FEBRUARY 2017 | ISSUE 2 | $50

THE PURPLE

A **DATALEND** RESEARCH PUBLICATION

TABLE OF CONTENTS

NEW YORK
+1 212 901 2200

LONDON
+44 207 426 4426

TORONTO
+1 416 865 3395

HONG KONG
+852 3101 7070

THE PURPLE

Jonathan Hodder
Global Head, Sales & Marketing
Publisher

Christopher Gohlke
VP, Marketing & Communications
Editor in Chief

Damian Antommarchi
Graphic Designer
Creative Director

Divya Ijari
Intern

Chris Benedict
Director, Senior Analyst
Data Commentator

Rachel Alembakis
Contributor

DATALEND

Brian Lamb
CEO

Nancy Allen
Global Product Owner

Chris Benedict
Director, Senior Analyst

Robert Antelmann
Nimisha Patel
David Poulton
Matthew Ross
Product Specialists

Ann-Marie Pearce
U.S. Sales

Alexa Lemstra
Canada Sales

Emmanuelle Charriere
Mina Kinsey
Europe Sales

Yuka Hasumi
Andrew McCardle
Asia Sales

Matt Schoenberg
Director, Senior Engineer

Sean Menago
Arun Nunna
Paramjit Singh
Engineers

LIKE WHAT YOU SEE?

Email us at *marketing@equilend.com* **to receive a digital edition directly in your inbox!**

Contact *Jonathan.Hodder@equilend.com* **or +44 207 426 4419 if you are interested in sponsoring our next issue, to be released in September 2017 at various industry conferences.**

DEAR READERS,

Greetings, and welcome to the second edition of The Purple. Thank you to those who read and gave us feedback on our first edition. It was all very positive, and as a result we aimed to make this edition even better.

As we turn our attention to our targets and goals for 2017, there are many irons in the fire here at EquiLend. We continue to invest heavily in our clearing business with EquiLend Clearing Services (ECS) and in our Post-Trade Suite via One File and Unified Comparison. As we progress on that agenda, we are wrapping up the migration of all our trading activity globally away from schedules and onto NGT. I am pleased to report that as of February 2017, more than 80% of our global trading flow is now done on NGT. Finally, as you'll see from the content in this edition of The Purple, our DataLend product is better than ever. In particular, our Client Performance Reporting (CPR) tool, which was released at the end of 2016, is a game changer for us as well as our clients. I encourage you to take a look for yourself—you won't be disappointed.

Thank you again for your feedback. Please keep it coming! And thank you all for your business and your support. I wish you the very best for 2017.

Brian Lamb
CEO, EquiLend
BRIAN.LAMB@EQUILEND.COM

DEAR READERS,

This is an exciting time for DataLend and our clients. We recently rolled out an all-new Client Performance Reporting service for agent lenders and beneficial owners; read more about it on the next page. We continue to enhance the data set on our core platform, which now covers more than $15.5 trillion in lendable and nearly $1.9 trillion on loan. And, of course, we now unveil issue two of The Purple—A DataLend Research Publication. Taking into account your requests, in this issue you will find richer data throughout on the global fixed income markets; more data-intensive editorial; and coverage of exciting markets such as Australia (page 10), Korea (page 14), emerging market debt (page 28) and others. We hope you find issue two as informative as issue one. We welcome your feedback and suggestions for our next edition.

Nancy Allen
Global Product Owner, DataLend
NANCY.ALLEN@EQUILEND.COM

STANDARDIZING PERFORMANCE MEASUREMENT

BY NANCY ALLEN, GLOBAL PRODUCT OWNER, DATALEND

PRIMARILY driven by regulatory changes and the subsequent capital charges incurred by lenders and borrowers, securities lending programs have become more complex. Beneficial owners must now consider a wider range of collateral types, varied term structures, new types of routes to market (such as central counterparties) and bespoke indemnities. For all parties involved in securities lending, transparency has become increasingly important to ensure that optimal value is extracted from lending programs. Data services are becoming ever more embedded, and data is being treated as an asset, one that is pivotal in the navigation of a changing market environment.

Given the various decisions that beneficial owners face when reviewing their lending programs, many have now taken a hands-on approach with their investment teams providing program oversight, as opposed to an outsourced approach using the custodian or investment manager.

Beneficial owners would like to be able to quantify how well their agent lender is performing not just against the securities finance market as a whole, but against a peer group sample that is as close to their fund structure as possible. As part of that assessment, beneficial owners want to understand what drives revenue and how they can generate an optimal return for their investors. Agent lenders and beneficial owners alike can benefit from performance measurement tools such as the DataLend Client Performance Reporting suite to help identify trends in the market and quantify returns from a change of strategy.

Once beneficial owners establish their program parameters in line with their risk appetites, they then have a responsibility to ensure that their programs are being properly managed given their requirements and that they are achieving returns commensurate with market rates. Given the complexities of the market and the unique nature of each beneficial owner's program, this is not an easy or straightforward task. Many have asked: "How can I get a true like-for-like analysis when comparing my program to the broader industry, and how can I ensure that my agents are reporting their performance in a consistent manner?" The answer starts with data quality and a standardized peer group.

At DataLend, we have been working closely with our agent lender and beneficial owner clients to re-architect our Client Performance Reporting tool. We believe the new design provides our clients with the transparency and the peer group benchmarking standardization they desire. We have incorporated enhanced data cleansing processes to ensure that clients have access to the most accurate and complete data set possible, including an accurate reflection of key attributes such as dividend rates at the inventory level. Using that cleansed data, we introduced a suite of standard DataLend-defined peer groups, which are created from the same aggregate dataset and DataLend matching algorithm regardless of the user; a beneficial owner that receives performance reporting from multiple agents can feel secure that reporting from DataLend will reflect the standardized peer group.

In addition, the enhanced Client Performance Reporting suite provides complete transparency around the chosen peer group. A lender or a beneficial owner will always know the types of entities that are included in their chosen peer group at any time (legal structure, fiscal location and collateral are displayed). As a start, all peer groups are weighted at a security level to the portfolio being reviewed and are also matched at dividend rate.

From there, users are able to select which benchmarking criteria are most important to them: fiscal location, legal structure, collateral type or all of them.

To better understand how revenue is being generated, beneficial owners need a tool to help them perform a revenue attribution analysis. Which assets are generating the most return and why? What is driving that return: collateral? Term? Intrinsic value? Cash reinvestment? Are there currently dormant assets in inventory that may be lent out profitably?

Beneficial owners can better optimize portfolio returns when they understand how revenue is generated. DataLend's Client Performance Reporting provides that level of transparency to help agents and beneficial owners identify revenue attribution.

In recent years, beneficial owners have struggled to find a consistent approach to performance measurement. In consultation with beneficial owners and agents, we believe we have created a comprehensive application that provides the market with the tools to review performance at a program, client, fund and account level across combinations of asset classes, countries and sectors while doing so relative to a standardized peer group.

We look forward to continuing to work with the lending community to further enhance DataLend's Client Performance Reporting tool.

FOLLOWING significant development efforts and in consultation with our agent lender and beneficial owner clients, DataLend is excited to announce the release of our all-new Client Performance Reporting suite.

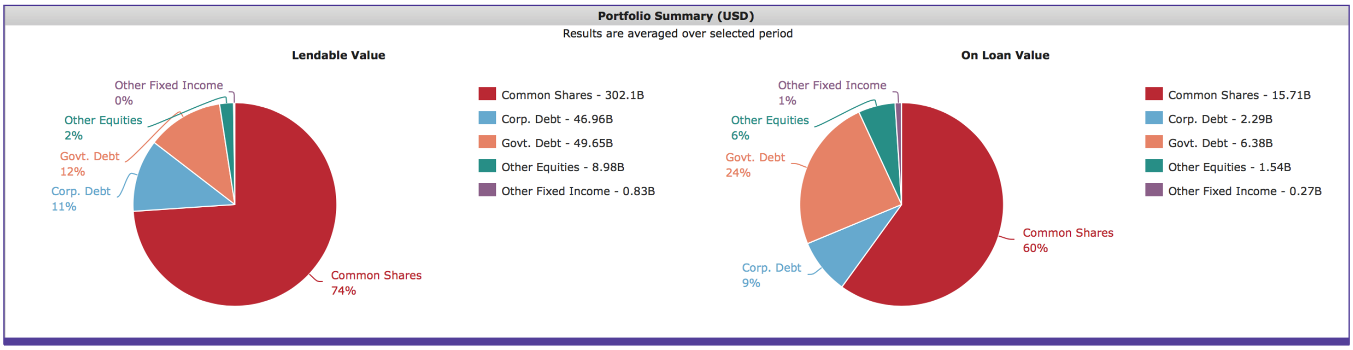
In addition to an enhanced look and feel with an all-new graphics library, the updated architecture increases data flexibility and provides a more intuitive screen layout and workflow.

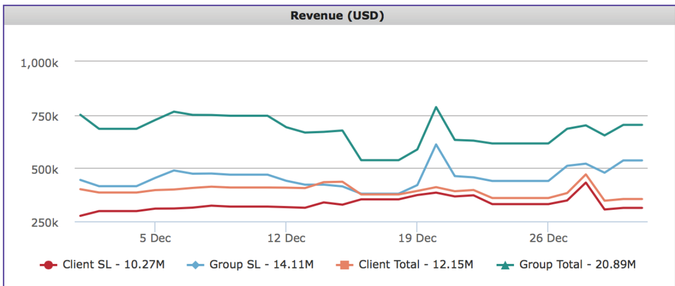
Access DataLend now to try out the new features:

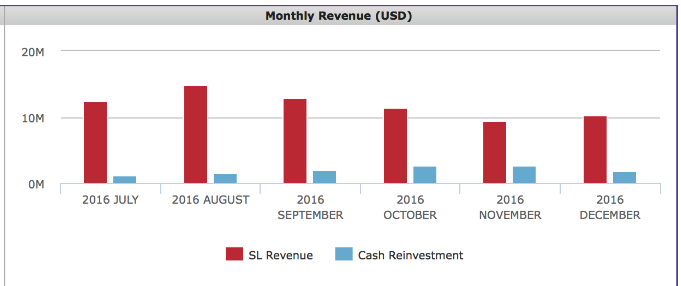
- Assess performance across new peer group matching options
- Review performance at program, client, fund and account levels
- Create customized client groups for performance reviews
- Create your own performance metrics (across countries, sectors and asset classes)
- Analyze new trending data across collateral and loan tenure
- and more

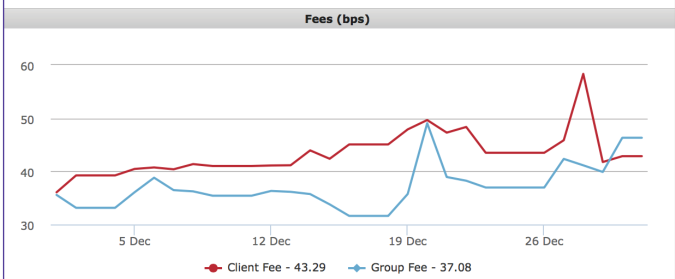
FOR MORE INFORMATION ON CPR, PLEASE CONTACT NANCY ALLEN AT NANCY.ALLEN@EQUILEND.COM

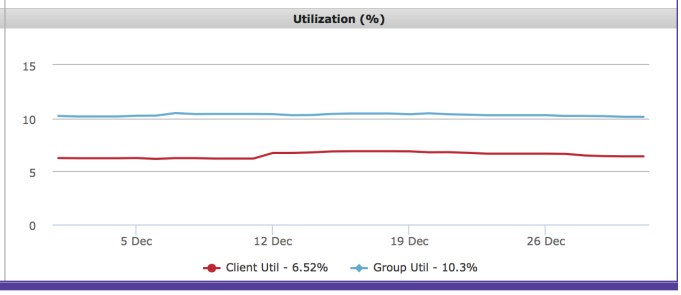
CLIENT PERFORMANCE REPORTING BY DATALEND





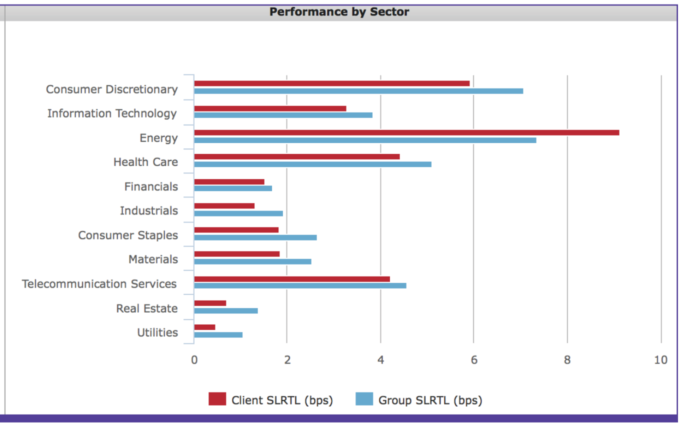






Performance by Sector

Sector	Client Util %	Client Fees (bps)	Client SLRTL (bps)	Client Total Revenue	Group Util %	Group Fees (bps)	Group SLRTL (bps)	Group Total Revenue
Consumer Discretionary	8.52	68.20	5.92	2,258,567	10.64	65.38	7.08	3,211,374
Information Technology	5.80	55.36	3.27	1,938,966	8.43	44.98	3.85	2,921,661
Energy	8.85	100.92	9.13	1,737,335	9.99	72.16	7.36	1,724,940
Health Care	6.00	72.47	4.43	1,664,921	9.28	53.88	5.10	2,464,856
Financials	3.03	49.13	1.52	736,374	4.34	37.96	1.68	1,230,039
Industrials	5.72	22.64	1.32	590,541	7.71	24.30	1.91	1,251,066
Consumer Staples	3.45	51.82	1.82	406,445	6.56	39.51	2.64	739,207
Materials	5.89	31.00	1.86	313,508	7.67	32.34	2.52	507,980
Telecommunication Se...	4.31	95.97	4.21	253,852	6.03	74.01	4.56	312,165
Real Estate	6.28	10.87	0.70	177,274	8.39	16.19	1.38	458,748
Utilities	4.10	11.22	0.47	108,887	5.50	18.87	1.05	294,185



