to the downside or tail risk.

IVR is generated for a single name: the single equity underlying an option chain. Aggregate measures can then be constructed as shown below for HYG, either based on the weights of an ETF or index, or any arbitrary basket.

IVR:

- Synthetic credit spreads from equity options
- Based upon a constant elasticity of variance (CEV) model
- Transformed with predictive analytic processes to separate signal from noise

Synthetic credit replication with equity options

Figure 1 shows in the upper panel a synthetic replication of HYG entirely from equity and equity options data (no corporate bond information). In this example, the synthetic is generated in terms of credit spread (IVR_spread) shown in a reversed Y-axis so that price and yield spread can move in the same direction. The lower panel shows the historical closing prices of the HYG ETF, which comprises over 950 high-yield bonds of nearly 300 unique issuers.

Process of credit replication with IVR:

- Map corporate bond to related equity
- For equities with listed options, calculate IVR on the option chain
- Construct a weighted aggregate of IVRs on mapped entities

Synthetic showed distress prior to the actual ETF in Q4 2018

The IVR of HYG series has very high correspondence with the actual ETF, and in Q4 2018 it appeared that the equity derivative market moved first both in the process of rapid spread widening (lower HYG prices), and then recovery with spread narrowing (higher HYG prices). IVR moved ahead of HYG, with the major move down (spread widening) on 29 October last year to 437bp (circled in blue), and the second leg down on 24 December last year to 530bp. HYG didn't see the first corresponding move lower until reaching 82.71 on 23

November last year (lagging by weeks), and then the second move down to the December low of 79.63 on 24 December last year (entire area of changes circled in red). Both series recovered rapidly after Christmas of 2018, with the synthetic series moving up very sharply to reduced risk level.

The fact that the equity derivative series moved more quickly can partly be explained simply by the fact that it has more transparent and liquid underpinnings—the exchange-traded listed equity options market. On the other hand, the markets for the bonds within HYG are opaque, trade less frequently, and tend to be model priced between trades based upon characteristics such as sector, rating, and duration.



The analytics considered here can transform information hidden in the equity options markets—where there can be market leading information—into data that informs both equity strategies and securities lending



Those trying to seek bids for the bonds may notice that markets have widened considerably, but otherwise, information filters back out to the market relatively slowly compared to exchange-traded products. This will only get worse if recent proposals such as a 48-hour delay on block bond trades are brought into effect. These are all motivations to see an alternative market view of HYG and other credit-based ETFs.

BII on HYG

Figure 2 shows the 45-day and 180-day BII on HYG, where Borrow Intensity is expressed in the format of a rebate rate. In this time period, the 45-day term rate reached a negative (hard-to-borrow) level of -1.5 percent with the 180-day term at the same time of roughly 0 percent. This was wider and more rapidly changing spread (45 day to 180 day) than usual for HYG (see chart area circled in blue), which tends to be a leading indicator for market distortions arising from some combination of tightness in the collateral market and a higher level of put buying. The pattern around the turn of the

year was somewhat erratic, but the BII synthetic rates appear to show evidence of shorting by 15 November 2018, which dissipates by roughly a month later on 18 December. Combined with the IVR information also showing distress from the equity options market, there was evidence of signals anticipating near-term distress in HYG. In fact, HYG declined approximately 2.6 percent over the next month (from 15 November to 18 December), and 4.7 percent in total by 24 December last year before reversing after the holiday. Notably, by this time the BII picture had turned completely upside down with 45-day rates above 180-day rates.

The ETF didn't command a greater borrow premium again until mid-January as HYG bounced strongly higher almost completely retracing December losses by 11 January 2019, when the 45-day rate went back below the 180-day, but both stayed more synchronised in this next episode of maintaining a lending premium.