SECTORS

Some sectors are consistent revenue earners in securities lending. DataLend looks at the highest-earning sectors, hottest industries and stocks that are driving profits in securities lending

MACROECONOMIC cycles can have a significant impact on a sector or business' profitability, which in turn can affect fees and revenues earned in the securities lending marketplace. A great example of this can be seen in late 2014 and throughout 2015 when the overproduction of oil caused a supply glut, driving oil prices down to levels that hadn't been seen in years. That caused economic uncertainty across many energy securities, most notably the drillers. Securities lending activity in the sector increased and made energy the hottest sector of 2015 with fees averaging 121 basis points (bps) for the year. But as the price of oil (and the share prices of energy stocks) stabilized and started to rebound, fees to borrow energy stocks began to wane.

However, the decrease in fees for the energy sector did not prevent it from claiming the title of the hottest sector of the year again in 2016. Energy sector fees averaged 102 bps for the year, generating $767.2 million in revenues for securities lending participants. Coal and consumable fuels was again the hottest industry within the energy sector with lending fees averaging 243 bps for the year. The most profitable security within the energy sector was French energy giant Total, generating $104 million in gross revenues. Despite a bounce in oil prices, the share price of Seadrill also remained under selling pressure and brought in a combined total of $64 million in revenues from the U.S. and Norway for securities lenders.

Healthcare was the second hottest sector in 2016 with fees averaging 99 bps for the year. However healthcare earned more for securities lenders than the energy sector, bringing in $933 million in revenues due to higher on loan balances. Biotechnology was the hottest industry within healthcare with volume-weighted average fees of 198 bps. One notable biotechnology name that has been featured in many of DataLend's most profitable securities lists in years past is South Korea's Celltrion. Celltrion generated an incredible $148 million in revenues in 2016. In distant second place was U.S. biotech firm Insys Therapeutics, which yielded $37 million for securities lenders last year. Fees to borrow Insys Therapeutics have been on the rise since May.

The consumer discretionary sector may not have been the hottest sector with fees averaging 89 bps, but it was the most profitable sector for securities lenders with revenues coming in at $1.46 billion last year. The automobiles and components industry helped to drive lending profits in the consumer discretionary sector higher with fees around 164 bps. Of note in this industry for 2016 was Tesla Motors, which was the most profitable name in the consumer discretionary sector and in the securities lending industry overall; it alone yielded revenues of $353 million. Once high-flying GoPro came in at a distant second place on revenues of just over $50 million as a result of higher borrowing fees due to weaker than expected earnings in November of last year.

Financials was the fourth hottest global sector of 2016 with fees averaging 85 bps to yield revenues of $902 million in 2016. Banking was the hottest industry within the financials sector with volume-weighted average fees of 91 bps for the year. Canada's Home Capital was the top revenue-earning name for the banking industry sector, bringing in revenues of $38.3 million. Swedish Nordea Bank was the second highest grossing financial stock in 2016 on revenues of $31.5 million.

The telecommunications sector was just below financials with fees averaging 82 bps to call up revenues of $199 million in 2016. Alternative carriers was the hottest industry in telecommunications last year on high fees of 240 bps. Integrated telecommunication services company Windstream Holdings was the top-grossing name in this space, generating $17.2 million last year, in part due to fees increasing on news they were to acquire EarthLink in November. Telenor Group was the runner up in the telecommunications sector with $15 million in revenue.

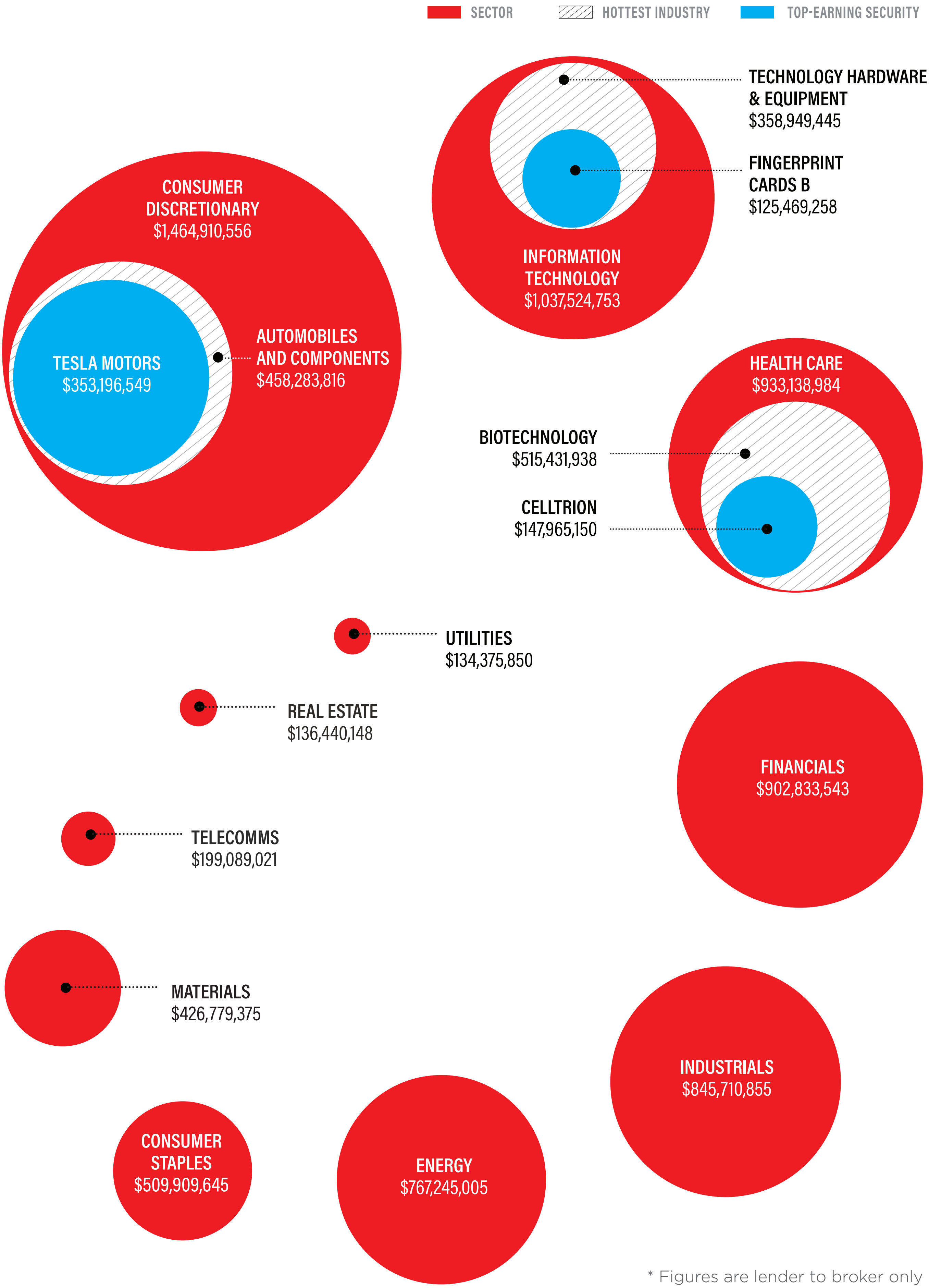
Consumer staples averaged 79 bps in fees to bring in $509 million in securities lending revenue. Household and personal products was the hottest industry within consumer staples, generating average fees of 104 bps. Food products company Cal Maine Foods was the top-earning name in consumer staples, generating revenues a little over $109 million on high borrowing fees related to poor earnings and falling sales. Hong Kong food products company Huishan Dairy was another top earner in the sector, as it has been in years past, on consistently hot fees generating revenues of $42 million in 2016.

The materials sector also averaged 79 bps for the year, resulting in $426.7 million in revenues in 2016. Paper and forest products was the hottest industry within materials with fees averaging 148 bps yielding $27.7 million last year. Korean chemical firm OCI was the top revenue-grossing materials stock in 2016, whose hot fees helped to generate $25.1 million in securities lending revenues. Steel firm Vale's ADR was the second most profitable security in the materials sector, bringing in $20 million in revenue.

The global information technology sector averaged 75 bps in fees to gross $1.037 billion in revenues, making it the second most profitable sector overall for 2016. The technology hardware and equipment industry was the hottest within the IT sector, with fees averaging 128 bps to gross almost $359 million.

>>

2016 REVENUE BY SECTOR



* Figures are lender to broker only

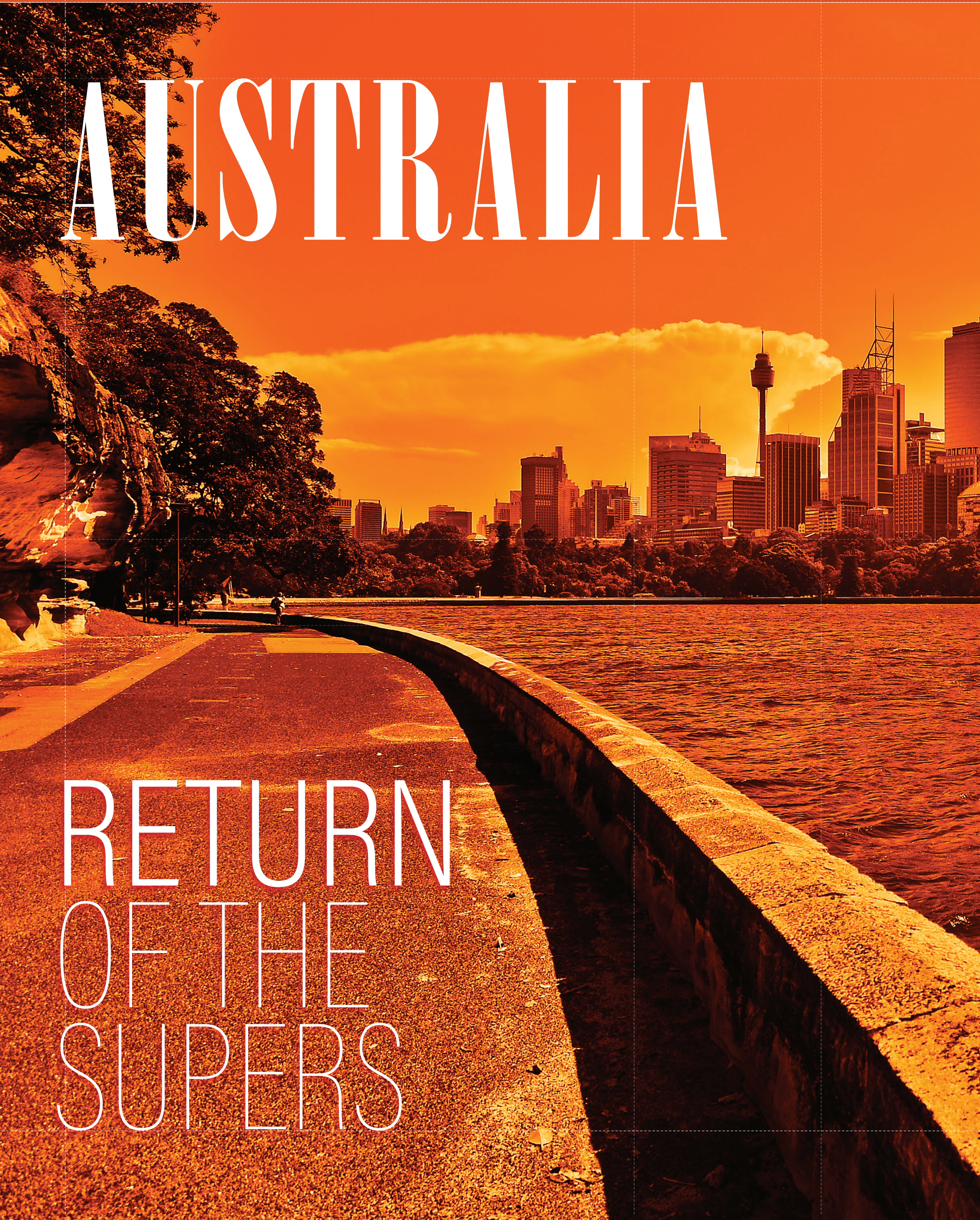
Red hot Swedish biometric company Fingerprint Cards was the most profitable security in the IT sector as well as all of Europe for 2016, contributing $125.4 million in revenues to the region on higher fees due to concerns that the company was expanding too rapidly and that Chinese competitor Goodix may be taking market share in the smart phone biometrics space. German software and services company Wirecard was the second most profitable name in IT, producing revenues of $71.6 million.

Volume-weighted average fees for the industrials sector came in at 71 bps for 2016 to manufacture $845 million in revenue. Electrical equipment was the hottest industry within industrials on fees of 259 bps. Solarcity was the most profitable name in industrials by far last year, generating $114 million in revenues, with high fees driven largely by uncertainty surrounding the merger with another Elon Musk-affiliated company, Tesla Motors. Aerospace and defense giant Lockheed Martin was the second-highest revenue generator in the industrials sector amidst the spinning off of its Information Systems and Global Solutions business to Leidos in August. Revenues for lending the stock totaled just under $49 million.

The utilities sector averaged fairly low fees of 53 bps to generate revenues of a little over $134 million in 2016. Independent power and renewable electricity producers was the hottest industry in the utilities sector on fees of 90 bps and revenues of $18 million. French utility company Engie (known as GDF Suez until the spring of 2015) was the top revenue producer in this sector, earning $19.4 million for the year. Italian firm Enel came in second in the utilities sector with revenues of close to $9.5 million in 2016.

Finally, real estate, newly promoted to its own sector taxonomy by the Global Industry Classification Standard (GICS) organization, grossed a total of $136 million on fees of 40 bps for the year. Shares of Canada's Boardwalk Real Estate Investment Trust Units grossed the highest revenues within real estate, earning $5.9 million for the year.

With anti-globalist sentiment running high, lower unemployment, a strong dollar and federal government spending in the U.S. expected to increase as a result of proposed infrastructure upgrades, economic growth for 2017 appears promising. What this holds in store for certain sectors and regions remains unseen, but there is no doubt that securities lending participants will watch both macroeconomic trends and company-specific information very closely.



AUSTRALIA

RETURN OF THE SUPERS

Australian beneficial owners are returning to securities lending, spurred by increased returns given strong global demand for high-quality liquid assets (HQLAs). As a result, term lending and on-loan balances are on the rise in the market. However, the global financial crisis and particular domestic debacles such as the 2008 collapse of Opes Prime remain recent memories and are impacting how beneficial owners, particularly superannuation funds, manage their lending programs. Rachel Alembakis reports from Melbourne

>>

AS in other markets, changes to the banking sector relating to the Net Stable Funding Ratio (NSFR) and Liquidity Coverage Ratio (LCR) standards of Basel III are causing borrowers to seek stable term loans of high-quality liquid assets (HQLA) for longer-term trades, which has resulted in increased demand for Australian securities. Stewart Cowan, executive director for agent lending at J.P. Morgan Australia New Zealand, says that the demand for HQLA for both loans and collateral have driven demand for Australian securities.

"Those two factors are ... creating different trade opportunities," Cowan says. "That's beneficial [for HQLA] but is also beneficial from the cash reinvestment side of things: When we take cash as collateral, the market is pricing in a term premium." Cowan suggests that banks can benefit from funding term trades beyond six months due to NSFR requirements. "You can see that we're getting paid a really significant premium to take on some term."

Cowan notes that while the term premium is not unique to the Australian market, it is allowing clients to generate additional revenue to reflect the potential risks of longer-term trades.

While securities lending revenue may be incremental for many multi-billion dollar funds, it can be significant when market returns are lower than in previous years.

"The number of superannuation funds in Australia is shrinking," says Mark Snowdon, head of client management for capital markets in Asia Pacific for Northern Trust. "At the same time, the assets under management are expected to double in the next 10 to 12 years. You have this concentration of asset pooling in a smaller number of funds, which are growing at a significant rate. That makes for an environment where the larger growing funds are looking to generate as much efficiency and as much return on those funds as they possibly can against the backdrop of a low-rate environment, a low-yield environment, and that's driven the funds with the increasing scale to absolutely have to drive out as much growth and efficiency as possible.

"Hence the fact that more and more are turning to securities lending as one way to generate that additional alpha. We do see, as one of the major trends, increased client interest in lending driven by the low yield, driven by the need to avoid pension deficits, the need to move away from zero returns and the need to address the increasing costs associated with additional expenditure."

> **While the term premium is not unique to the Australian market, it is allowing clients to generate additional revenue to reflect the potential risks of longer-term trades**

AUSTRALIAN beneficial owners pulled back from securities lending during the global financial crisis in concert with global trends, but there were specific influences within the Australian market that impacted the responses here.

The 2008 collapse of Opes Prime led to widespread questioning throughout the Australian market as to whether the entire short selling and securities lending industries needed more oversight and whether it was appropriate for institutional investors such as superannuation funds to participate in securities lending at all.

Opes Prime was a stockbroker that provided margin loans to clients who put their shares up as collateral for the loan. ANZ Bank and Merrill Lynch provided Opes Prime with the cash that was used for margin loan purposes. Widespread market jitters in Australian equities resulted in a loss of value for many of the shares that were used as collateral for the loans. In March 2008, ANZ and Merrill Lynch recalled their loans to Opes Prime, which owed AU$1.05 billion to the banks—AU$650 million to ANZ and AU$400 million to Merrill Lynch. Opes Prime was unable to provide the cash to repay the loans, and went into receivership. ANZ and Merrill Lynch took the securities to which they had title and sold the equities to recover some of their losses. Clients of Opes Prime were unsecured creditors and lost the securities that they purchased under the margin loans secured with the securities lending and borrowing agreement.

In the wake of the global financial crisis, the collapse of Opes Prime and subsequent legal challenges aimed at the language of contracts used by Opes Prime that were based on Australian Master Securities Lending Agreements (AMSLA), many superannuation funds suspended their securities lending programs for varying lengths of time. ANZ Bank subsequently sold its securities lending business to J.P. Morgan.

Dane Fannin, head of capital markets for Northern Trust in Asia-Pacific, specifically cited the longer-term implications of the Opes Prime collapse in the impact on lendable supply in the market. "If we look at supply pre-crisis, it was healthy, but it's clear that there were certain market events that were the catalyst for that supply coming out of the market," Fannin says. "People will remember Opes Prime very clearly. Australia being a closed market, the perception was that there was an element of risk associated with securities lending tied to short selling, which in turn indicated an impact on pricing. From a public perspective, it was an appropriate decision [for some beneficial owners] to pull out of lending programs. What's changed is that the securities lending product has evolved in quite some ways—it is more robust and flexible to allow clients the customization. Actually, they can realize a lot more comfort and mitigate those risks. That's helped a lot of the clients coming into the programs again."

INDUSTRY superannuation fund Sunsuper, which has AU$37 billion in assets under management, had suspended its securities lending program after choosing to move from a custody agreement with National Australia Bank to State Street in 2011. However, Sunsuper returned to the securities lending market two years ago after a two-year analysis process to evaluate the risks and benefits of securities lending, and which provider Sunsuper should utilize, says Lounarda David, the fund's chief investment operations officer. Sunsuper manages its securities lending program through current custodian State Street, David says.

Sunsuper has a hybrid model in which some assets are managed in-house and other assets are managed through outsourced agreements with external funds managers. Their securities lending program is tailored to reflect that model, and State Street has provided Sunsuper with an online dashboard that shows granular data on securities lent out, David says.

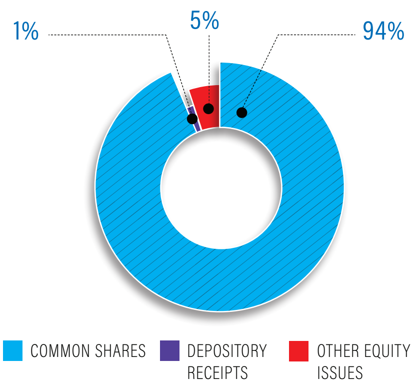
"You need to have a tight operating model," David says. "We have been

ON LOAN $32 BILLION

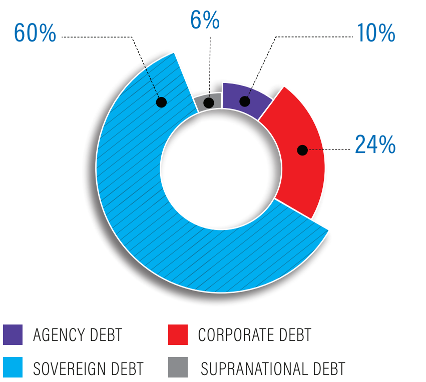
LENDABLE $297 BILLION

REVENUE $124 MILLION

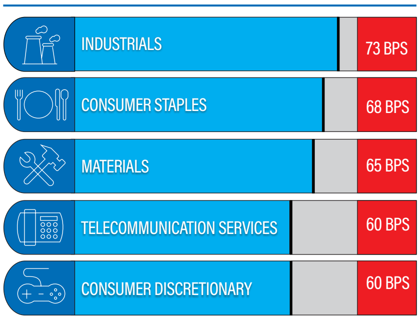
EQUITIES BREAKDOWN (ON LOAN)



FIXED INCOME BREAKDOWN (ON LOAN)



HOTTEST SECTORS AVG FEE



FIGURES ARE AVERAGES FROM JANUARY 1 TO DECEMBER 31, 2016, AND REPRESENT LENDER TO BROKER ACTIVITY ONLY

going through a lot of restructuring. We've moved to being a hybrid model. We didn't go with the custodian just because they're the custodian, but because they're the right provider for us. We have agreements with more than 100 counterparties, but that doesn't mean that we deal with all of them. The fact that we have a counterparty indemnity from State Street is very important. We look at the counterparty—not just the risk of the counterparty directly, but the indirect reputational risk."

Sunsuper's level of scrutiny of counterparties and securities lent out is "an exception rather than the norm," David says.

"We look at our counterparties on a daily basis," she says. "We report, on a monthly basis, the top 20 borrowers and our lendable assets. That information gets spread around the other investment teams. This gives us a lot of visibility and allows us to monitor and report on them on an active and regular basis. … That's why we went with the State Street model—the model is good. When we look at counterparties, we don't look at counterparties in a direct risk [way], but rather an indirect risk."

J.P. Morgan has also noted increased demand for reporting around daily lending positions, Cowan says.

"We can graphically present their online portfolio like we've never been able to do before," he says. "We have a report which is like a daily program summary. It gives the client a full wrap-up of what their current positions are, who they're with, what are they, their top-earning stocks and all the cash summaries and what their earnings are, month to date, year to date, calendar year and full year."

Northern Trust also cites an increased demand for customization of securities lending programs, including not just reporting but also for collateral and collateral management.

"There is a need for increased program customization," says Snowdon of Northern Trust. "These clients that are coming back into securities lending post-crisis, or the ones who are looking at changing their funds now, are doing so because they want additional customization. That can come in many forms, and one of the benefits is to offer clients all the customization benefits they need to manage risks/returns accordingly.

"Clients are coming back with specific collateral requirements, such as wholly non-cash, or a sub-class of non-cash. Clients who were accepting cash collateral are now not accepting cash collateral, or on a more restricted basis, like limiting it to overnight repo, for instance. They're managing the risk without eliminating the return."

From an operational perspective, the growth in superannuation funds retaining securities or recalling securities lent out in order to exercise the proxy vote during annual general meeting season has also impacted program design.

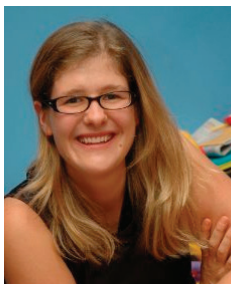
"We are very active in the ESG [environmental, social and governance] space, and proxy voting is a very important requirement for us," says David at Sunsuper. "We do call back our securities as needed for proxy voting events. … We haven't created a blanket model where we lend out everything all the time. In some markets you can't do that. Japan is a classic—we know that in the proxy voting system in Japan, we have to call back all our securities, because we won't get enough notice to do it otherwise. Timing is critical. It becomes a case of what becomes a priority for us. The decision on how to vote is delegated to the managers, but we oversee that."

Sunsuper isn't the only superannuation fund with an active proxy voting policy, and Snowdon notes that it is a balancing act to manage the timing of voting periods with lending requirements.

"They're looking to balance the voting with the lending requirements," he says. "There are systems to allow them to do so, and that will become ever-more important, which will have the effect on the borrower community. … It becomes an issue for the borrowers, because they need certainty of supply. The juxtaposition of the trade is always going to play out. We've got to manage the automation of that process and the relationships on both sides to make sure that the industry moves forward. Governance and proxy are not going to go away, and we're going to make sure we deal with that."