Value of linking information across markets

We focused here on using Hanweck IVR and BII to increase the understanding of the flows and valuation of the high yield bond ETF HYG. Fixed Income ETFs are increasingly important as liquidity expands to meet institutional investment needs. The bond market does not have as efficient a market structure as equities in either transparency or execution, and these ETFs serve a valuable function. At the same time, there is a tension in creating liquid ETFs in the equity market that holds comparatively illiquid bonds.

This creates both challenge and opportunity for equity investors, market makers who participate in the creation/redemption process, and for securities lending areas trying to maximise value in managing ETF collateral.

It's valuable to connect information across the derivatives and cash markets, and even across asset classes. The analytics considered here can transform information hidden in the equity options markets—where there can be market leading information—into data that informs both equity strategies and securities lending. [SLT](#)



Robert Levy
Head of
business development
Hanweck

Figure 1: Synthetic (entirely from equity options) vs Actual traded prices of HYG ETF

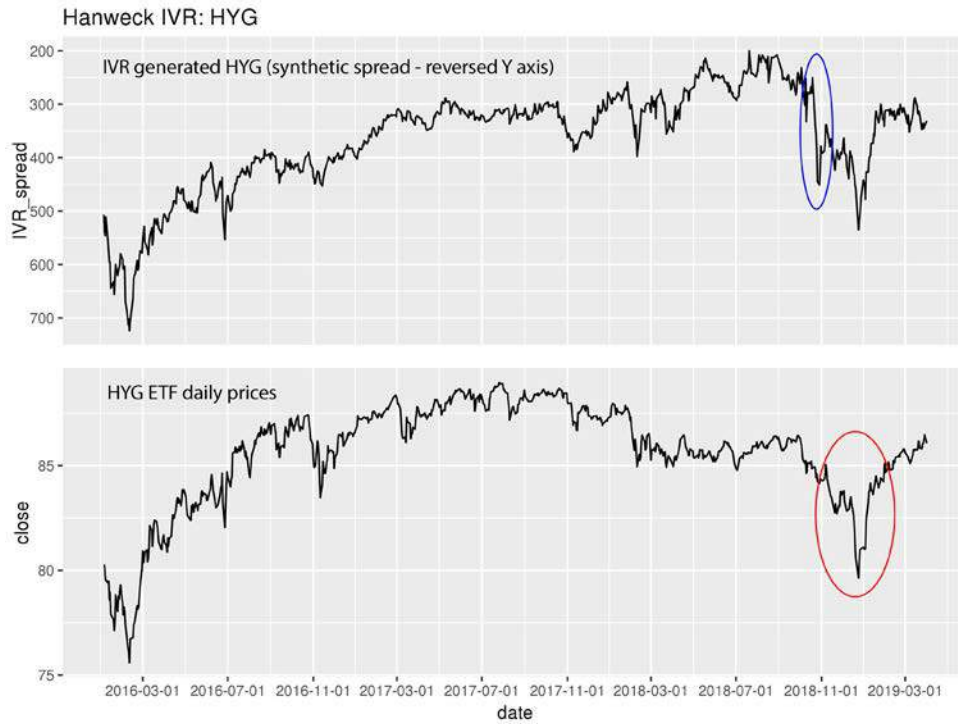
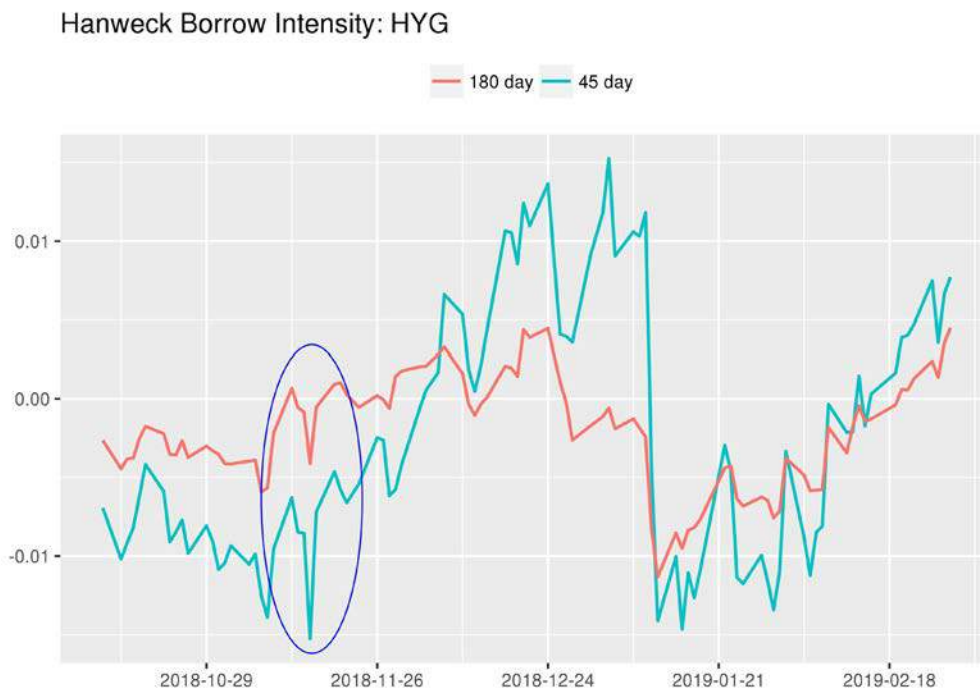