The pool of assets available from Australian beneficial owners, including HQLA and plenty of hard-to-borrow securities, results in a robust securities lending business in the market. As superannuation funds in Australia gradually return to the market following the woes of recent years, there is great potential for continued growth in Australia's securities lending market.

Rachel Alembakis is a Melbourne-based journalist who has been covering institutional investment in Australia for more than a decade.



KOREA

KOREA has been a particularly important market for many organizations in the past decade and has become an even bigger focus for the banks within the Asia region in the last five years. Within a country where the *chaebol*, or large family-controlled conglomerates, still contribute a large amount to the country's GDP, there is much appetite for access to the market. Being a market of close to 2,000 names, $10 billion on loan and $110 billion in lendable (2016 daily averages), it not only has the maturity but the breadth to support a robust securities finance flow. One of the big drivers of the market has been the appetite of the Quant Fund based on the demand for illiquid names and the changes in borrow fee trends in those names.

Korea operates under a CCP model, with trades all handled via one of three onshore intermediaries: Korean Securities Depository (KSD), Investment Broker Company (KSDA) or the Korea Securities Finance Corporation (KSFC). The Korean market is further defined by its onshore and offshore participants, with a distinct difference in the cost of borrowing depending on whether it was traded with an onshore or offshore entity.

The differences in the cost of borrowing between offshore and onshore is impacted by several factors, including the different collateral requirements of onshore (140%) versus offshore (105%), the different risk-weighted asset values and callable nature of onshore stock.

Regulations strictly dictate how much offshore investors can borrow from onshore investors. Amounts up to 30 billion Korean won (KRW) worth of securities do not require any notification. Amounts between KRW 30 billion and KRW 50 billion are allowed with a one-off report within three days of exceeding KRW 30 billion. Pre-reporting is required for proposed borrowing in excess of KRW 50 billion. There are no KRW amount limits if the stock lending and borrowing is between non-residents and also if the stock lender is a non-resident whereas the borrower is a resident. In recent years the emergence of a strong onshore hedge fund market has helped to grow volumes and has meant that there is also more competition for the stocks held locally.

The Korean market is seen as the benchmark for a CCP model in the region. Korea also has been willing to collaborate with other countries in the region by offering its expertise and knowledge through discussions with other markets as they look at how best to open up their securities lending programs.

In a region with a diverse array of models, market maturity and regulation, corporate actions remain a major concern for market participants. Lack of consideration for the securities lending market in regulation around corporate action events have presented challenges for market participants. In Korea, positions shorted between announcement date and price-fixing date are not eligible for the secondary offer. There are often instances of retrospective corporate actions that need to be handled, which test the legal interpretation of the GMSLA and any side agreements. There also have been instances where corporate action issues arise due to the differences between corporate law and securities lending rules, with corporate law taking priority. The investment registration certificate (IRC) structure and CCP model provide further restrictions on market participants in dealing with corporate actions in comparison to a more OTC model.

The recent announcement to change the short-selling reporting requirement from three to two days has concerned some firms, which believe the change may lead to a reduced desire from some directional funds. But it is unknown if those fears will bear any fruit in the coming months. The high penalties for failure to submit the short-selling information means that firms will need to ensure their procedures are ready.

Korea has seen the trend of borrowing fees rising through 2016 with a very hot average of 392 bps for the year, although recently there has been a slight drop. The nearly 400 bps volume-weighted average fee in the market results from a mix of GC trades and more than half the market trading at higher fees. These high fees helped securities lenders earn a little over $391 million last year.

The size of the Korean market is smaller than some other regional markets such as Taiwan, which has almost twice as many names. However, Korea has a greater number of high-fee stocks. One of the consistently hot stocks in recent years in the region and around the globe has been Korea's Celltrion, which alone earned securities lenders about $148 million in 2016. While the fee to borrow Celltrion has halved lately, it still provides lenders and borrowers a continual opportunity. While the healthcare sector makes up around 21% of the stocks in the market, it was responsible for more than 50% of the securities lending revenue in Korea in 2016 due to revenue-driving stocks such as Celltrion and others.

Other names such as Samsung have also seen interest this year due to issues the company had with its Galaxy Note 7 phone release and eventual removal from the market.

While Korea is not the largest securities lending market in the region, it is without a doubt one to watch with an established infrastructure and plenty of opportunities. As in other markets in Asia, the size means revenue is concentrated in a few names, but it is suspected with the upcoming election and ongoing investigation into the use of political connections for personal gain that 2017 should be another good year for securities lending opportunities in Korea.

KOREA

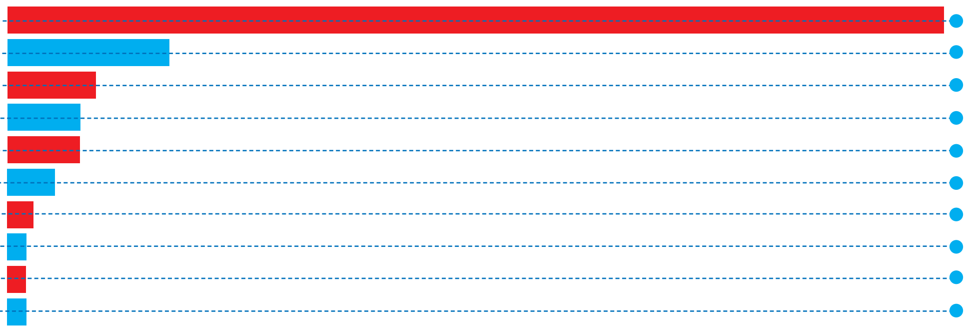
FIGURES ARE AVERAGES FROM JANUARY 1 TO DECEMBER 31, 2016, AND REPRESENT LENDER TO BROKER ACTIVITY ONLY

LENDABLE	ON LOAN	REVENUE
$110 BILLION	$10 BILLION	$391 MILLION

TOP 5 HOTTEST SECTORS BY FEE

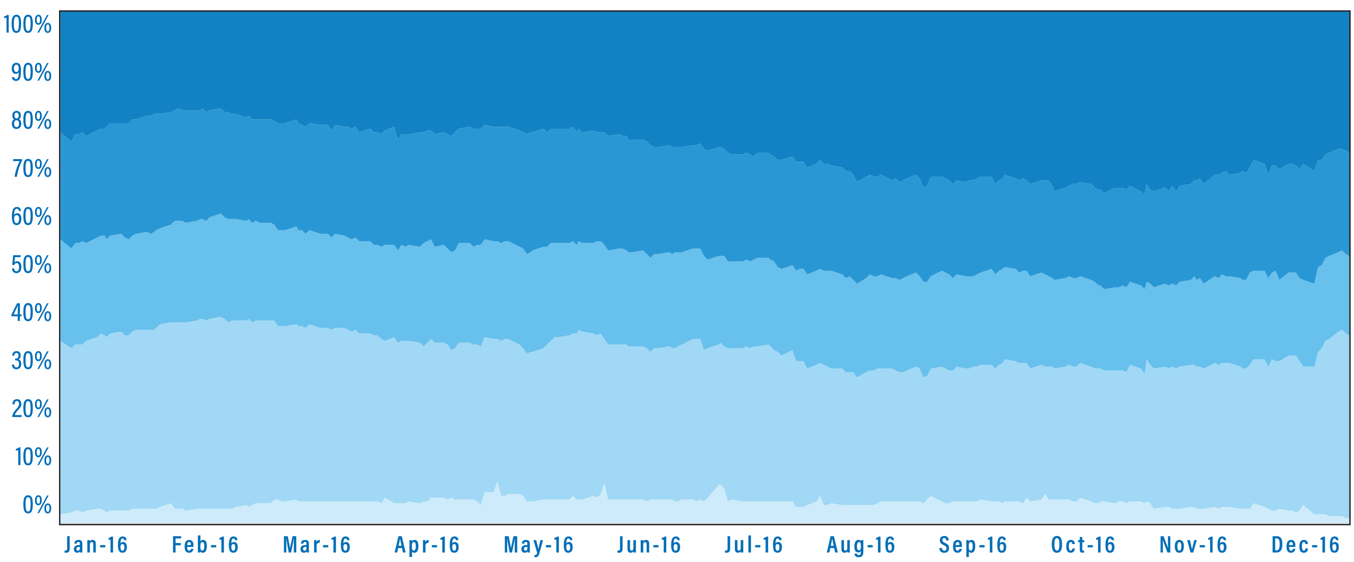
HEALTHCARE	MATERIALS	REAL ESTATE	IT	INDUSTRIALS
944 BPS	410 BPS	402 BPS	290 BPS	279 BPS

MOST PROFITABLE SECURITIES



CELLTRION	$147,965,150
OCI	$25,166,903
KAKAO	$14,284,563
SAMSUNG HEAVY	$12,285,776
HOTEL SHILLA	$12,009,381
HANMI PHARM	$7,711,835
GS CONST	$4,673,137
HYUNDAI HVY IND	$3,633,272
PARADISE	$3,530,862
DAEWOO SHIPBUILD	$3,525,863

EQUITY HEAT MAP



≤ 20 BPS
20BPS ≤ 50BPS
50 BPS ≤ 250 BPS
250BPS ≤ 500 BPS
> 500BPS

DRIVING REVENUE IN FIXED INCOME

Do bond ratings have any bearing on the revenue earned for lending fixed income securities?

IN 2016, while analyzing lender to broker transactions, DataLend saw over 162,000 unique fixed income assets in inventory and/or on loan across almost 200 different countries. These assets all commanded varying fees and utilizations in the securities lending market, generating some very different revenues depending upon market conditions. In looking back at trends in global fixed income on loan in 2016, DataLend investigated what effect, if any, the credit ratings of fixed income securities had on fees and revenue in the securities lending market for sovereigns as well as corporate issues. DataLend also reviewed the ratings on some of the top-earning corporate bonds within the top-earning countries. For this analysis, DataLend divided global debt into three broad categories based on their long-term financial obligation ratings provided by Standard and Poor's: high grade (AAA to AA), medium grade (AA- to BBB) and non-investment grade (BBB- and lower).

DataLend estimates that the fixed income asset class yielded a total of $1.57 billion in gross revenue for securities lending participants in 2016. High-grade fixed income led the pack globally with over $782 million in revenue. Non-investment grade bond issues came in at second place on revenues of $503 million. Finally, medium-grade fixed income generated almost $287 million in revenue last year.

When looking at fixed income on loan by country of issue, the U.S. dominated the landscape in 2016, generating earnings of $709 million. Of the $709 million, high-grade issues accounted for $436 million, with fees averaging 12 bps. Medium-grade U.S. fixed income produced a little over $83 million with fees averaging 23 bps and a utilization of approximately 4%. Non-investment grade U.S. bonds finished the year with $189 million with average fees of 21 bps and a utilization of 22%.

When turning our attention to the corporate bond world, we saw that one of the biggest revenue-generating corporates in the U.S. last year was a B+ rated 6 7/8% coupon bond maturing in March 2022 issued by Oasis Petroleum, which yielded $4.5 million in lending revenue. The second highest corporate revenue earner was a Devon Energy 5.85% issue (BBB) with $3.75 million in revenue.

Germany was a distant second behind the U.S. with lender to broker earnings of $159 million. Like the U.S., high-grade German bonds (predominantly sovereigns) generated the most revenue of $109.7 million with fees averaging 18 bps and an average utilization of 38% for the year. Medium-grade German bonds generated just $2.8 million on fees averaging a higher 35 bps but an average utilization of only 7%. Finally, non-investment grade German bonds, mostly corporates, yielded $46.6 million in revenue from fees averaging a surprisingly low 16 bps but a higher average utilization of 40%.

Upon reviewing German corporate debt, we saw that the top-earning corporate issue for 2016 was a Deutsche Bank 4 1/2% coupon with a January 2025 maturity (BB+), which brought in a little over $1 million in revenue. The next highest earning German corporate was a 6% Norddeutsche Landesbank Girozentrale bank issue (AAA) maturing in June 2020 with $604,500 in revenues. The third largest revenue-generating corporate bond in Germany was a 7 3/4% coupon issue from Hapag Lloyd (B-) maturing in 2018, which grossed $383,000 in lending revenue.

In the fixed income market, the U.K. was the third largest revenue-generating country with gross revenue of $134 million. Unlike the U.S. and Germany, non-investment grade corporate bonds were the highest-earners with $69.5 million in revenue and an average utilization of almost 30%. High-grade U.K. bonds followed with $48.5 million and a 24% utilization rate. Finally, medium-grade bonds generated $16 million for the year with an average utilization of 4.5%.

Within the U.K. corporate debt world, the top two earners were Standard Chartered issues with coupon rates of 6 1/2% (BB-) and 5.2% (BBB-), generating $2.5 million and $1.05 million respectively. A Fiat Chrysler 5 1/4% (BB) bond came in at a distant third with $851,000 in revenue.

In France, fixed income generated a little over $109 million in the lender to broker securities lending market. High-grade issues came in as the top revenue-generating bond class with $61 million worth of lending fees on an average utilization of 31% for the year, followed by non-investment grade corporate bonds with almost $36 million in revenue from an average 30% utilization, and medium-grade bonds coming in at a total of $12 million on an average utilization of almost 6%.

Oil and gas equipment firm Vallourec's 3 1/4% bond maturing in August 2019 (B+) was France's #1 corporate bond revenue driver with $1.57 million, followed by capital goods firm Areva's 4 5/8% October 2017 issue (B+) with $1.27 million and consumer goods packaging firm Tereos Finance Groupe's 4 1/4% maturing in March 2020 (BB), with revenue of $757,000.

Corporate bonds making the most revenue across other countries in 2016 include a 7 1/8% coupon bond from Italy's Astaldi Spa maturing in December 2020 (B) with lending earnings totaling $4.3 million. There were numerous issues of Brazilian steel company Vale that earned a significant revenue amount, the highest of which was the 4 3/8% coupon maturing in January 2022 (BBB-) with lending revenue of just over $4 million. Australian FMG Resources 8 1/4% coupon bond maturing in November 2019 (B+) was another top earner with $3.7 million.

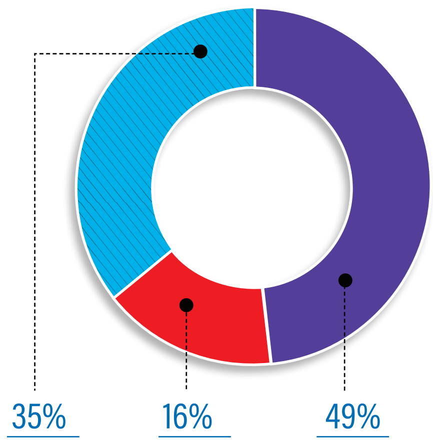
Insight from this analysis reveals that in many cases, but not always, non-investment grade fixed income issues typically command higher fees and enjoy higher utilizations than medium or high grade debt. However, we also saw that due to the sheer number of high-grade issues in the universe (including sovereign, agency and local/provincial debt) as well as demand for HQLAs, indicate that non-investment grade corporates are not always the top revenue drivers in the securities lending market in aggregate.

FIXED INCOME REVENUE

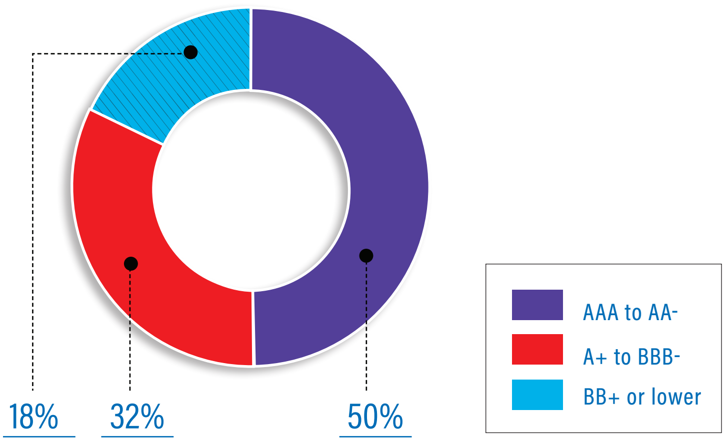
FIGURES ARE AVERAGES FROM JANUARY 1 TO DECEMBER 31, 2016, AND REPRESENT LENDER TO BROKER ACTIVITY ONLY

LENDABLE	ON LOAN	REVENUE
$5.44 TRILLION	$899 BILLION	$1.57 BILLION

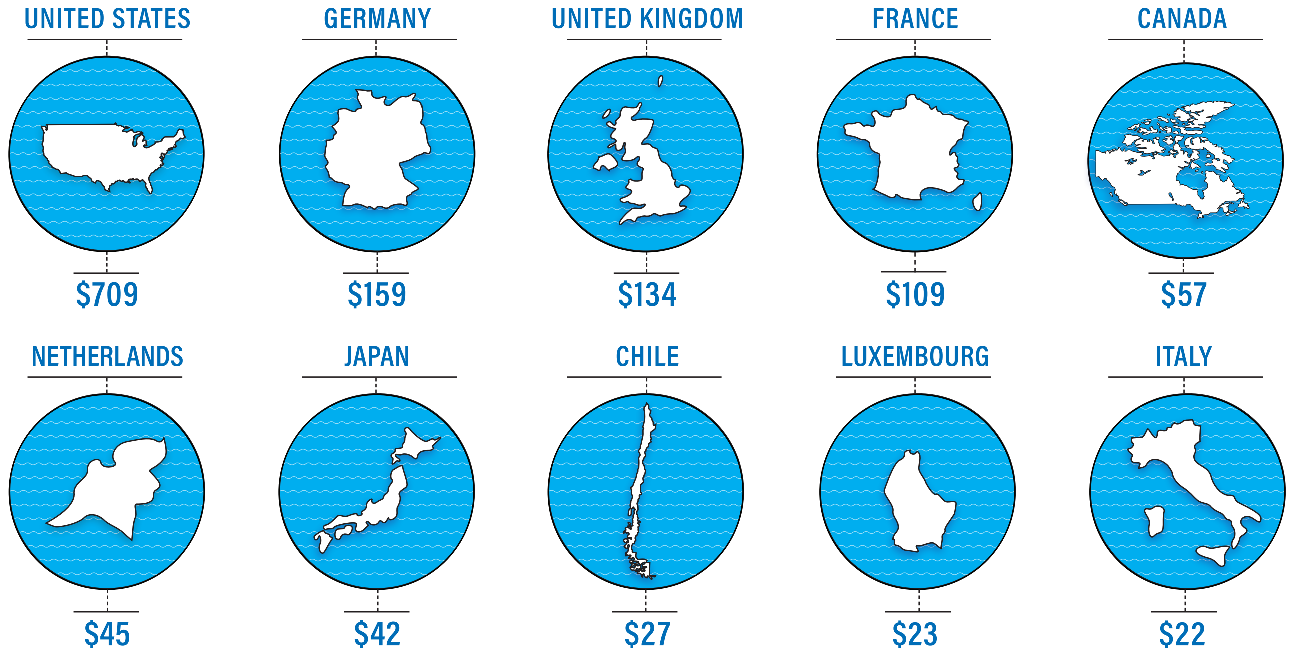
LENDABLE BREAKDOWN



REVENUE BREAKDOWN



TOP 10 COUNTRIES BY FIXED INCOME REVENUE (MILLIONS)



TOP EARNING COUNTRIES: REVENUE ATTRIBUTION BY RATING

	AAA to AA-	A+ to BBB-	BB+ or lower
UNITED STATES	61%	12%	27%
GERMANY	69%	2%	29%
UNITED KINGDOM	36%	12%	52%
FRANCE	56%	11%	33%
CANADA	65%	22%	13%

CANADA

SPONSORED BY

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

WITH a dip in January 2016, the S&P/TSX Composite index has been steadily climbing up and over the beginning point of 2016, reflecting the healthy state of the Canadian market. This is also reflected in the steady securities lending on-loan, fee and utilization numbers over 2016. Canada remains the second largest securities lending market in the world with an on-loan balance of approximately $108 billion and an average lendable balance of over $842 billion for 2016.

Despite 91% of the Canadian market trading at GC fees, the market showed spunk last year with interesting headlines producing specials in the housing and healthcare market.

A notable story in Canada for 2016 was the increasing cost of housing, which dominated headlines across the country. Rising housing prices in Vancouver and Toronto caused the government to implement mortgage-rate stress tests, speculator and foreign buyer tax changes and warnings of future moves to avoid a housing bubble and maintain stability in the housing market.

Home Capital Group, which offers residential and non-residential mortgages, was the highest-fee name in the Canadian securities lending market with a nearly 100% utilization all year and generating $38 million for lenders in 2016. Genworth MI, a private residential mortgage insurer in Canada, also was a high-fee stock at the beginning of 2016 and generated a little over $11.8 million in revenue for the year, although fees have eased in more recent months.

Healthcare was the highest fee sector in Canada in 2016, peaking at an average fee to borrow of 357 bps in August and 458 bps in December and averaging 173 bps for the full year. The life sciences tools and services industry led the category with a volume-weighted average fee of 844 bps for 2016 driven by various pharmaceutical stocks in December.

Canada ended 2016 with a very healthy on loan balance of $135.8 billion across over 4,000 securities, a lendable balance of $1.16 trillion and total securities lending revenues for the year of about $492 million, indicating that the Canadian securities lending market will continue to thrive for years to come.

CANADA

FIGURES ARE AVERAGES FROM JANUARY 1 TO DECEMBER 31, 2016, AND REPRESENT LENDER TO BROKER ACTIVITY ONLY

LENDABLE	ON LOAN	REVENUE
$842 BILLION	$108 BILLION	$492 MILLION

HOTTEST SECTORS

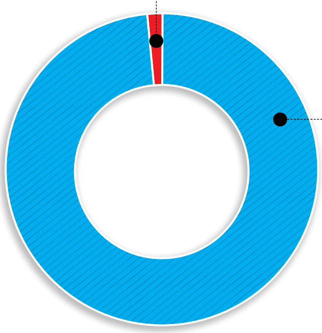
HEALTHCARE	REAL ESTATE	FINANCIALS	MATERIALS	ENERGY
173 BPS	147 BPS	111 BPS	78 BPS	67 BPS

MOST PROFITABLE SECURITIES

HOME CAPITAL	$38,332,372
ROYAL BANK OF CANADA	$26,945,196
ENBRIDGE	$20,738,763
BANK NOVA SCOTIA	$18,637,873
TORONTO DOMINION	$18,262,674
CANADIAN IMPERIAL BANK COMMERCE	$16,826,479
BANK OF MONTREAL	$13,080,292
GENWORTH MI CANADA	$11,823,257
TRANSCANADA	$11,455,203
BCE	$10,754,349