Figure 2: Borrow Intensity HYG October 2018 to March 2019



The role of CCPs in evolving market structures

Eurex Clearing's Erik Müller discusses why CCPs, in particular, are attractive as additional risk-mitigating mechanisms

The financial crisis revealed that the concentration and interconnectedness of banks could prove problematic if these leveraged businesses add outsized incremental leverage. It is particularly difficult to manage where such risk transfer or acquisition occurs outside organised and regulated markets or financial market infrastructures. While even some of the larger players needed support from investors, governments or taxpayers, the same was not true for market infrastructure providers.

Post-crisis measures have made banks much safer by stepping up equity capital requirements and introducing new rules on liquidity management, with rather crude backstop measures such as leverage ratio. Even though banks are much more stable today, it is interesting to give some thought to what makes central counterparties (CCPs) in particular so attractive as additional risk-mitigating mechanisms.

1. Placing the CCP between two counterparties reduces interconnectedness and allows for netting the exposures across different counterparties. Typical CCP netting figures range from 95 to 99 percent.
2. The concept of variation margin prevents credit exposure build-up by levelling "marking to market" the exposures every day. This concept is increasingly applied in uncleared markets as well.
3. Initial margin essentially restricts the leverage to what a market participant can collateralise. Total initial margin across major global CCPs exceeds \$500 billion on any given day. Applied thoughtfully, these mechanisms go a long way to ensure trade size reflects capital.
4. A mechanism called default fund that backstops initial margin modelled for extreme but plausible events to the best of the

collective imagination and judgement. All participants in the clearing ecosystem, including the CCPs themselves, resource it. The prefunded collateral currently held at CCPs globally is around \$75 billion—true mutual resources committed jointly by market participants.

5. Mechanisms embedded in the rulebooks of CCPs that allow CCPs to rebalance themselves in case all other lines of defence fail.
6. The last two elements create an incentive structure and ongoing interest of participants in risk management that is virtually impossible to archive in bilateral markets.

Much has been done by regulators to reduce the likelihood of bank failure and their implications. CCPs address both these aspects, enabling a shift from firm-based financed to market-based financed, which fosters competition and transparency in the markets. Most importantly, they ensure very strong and structured risk management between financial companies. [SLT](#)



Erik Müller
CEO
Eurex Clearing



RBC Investor & Treasury Services

Trusted Expertise **Strict** Risk Management

With more than 30 years of expertise and a strict risk management framework, RBC Investor & Treasury Services clients continue to benefit from enhanced returns on their lending portfolios.