ASSET CLASS BREAKDOWN BY ON-LOAN BALANCE

EQUITIES

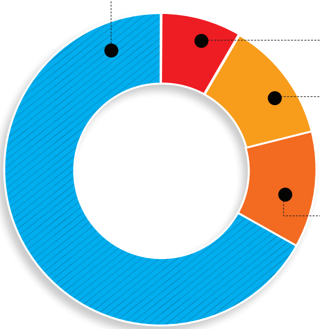


ETF/ETN 1%

COMMON SHARES 99%

TOTAL: $54.47 BILLION

FIXED INCOME



SOVEREIGN DEBT 67%

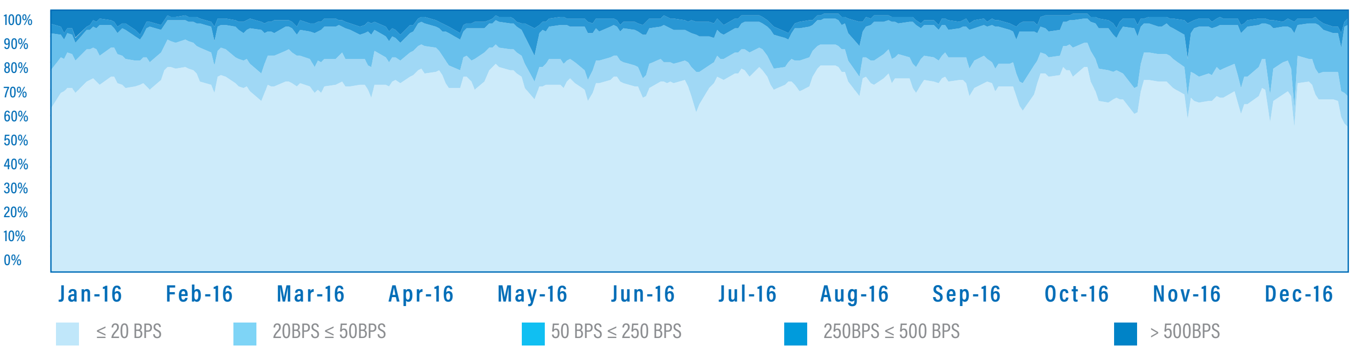
AGENCY DEBT 8%

CORPORATE DEBT 13%

LOCAL/PROVINCIAL DEBT 12%

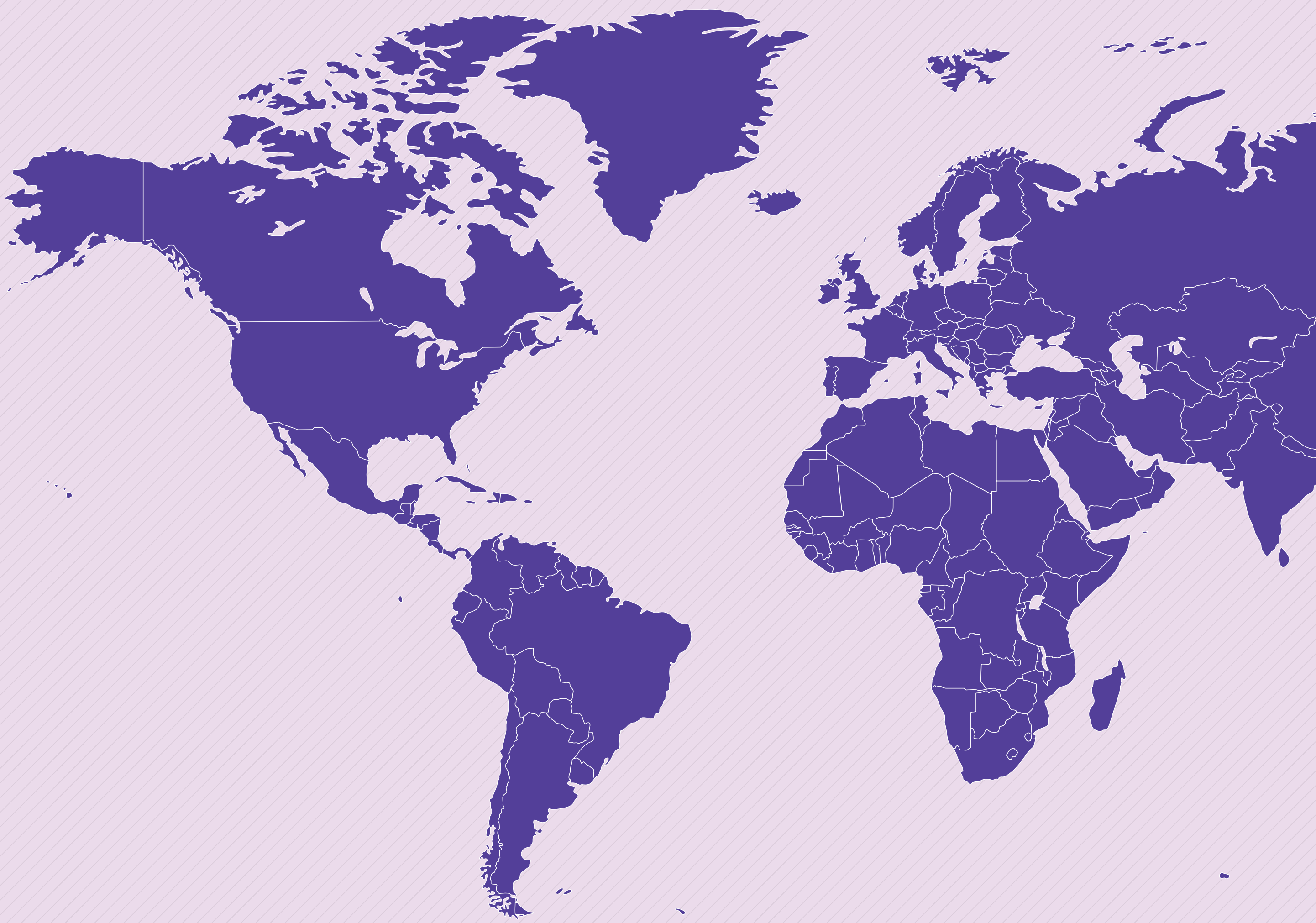
TOTAL: $53.81 BILLION

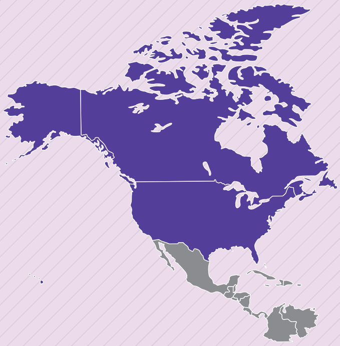
EQUITY HEAT MAP



SECURITIES FINANCE REVENUE 2016

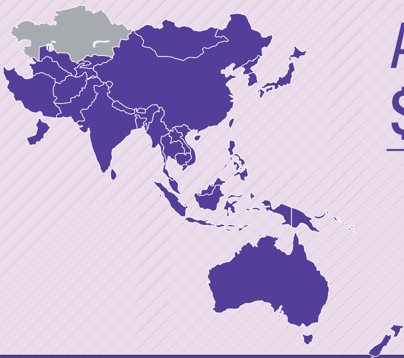
GLOBAL **$9,159,863,746**



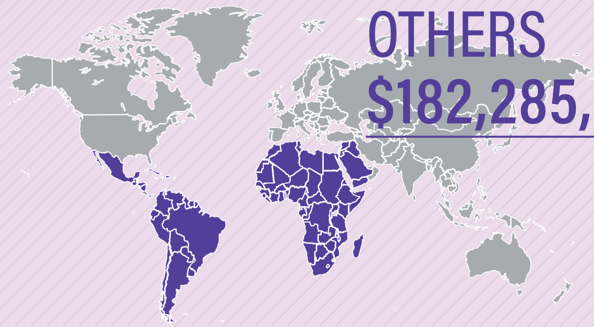


NORTH AMERICA
$4,671,551,482

EUROPE
$2,642,719,412



ASIA PACIFIC
$1,663,307,629



OTHERS
$182,285,223

THE ART OF THE 'SWEET SPOT' IN RERATES

BY **CHRIS BENEDICT,** DIRECTOR, **DATALEND**

When lenders respond to sudden market movements, striking a balance between rerates and utilization to optimize revenue requires a creative balance of time and tenacity. Their approaches, and their payoffs, may differ

SECURITIES lending participants see plenty of market news hit the tape almost every day. Earnings, management changes, mergers and divestitures or other corporate events impact a number of securities across all sectors, asset classes and regions. Agent lenders and broker-dealers alike must react to this data in an attempt to adjust to new market conditions and capture the best rates possible for their respective clients. DataLend took a look back at a few recent examples of unexpected news to see how quickly—and how efficiently—agent lenders rerated existing loans in an attempt to optimize revenue for their beneficial owner clients.

There are many variables that can impact a study of rerates in the securities lending market. These include the size of existing loan positions, whether or not the underlying beneficial owner decides to sell or restrict lending activity as a result of news, the risk appetite of a lender and the potential impact to their P&L, hedge funds naturally closing out a short position, and other factors. For this study we concentrated on how quickly a lender rerated, what percentage of their existing book was returned (or recalled), the change in a lender's overall on loan balance and the volume weighted average increase in fees to the existing positions as a result of rerates.

Poor earnings or guidance is usually a trigger for increased securities lending activity, and agent lenders are well aware of this. One recent example of this occurred in apparel company Under Armour, which saw its stock sell off significantly after the company revealed on October 25 that its growth rate would be lower than previously expected. Analyst downgrades soon followed, and the securities lending world took notice as the volume-weighted average fee for all trades jumped from a little over 100 basis points (bps) to almost 5 times that a few days later, with some new trades being booked north of 1300 bps.

In sifting through the aftermath of the Under Armour sell off and sharp increase in borrowing fees, DataLend considered: How many agent lenders rerated existing loans, how quickly did they rerate and by what amount? Did lenders rerate the existing loans more than once after the October 25 date? How many existing loans were returned by broker-dealers?

Prior to October 25, agent lenders had roughly $1.602 billion worth of Under Armour on loan across more than 4,000 contracts. DataLend followed the history of each unique loan from the top-10 agent lenders by on-loan value from October 26 through November 1 to answer our questions. We found that each agent lender had its own approach of rerating existing loans in Under Armour. Some rerated the majority of their outstanding loans almost immediately and rerated those same loans multiple times over the following five-day period. Other lenders waited a day or more before rerating their counterparties only once or twice at most.

We saw a fairly large range of rerate increases during the October 26 to November 1 timeframe, from a volume-weighted average increase of around 70 bps across all rerated loans for one lender to a higher increase of over 250 bps from another lender. These fee increases feed directly into a lender's critical return to lendable (RTL) metric, which is calculated by scaling the profitability of all outstanding loans across their lendable base. The RTL figure is a measure of both fees and how much inventory the lender has out on loan; an imbalance in either of those two figures can have a deleterious effect on RTL and overall profitability.

When analyzing this metric, we saw the lowest RTL increase across all lenders in Under Armour was slightly over 60 bps, while the largest was an increase of just under 250 bps. In cases reflecting lower RTL increases, we saw that while lenders were able to raise their fees, their utilization dropped during the rerating period. The highest RTL increases saw both a solid increase in fees while still maintaining (or even increasing) high utilization figures. The lender with the highest RTL in the Under Armour study came in at approximately 366 bps, increasing its fees by 253 bps and upping its utilization by 6%.

>>

DISAPPOINTING earnings, analyst downgrades or weak growth prospects aren't the only reasons to cause agent lenders to rerate shares on loan. Mergers and acquisitions can also trigger increases in fees to borrow. For example, oil and gas equipment services firm Frank's International N.V. announced it was acquiring Blackhawk Group Holdings, Inc., from Bain Capital Private Equity for $150 million in cash and 12.8 million shares of Frank's common stock on October 7. The securities lending market reacted immediately, and the volume-weighted average fee to borrow Frank's International soared from approximately 500 bps to a peak of over ten times that amount by October 13th.

There were $182.81 million worth of Frank's International shares on loan from nine lenders across 723 contracts on October 7 when the Blackhawk Group merger was announced. DataLend compared the results of those same contracts through October 14. In this particular instance, lenders appeared to have been slower to rerate shares of Frank's International than they were during the Under Armour scenario, perhaps because the stock price of Frank's International did not share the same sudden sell off as Under Armour. Similar to the Under Armour scenario, we observed another fairly large range of rerate increases for existing loans of Frank's International, from a 150 bps increase for one lender to a more substantial increase of over 600 bps for another. When analyzing the changes in this study, we saw a very large range of RTL increases across the lenders: from a little over 50 bps while the largest increased by 600 bps. In the case of lower RTL increase, lenders realized a solid increase in their rerated fees, but saw no change in utilization. The higher RTL figures were a combination of both increases in rerated fees as well as a bump up in utilization.

As in the Under Armour study, we saw a disparity amongst lenders in the number of Frank's International contracts rerated or returned, the number of days it took them to rerate their existing positions and the new rates they negotiated with brokers: some lenders rerated very soon after the announcement was made and rerated multiple times while others waited several days and rerated their counterparties only once. In the Frank's International study, the lender with the highest RTL had 781 bps as a result of increasing their fees by over 600 bps while also raising their utilization figure by a little over 9%.

A THIRD example of rerate activity occurred in June 2016, when Tesla Motors announced its intention to merge with SolarCity in a deal worth approximately $2.8 billion. The news took the street by surprise as both companies were affiliated with Elon Musk (CEO of Tesla and chairman of SolarCity), suggesting some self-dealing concerns. Nevertheless, the volume-weighted average fees to borrow Tesla jumped from a slightly warm fee just below 100 bps to reach a high of almost 5,000 bps in the days that followed. Fees to borrow the already-hot SolarCity shot up from around 3500 bps to hit a high near 10,000 bps during the same timeframe. Toward the end of 2016 the deal appeared to be moving forward, but throughout the summer and fall there was plenty of uncertainty, making Tesla and SolarCity amongst the top revenue-grossing names in the securities lending market for 2016.

> **What constitutes the 'best' rate can be subjective, and determining it sometimes seems more of an art than a science**

There were more than 31 million shares of Tesla on loan worth about $6.78 billion across 17 lenders and some 2,400 contracts prior to the announcement on June 21. DataLend examined the rerate history of the top 10 agent lenders by on-loan value in Tesla from June 20 to June 27.

Again, different approaches were taken to rerates by the top-10 agent lenders in Tesla. We saw that almost all of the lenders managed to yield solid, double-digit percentage increases in fees across rerated loans. Once again, we saw a fairly large range in volume-weighted average fees in rerated loans: One lender saw an increase of a little under 200 bps in the volume-weighted average fee for all rerated loans, while another lender increased its fees on rerated shares by over 500 bps. When reviewing the range of RTL figures, we saw an increase of about 80 bps for one lender, while the highest increase came in at close to 400 bps as a result of an increase in fees and a 15% jump in utilization. Not surprisingly, most lenders that rerated with the highest fees had a higher percentage of their loans returned by borrowers. Lenders took an average of a little longer to rerate shares of Tesla than they did in the Under Armour scenario. We also saw that in Tesla's case, lenders rerated their borrowers multiple times across the days that followed. The lender with the highest RTL in the Tesla study achieved an RTL of 443 bps in the days after the merger announcement with a nearly 400 bps increase in fees and a 17% increase in utilization.

In all instances across all lenders, the increase in fees as a result of rerating existing loans was less than the fees charged in newly booked loans after the news hit the tape. Those newly booked loans consistently had higher average borrow fees than those of rerated loans.