To discover how our team of specialists can deliver a securities finance program that meets your risk and return objectives, visit rbcits.com.

Optimization | Securities Processing & Administration | Distribution Services | Information Management | Transaction Banking

RBC Investor & Treasury Services™ is a global brand name and is part of Royal Bank of Canada. RBC Investor & Treasury Services is a specialist provider of asset servicing, custody, payments and treasury services for financial and other institutional investors worldwide. RBC Investor & Treasury Services operates primarily through the following companies: Royal Bank of Canada, RBC Investor Services Trust and RBC Investor Services Bank S.A., and their branches and affiliates. © / ™ Trademarks of Royal Bank of Canada. Used under licence.



Could your collateral work harder?

As firms look to manage or expand programmes, J.P. Morgan's Ed Corral explains that the choice of a collateral agent may help extract more value from collateral

The value of collateral extends beyond its actual worth as an asset to secure a securities or derivatives transaction. Increasing demand for collateral, across transaction types, and the need to mobilise it globally to support your trading activities has made collateral a front-office concern for broker-dealers and collateral providers. Conversely, the need to align received collateral with institutional risk parameters and risk guidelines means that collateral takers require greater flexibility in how they manage and monitor their collateral schedules.

As you look to manage or expand your programme, the choice of a collateral agent may help you extract more value from your collateral.

The value of integration

Your assets should work hard for you across geographies. For global broker-dealers, collateral demands require the ability to quickly mobilise and optimise collateral across regions and legal entities, so

that the right piece of collateral is available to secure the trade and every asset is utilised effectively.

A unified collateral platform that allows you to seamlessly move assets between the US, Canada, Europe and Asia—without unnecessary and costly market movements or re-booking assets—can help you manage your global asset inventory more efficiently. For example:

- Use eligible US equities to secure financing trades or derivatives collateral requirements in Europe.
- Move Japanese Government Bonds (JGBs) from Japan to satisfy eligible central counterparty (CCP) requirements in the US, Europe or Asia (ex-Japan).
- Satisfy high-quality liquid asset (HQLA) requirements across the globe with US Treasuries.
- Maintain a secondary liquidity pool for US Treasuries. This gives you the flexibility to meet obligations requiring treasuries (such as 15c3 lock-up, CCP and non-cleared margin requirements) in the event that another provider is unable to meet daily deadlines. Those Treasuries can be used for other intra-day purposes when not required on a contingency basis.

A single long box gives you greater visibility and control, letting you manage recalls and substitutions and identify the potential impact of hypothetical scenarios. To further streamline the movement of assets, a single global legal agreement can help to ease the operational friction of moving securities between geographies. Even greater efficiencies accrue when you can manage collateral for both securities and derivatives transactions from the same platform and with the same collateral agent.

The value of diversification

It's prudent to diversify your providers in the same way you'd diversify your assets—to minimise concentration risks and to take advantage of incremental opportunities. Vendors can offer 'plug-in' solutions, but a true collateral agent can facilitate introductions between collateral providers and takers and offer important insight into programme options. As you manage a global collateral programme, you'll want to have providers who can support you across markets and asset classes, and have the financial strength and resources to invest in technology and continue to innovate even in turbulent markets.

The value of flexibility

As non-cleared margin rules (NCMR) continue to roll out globally, even more institutions are coping with the increased demand for collateral and related additional operational requirements. There's no one-size-fits-all model: each institution has to find solutions to help them best meet their collateral needs. Components of a solution could include the ability to:

- Actively manage and direct collateral allocation, but direct the assets to a segregated account that satisfies non-cleared margin rules. This is a lower cost option that allows the client to remain in control.

- Integrate your segregated initial margin (IM) obligations with variation margin (VM) management, and utilise your custody assets to meet your obligations. Interconnected custody and collateral platforms allow your assets to remain in situ, but to be used automatically and in accordance with your agreed eligibilities to meet margin requirements without friction or market movements. Tracking and managing IM and VM is done through a single interface, providing one view into your obligations and collateralisation.
- Use a tri-party solution to address your non-cleared segregated initial margin requirements. Once a tri-party account is established, assets are automatically sourced and priced from that pool to meet NCMR obligations. Both the pledger and pledgee receive daily pricing sourced from third-party vendors, and the obligations are actively managed on a daily basis to validate that the correct amount of collateral has been allocated. As margin calls are proactively managed, excess collateral is recalled and sophisticated mutually-agreed algorithms are used to pick the most economical asset to allocate.
- J.P. Morgan has the institutional resources to offer additional benefits to US clients with a long cash balance but an insufficient amount of eligible securities collateral. The cash can be transformed into eligible US Treasury and/or US Agency collateral that can be automatically allocated to the client's NCMR obligations.

The value of a powerful partner

At J.P. Morgan, we understand the importance of continuing to evolve our solutions to fit our clients' evolving collateral requirements, and our clients benefit from more than 40 years of our experience as a global collateral agent. From the first international tri-party collateralisation to an early and market-leading derivatives collateral solution, through long-standing relationships in and across geographies bolstered by a leading custody franchise operating in over 100 markets, we have the expertise to help our clients adapt to changing conditions. And, powered by the financial strength of J.P. Morgan, we will continue to innovate and invest to help clients extract value from their collateral programmes. **SLT**



Ed Corral
Global head of
collateral strategy
J.P. Morgan



The rise of machines

David Lewis of FIS explains that while science fiction has represented the machines as a potential danger to humans, the reality is that without them, we simply could not function

Such headlines evoke fears of dystopian landscapes akin to films like the Terminator series—or even War of the Worlds—but in reality, machines and automation have become the very necessities of modern life. Without machines—by which, of course, I really mean computers and technology—where would we be? Without our location maps and social media services, we would not only be unable to find the restaurant we had booked online earlier that day, having read 32

reviews of it, but we would also certainly fail to inform all our friends of what we had eaten and shown them how it looked.

This is, of course, a more than flippant view of the technologically advanced world around us, but it is used as an illustration of the need we have for information and automation to lead our lives effectively and efficiently. We must also take the same approach in

our professional lives. Consider just one of your tasks today and now imagine undertaking that without the assistance of any electronics of any sort.

The physical systems and interfaces we all use throughout our days, whether at work, on our way to work or even at home, rely not only on vast processing power undreamt of a generation ago, they require enormous amounts of information and data. Without the underlying data in the right quantities and level of quality, the outcomes become worthless or, arguably worse, they could be wrong. Data itself has become the cornerstone of automation, without which we would be unable to achieve and produce at the levels we can now, be that in our professional or personal lives.

There are many statistics out there regarding the amounts of data gathered and processed on a daily basis now, and they won't be quoted here, mostly because by the time this is published that statistic will likely be out of date. It is sufficient to say, however, that vast quantities of data are required to drive the systems we use every day without a second thought. For example, at FIS, all of our data is stored in the cloud. Our laptops carry nothing of note, instead swapping enormous files of data backwards and forward near instantaneously—data required to undertake our every task.

The world of securities finance and collateral management is no different in this respect. Looking across our market and the systems we employ, it is easy to see the impact that data has had on our ability to process and manage complex tasks that would not have been possible just a few years ago. The machine constructed to break the enigma encryption code took on a Herculean task way beyond the capability of the humans that built it, not because the decryption task itself was impossible, but it was impossible in the timeframe available. For those not familiar with the story, the codes changed every 24 hours, so that while the code only had to be broken once, it had to be done in one 24-hour period, and failure meant a restart.