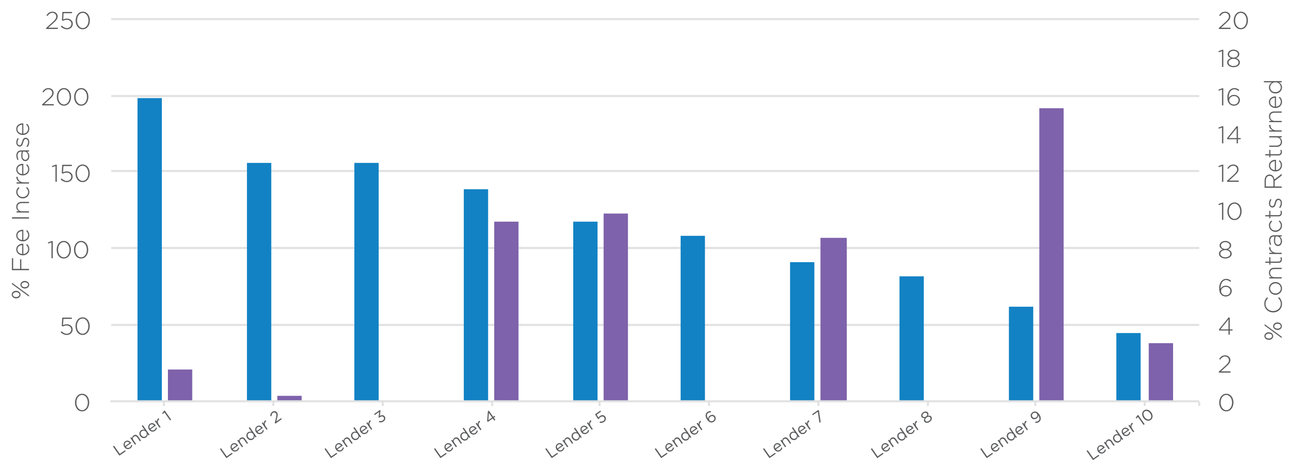
WHAT constitutes the "best" rate can be subjective, and determining it sometimes seems more of an art than a science. The optimal RTL in each of our studies was achieved through a variety of approaches. In the Under Armour scenario, multiple incremental rerates resulted in a lower number of returns and higher RTL figures, while rerates executed immediately following the news coincided with a drop in utilization. For Frank's International, rerates that were not immediate, in conjunction with stable to rising balances, saw higher RTL figures. The results of the Tesla study were similar to those of Under Armour: Multiple rerates over a longer period of time saw higher fees and fewer returns, combined with rising balances to capture the highest RTL. Each security and scenario is different; it is not always about immediately chasing the highest fee possible.

When market movements happen, lenders consider many factors such as their existing loans, their lendable supply and prevailing market rates prior to rerating. Striking the right balance between all of these factors leads a lender to the "sweet spot," thereby capturing the greatest overall return for their beneficial owner clients.

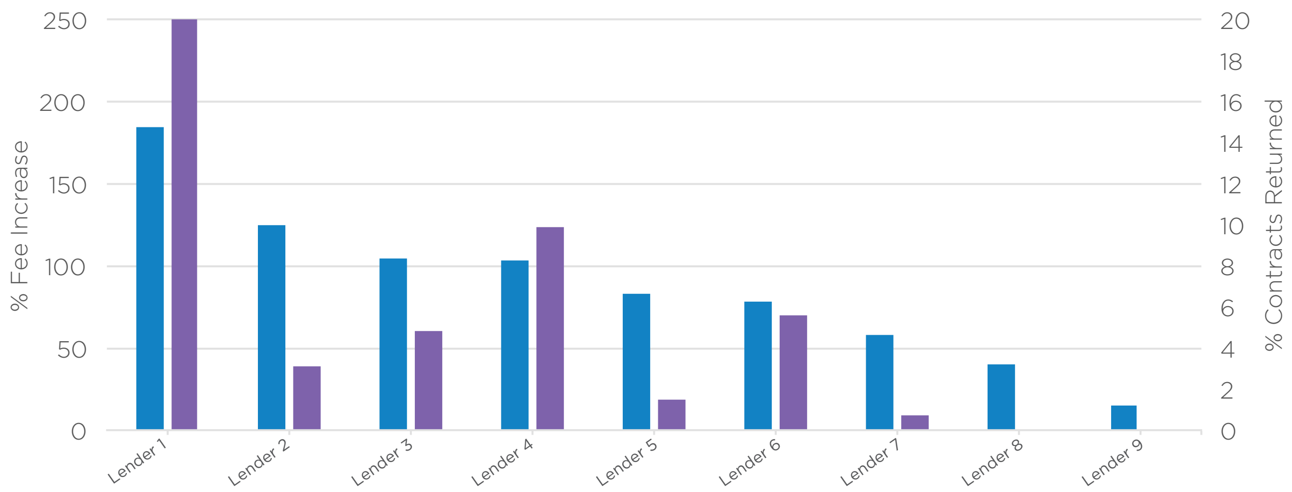
For more information on how you can use DataLend to optimize your rerates, please contact Chris.Benedict@equilend.com.

■% Fee Increase ■%Contracts Returned

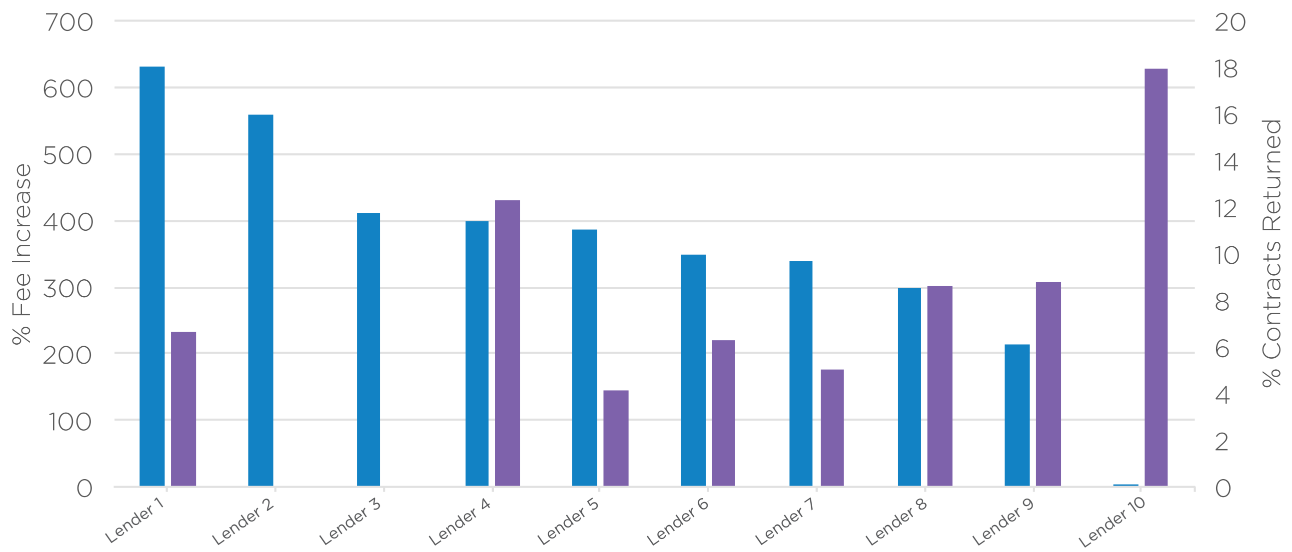
UNDER ARMOUR



FRANK'S INTERNATIONAL



TESLA



* Lenders are anonymized and shown in order by the percentage fee increase achieved for each security. Lenders (e.g., Lender 1, Lender 2, etc.) may not be consistent across the different securities.

EMERGING MARKET DEBT

DataLend looks at lender to broker trends in emerging market debt

LOW inflation and interest rates acted as a boon to issuers of higher-yield debt in 2016, and emerging markets were no exception. Investors seeking yield helped to rally emerging market debt through most of the year, but there were some challenges, including corruption scandals in Brazil, a failed coup attempt in Turkey, yuan devaluation concerns and overall anti-globalist sentiment, which helped to fuel the surprise vote for Brexit and an unlikely victory for Donald Trump in a bruising U.S. presidential election contest.

Securities lending in many emerging market countries also sees challenges. Barriers to entry include state-imposed limits on the length and volume of loans, collateral regulations, liquidity issues, settlement difficulties and other issues. Nevertheless, securities lending in emerging market debt remains profitable.

The on-loan value of emerging markets fixed income securities remained fairly steady in 2016, with a daily average lender-to-broker on-loan balance of approximately $19.7 billion. The average lendable balance for emerging markets fixed income assets was $192 billion, suggesting an average utilization of around 10% for the year. Overall revenue for lending emerging markets fixed income was over $122 million for 2016.

When looking at government, agency and local/provincial debt versus corporate debt in this space, government, agency and local/provincial debt grossed $81.7 million while corporate debt came in at $40.3 million.

The top revenue-generating country in the emerging markets fixed income space last year was Chile, with lending revenues of more than $27 million. A big contributor to this figure was the multiple agency debt issues from state-owned mining company Corporación Nacional del Cobre de Chile (also known as Codelco); those bonds yielded revenues of $21 million in 2016.

Brazil took the #2 spot with about $17.9 million in revenues to borrow its fixed income securities. Multiple bond issues from Vale Overseas Limited trading were the biggest contributor to this total with around $12.2 million in revenue. Fees to borrow Brazilian government bonds generated another $4.4 million in revenue.

Fees to borrow a combination of Mexican corporate and government bonds generated a little over $8.9 million in revenue for securities lenders. Various issues of Mexican government bonds were responsible for $5.2 million of this figure. Bonds issued by building materials company Cemex contributed some $1.7 million worth of revenue, while Mexico state-owned oil company Pemex bonds yielded $2.4 million in further revenues.

South Africa's total fixed income revenues of just over $8.8 million came primarily from fees to borrow various issues of South African sovereign debt. Corporate debt from electricity provider Eskom Holdings garnered almost $750,000 worth of borrowing fees for lenders.

Amongst some of the hottest emerging market government debt in 2016 were Ukrainian government issues, which were quite thinly traded but attracted substantial fees to generate almost $3.3 million in lending revenues. However, fees to borrow Ukrainian sovereign debt have been on the decline in recent months. Perhaps not coincidentally, fees to borrow Russian sovereign debt also looked fairly high in 2016, generating almost $4.5 million in revenues. Similar to the Ukraine, fees to borrow Russian sovereign debt also have been dropping recently. Hopefully this is a reflection of tensions in the region easing; time will tell if this is the case.

EMERGING MARKET DEBT

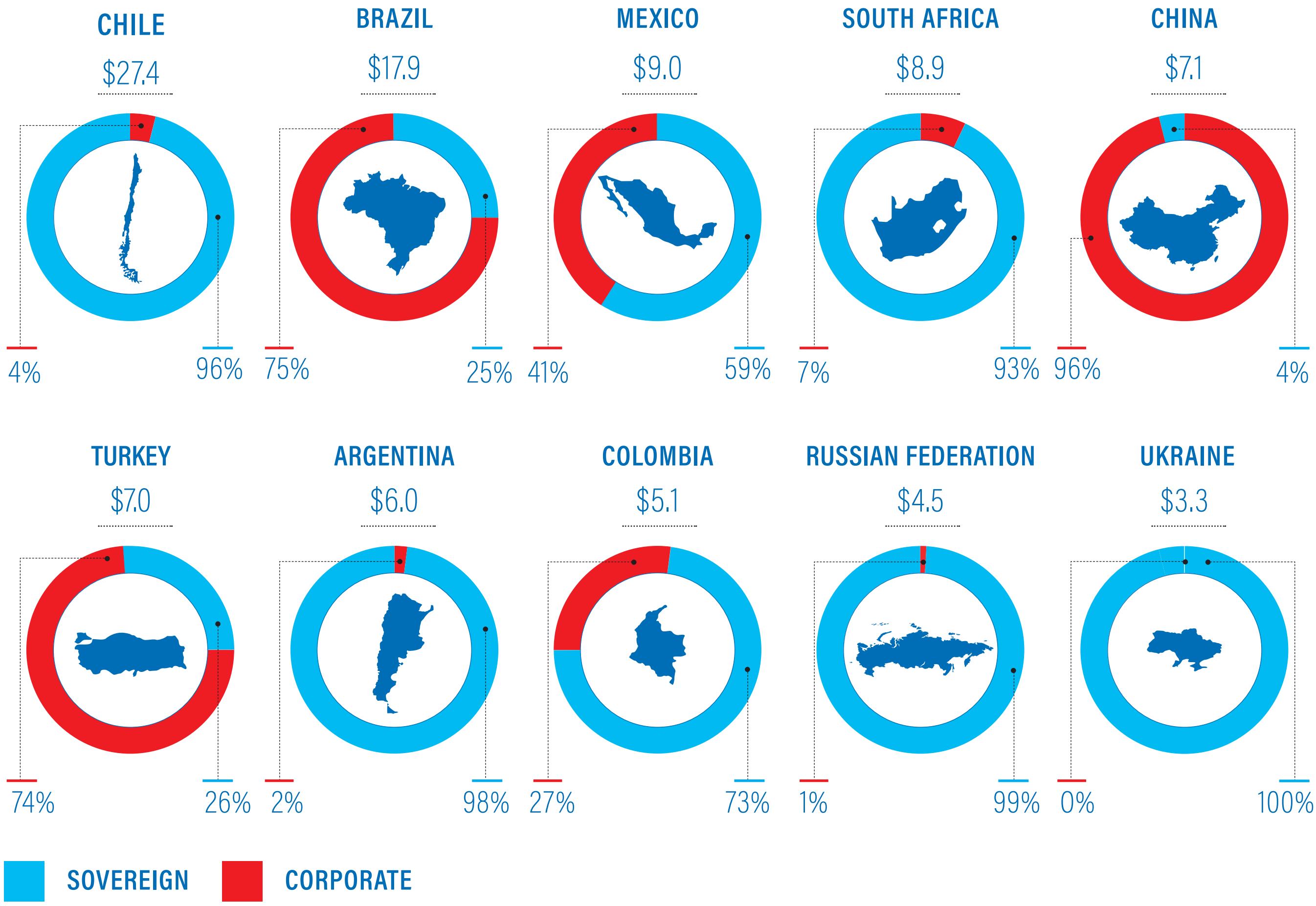
FIGURES ARE AVERAGES FROM JANUARY 1 TO DECEMBER 31, 2016, AND REPRESENT LENDER TO BROKER ACTIVITY ONLY