Managing a securities finance and enterprisewide collateral management business is not dissimilar, juggling the needs of the long and short books, while providing all the necessary collateral to satisfy the needs of associated businesses, only to have the supply and/or demand characteristics change almost constantly. Without the underlying data, showing available assets and collateral requirements coupled with acceptability criteria, credit limits, counterparty approvals, corporate actions, and intraday fee and rebate levels, the business could not possibly function. Again, imagine undertaking any, let alone all of these tasks, without any electronic assistance. Our businesses would simply not run without advanced automation, let alone run efficiently and within the requirements of the regulations that govern it.

'Big data' is an overused phrase, but one that is commonly used to describe the enormous amounts of new data entering our daily lives. However, here we are using 'big data' as an indicator of its importance, the fact that it has taken up a big part of our daily tasks, and without it,

our systems would not run, and our industry would not function. Being able to do more with less is a common refrain around big companies, and the reality of that is that automated tasks often mean less people employed. Here, the rise of the machines is often not a welcome advance for some, just as self-driving vehicles seem highly attractive to many, cab and lorry drivers will have a different view.

Automation, in this sense, is clearly not just about undertaking enormous and complicated mathematical challenges that are simply beyond human capabilities in the timescales allowed, but it is also about efficiency. Clients expect services of better quality, higher accuracy and, of course, that could be delivered faster while getting cheaper. Witness the rise of zero-fee investment funds; that kind of offering is simply not possible without high levels of automation and even 'robot advisors' to take the place of expensive humans. Such offerings are also likely not possible without securities lending incomes to boost their returns and pay the managers fees, but that is another story altogether.

Efficiency is as much about financial capital as it is about human. Capital adequacy and the returns on capital employed are also vital measurements that create complex inputs into the daily process of managing a securities finance business. Complex and potentially conflicting pressures to provide the best, read cheapest, collateral to satisfy the client and the regulator at the same time, require iterative calculations, constantly rebalancing as demands change minute to minute. The demands of regulations don't stop there of course. This year is bringing in increased demands for collateral to be posted on uncleared derivatives, placing additional volume and complexity through our allocation algorithms, and by April 2020, all our businesses will need to be able to marshal enormous amounts of data to enable them to tell their regulators all about it.

While science fiction has represented the machines as a potential danger to humans, the reality is that without them, and the data that feeds the automation they provide, we simply could not function. Whether in borrowing that share at the right rate, or booking the right restaurant, the machines are not only here to stay; we need them. **SLT**



David Lewis
Senior director
FIS



Don't miss the next issue of **SLT**

SLT is present at all of the major securities lending conferences around the world. Make sure you pick up a copy of the latest issue

51st ICMA Annual General Meeting and Conference

Stockholm

May 2019

15-17

3rd Edition Impact of SFTR on Securities Lending and Reporting Conference

London

May 2019

22-24

CASLA

Toronto

May 2019

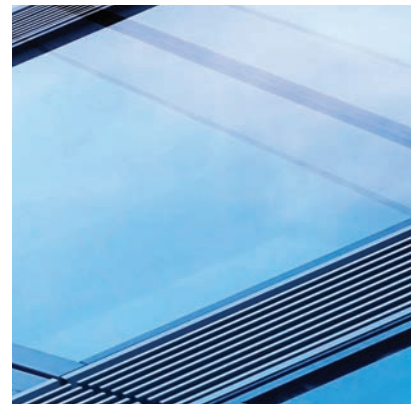
30

ISLA

Madrid

June 2019

18-20



We clear the path

OCC has the largest centrally-cleared stock loan offering in the world with approximately \$80 billion in cleared loan balances. Over the last 25 years, OCC has built an innovative and unique U.S. program for securities lending transactions where OCC steps in as the counterparty (with a two percent risk weight) and guarantees the return of stock or collateral. We continue to enhance and expand access to our stock loan program in order to offer clearing solutions and capital efficiencies for our members and the entire securities finance industry.

As the world's largest equity derivatives clearinghouse, OCC is committed to providing market participants with high quality and efficient clearing, settlement and risk management services. As a Systemically Important Financial Market Utility, we work to enhance our resiliency in order to reduce systemic risk, increase market transparency, and provide capital and collateral efficiencies for the U.S. capital markets.

OCC

**THE FOUNDATION
FOR SECURE
MARKETS**



Comings and goings at Pirum, FIS, OCC and more

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. 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.

Commenting on his new appointment, 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, 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."

Jonathon Hodder has joined FIS as senior sales executive, based in London.

Hodder will help drive new business growth across prime services with new and existing clients and will be part of FIS's European sales team.

Most recently, Hodder served as director, global head, sales and marketing, for EquiLend. He left EquiLend in November after serving in his role since April 2011.

EquiLend has appointed Michael Doyle to director of North American sales.

Doyle will assume responsibility for all EquiLend products and services in the North American region, including next-generation trading, post-trade suite and clearing services.

Previously, Doyle served in a senior capacity at Bank of America Merrill Lynch, Goldman Sachs and LXM, where he gained experience in hedge fund consultation, cross-selling equity capital markets products and international securities lending sales.

OCC has re-elected Craig Donohue as executive chairman at its annual stockholder meeting for 2019.

The equity derivatives clearing organisation also elected to its board of directors three

class III members and two class I public directors. The newest class III member directors are Kurt Eckert of Wolverine Trading, Jonathan Werts, head of Midwest at Bank of America Merrill Lynch, and William Yates, treasurer at TD Ameritrade.

Susan Lester and Robert Litterman, chairman of Kepos Capital's risk committee, were also unanimously elected as class I public directors. All of the above terms are set to expire in 2022.

Commenting on the elections, Donohue said: "The election of these knowledgeable experts from the financial services sector allows OCC to continue its transformation to a systemically important market influencer that ensures confidence in the financial markets and the broader economy."

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

Langlois was previously project manager and business analyst at Santander from July 2017 to September 2018.

Langlois has also served as lead business analyst at MetroBank from February 2016 to May 2017.

He has also served at Anchura Partners, Capco, Credit Suisse and Deutsche Bank. **SLT**

28th

ISLA INTERNATIONAL
SECURITIES LENDING
ASSOCIATION

Annual Securities Finance and Collateral Management Conference

Transition | Innovation | Future State

18-20 June 2019 | Hotel Puerta América Madrid, Spain

JOIN US IN MADRID

The International Securities Lending Association is delighted to be returning back after 7 years to Madrid with their 28th Annual Conference.

For full agenda, conference information and registration, please visit
www.isla.co.uk/isla2019



FOR ALL CONFERENCE INFORMATION

isla@eventrock.co.uk | +44 (0) 1708 530034 | www.isla.co.uk/isla2019

IN A CHANGING WORLD,
BY THE TIME YOU MASTER
THE GAME, THE RULES HAVE
CHANGED.



ANTICIPATING YOUR BUSINESS ENVIRONMENT

At Securities Services, we support your business in adapting to ever changing regulations. Our expertise across the globe ensures your assets are serviced effectively in over 100 markets.

www.securities.bnpparibas



BNP PARIBAS

The bank
for a changing
world

BNP Paribas Securities Services is incorporated in France as a Partnership Limited by Shares and is authorised and supervised by the European Central Bank (ECB) the ACPR (Autorité de Contrôle Prudentiel et de Résolution) and the AMF (Autorité des Marchés Financiers).

BNP Paribas Securities Services, London branch is authorised by the ACPR, the AMF and the Prudential Regulation Authority and is subject to limited regulation by the Financial Conduct Authority and Prudential Regulation Authority. Details about the extent of our authorisation and regulation by the Prudential Regulation Authority and regulation by the Financial Conduct Authority are available from us on request. BNP Paribas Securities Services, London branch is a member of the London Stock Exchange. BNP Paribas Trust Corporation UK Limited (a wholly owned subsidiary of BNP Paribas Securities Services), incorporated in the UK is authorised and regulated by the Financial Conduct Authority.