LENDABLE	ON LOAN	REVENUE
$192 BILLION	$20 BILLION	$122 MILLION

REVENUE ATTRIBUTION ACROSS ALL EMERGING MARKETS

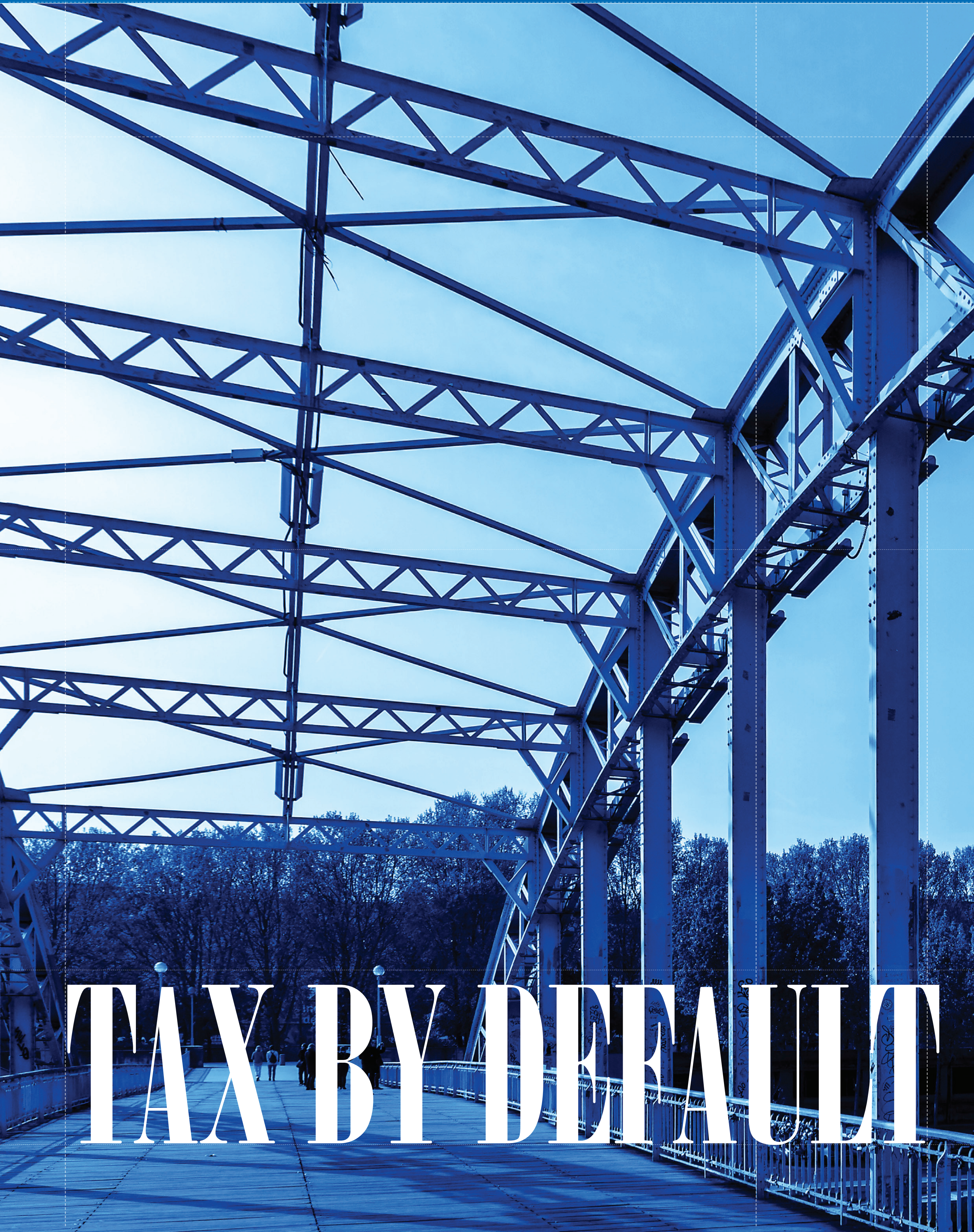
SOVEREIGN 67% | CORPORATE 33%

TOP 10 COUNTRIES BY FIXED INCOME REVENUE (MILLIONS) & REVENUE SPLIT



MOST PROFITABLE SECURITIES

VALE OVERSEAS LTD VALE 4.375 01/11/22	$4,067,216
CODELCO 144ASR UNSECURED 144A	$3,871,321
VALE OVERSEAS LTD VALE 4.625 09/15/20	$3,014,187
CODELCO 3.750 11/04/20	$3,009,152
CODELCO 4.500 09/16/25	$2,911,096
VALE OVERSEAS LTD VALE 5.625 09/15/19	$2,271,858
CODELCO 4.875% SNR 04/11/44 USD1000	$2,150,924
CODELCO 3.000 07/17/22	$1,832,755
CODELCO 5.625 10/18/43	$1,763,134
CODELCO 4.875 11/04/44	$1,649,446



TAX BY DEFAULT

Taxation developments have impacted the securities lending industry in recent years, ranging from Brexit, to the OECD’s efforts, to the extraterritorial nature of U.S. tax policy. Hansuke’s Ali Kazimi and Colleen Waddell discuss the impact of the regulatory trends that must be considered by counterparties and financial institutions engaging in securities lending activities

>>

Power and influence of the supranational

SOME of the major trends of the last decade or so have been shaped by the European Union. While the EU has followed some consistent policies—notably, in some aspects the reclamation of discriminatory withholding taxes—there are few signs of a wider coherent strategy when it comes to the EU Financial Transactions Tax (FTT) and Capital Markets Union (CMU). The principle of "direct effect," which applies to European law, manages to grab the attention of market participants who keenly keep a tab on EU tax developments. Direct effect, as enshrined by the Court of Justice of the European Union, enables European law to be invoked before a national or European court irrespective of whether it has been adopted into the national law of the member state.

The other major protagonist, whose activities have thus far enjoyed relatively less attention of market participants, is the Organization for Economic Cooperation and Development (OECD). In recent years, the OECD has sought to take a leadership role by developing the guiding principles and, subsequently, the tax rules to confront the lack of action at a national level. Indeed, this has been through the assumption of an informal role as the world tax organization, which has employed non-binding persuasive influence mechanisms such as the OECD model tax treaty and the commentaries thereon. The OECD's success has not gone unnoticed, and, in some quarters, there is disquiet about an unelected body funded by G20 countries imposing "binding" tax rules on participating OECD nations.

Whilst the work of the OECD has gone unnoticed by those outside the narrow circle of tax practitioners, the impact of its work has been far reaching. This includes training tax inspectors in developing nations; publishing the OECD Commentary on the meaning of beneficial owners of companies; and the long-running OECD Base Erosion and Profit Sharing (BEPS) project.

The common theme in the above is ensuring that there is transparency in where entities are recording profits and then adopting a common approach to the basis of taxation. However, there is a certain conflict with individual jurisdictions and their desire to plug the gaps in their finances. The blurring of the distinction between tax evasion and legitimate commercial tax planning has not helped corporations to organize their affairs.

Power of the United States of America

BESIDES the supranational institutions, it would be remiss not to mention the United States as a source of influence on taxation of the securities lending industry. This is on account of the transnational impact of its domestic tax legislation. Specifically, the U.S. substantive tax system applies to a U.S. person's worldwide income whilst also taxing a foreign non-resident alien's U.S. source income. Notwithstanding the extra-jurisdictional and controversial nature of the U.S. measures, the harsh reality is that the importance of U.S. for the financial services industry and the pervasive nature of U.S. institutions has ensured compliance therewith across the globe.

The U.S. traditionally has led the way with seeking to extend its territorial reach with regard to taxation, seeking to "look through" to the underlying source of the investment wherever it is deemed to derive from the U.S. As far back as 1997, the IRS issued regulations and published Notice 97-66 (subsequently repealed and replaced by Notice 2010-46) defining the treatment of substitute (manufacture/in-lieu) payments under a securities lending transaction for U.S. tax purposes. It provided for payments to be sourced and characterized by reference to the underlying U.S. interest and dividends for the purposes of U.S. taxation. The regulations and Notice 97-66 applied irrespective of the jurisdiction in which the securities lending transaction takes place or from where the manufactured dividend is paid. Effectively this involved "looking through" a securities lending or manufactured dividend transaction, treating it as though the underlying asset (such as a U.S.-issued security) was held instead.

The IRS has now modified §871(m) of the U.S. tax code to extend this treatment to dividend equivalents (such as equity-linked synthetic payments). These will, instead, be "looked through" and treated by the IRS as though they were instead a payment from a U.S. company. To treat the simulacra as the real dividend is a growing trend. To provide for the repeal of Notice 97-66 the U.S. initially established a Qualified Securities Lender (QSL) designation that has now been codified within the Qualified Intermediary (QI) Program—a contractual arrangement with the U.S. government—as the new Qualified Derivatives Dealer (QDD) regime pursuant to Notice 2016-42.

Separately, the U.S. Foreign Account Tax Compliance Act (FATCA), which was the most brazen attempt to impose extraterritorial reach in relation to taxation, created an unprecedented increase in documentation. For example, the IRS' entity self-certification form, the W8-BEN(E), grew to over eight pages, with a further 17 pages of explanatory notes. The IRS' own estimate is that it would take over 12 1/2 hours to learn about the form and to complete it. Due to the threat of the punitive 30%

withholding charge on U.S. Fixed or Determinable, Annual or Periodic (FDAP) income, financial institutions are understandably cautious in collecting and validating documentation.

The risk of withholding means that market counterparties need to ensure that this is appropriately allocated within their documentation and market agreements. Bodies such as the International Securities Lending Association (ISLA) have sought to alleviate the burden on the industry by producing sample agreements. However, this has not taken away the requirement to collect appropriate tax documentation (either the U.S. tax forms or self-certifications depending on the parties involved in the transaction) and conduct bilateral negotiations.

What does the future hold?

INSOFAR as the work of the OECD is concerned, admittedly as the many aspects of current business have become more complex, the taxation systems have been found to be ill equipped to deal with the challenges. This is particularly true in areas such as e-commerce and other multinational business lines where companies have deconstructed the business value chain, devolving high-value processes to low-tax jurisdictions. The OECD has sought to rebalance this in a number of ways, with the common aim of trying to rebalance the allocation of profits to fit with modern business.

OECD's efforts are likely to impact on the securities industry in numerous ways. The salient ones are outlined below:

- **OECD's** Beneficial Ownership project has evolved relatively quickly, with the commentary and training published in September 2014. It will, and already has had, a significant impact in a diverse range of countries, including Switzerland, Germany and Denmark.
- **Action 2** of the BEPS project seeks to neutralize the effects of hybrid mismatch arrangements. Repo and securities lending arrangements are cited as mechanisms that may be deployed to create asymmetric tax treatments. The current proposals are likely to capture these one-off, highly structured transactions. However, it is anticipated that there is likely to be little impact on the market participants' handling of ordinary "flow business."
- **Action 13** of the BEPS project introduces "country-by-country" reporting of profits. This is likely to create additional administration pressure for offshore booking centers. This may necessitate reconsideration of the transfer pricing arrangements/documentation and the need to allocate the responsibility for generating and submitting the reports.

Brexit and EU

THE reverberations following the UK's referendum vote to leave the EU are still being felt. However, it is necessary to consider the potential impact that this will have on the securities markets in a dispassionate manner.

In particular, the FTT has been rumbling below the surface within the EU for a significant period of time. There are significant concerns that the proposals are unworkable, though the EU seems unwilling to let the proposals drop. However, irrespective, the imposition of a transaction charge on securities transactions would seem to be completely against the principles for CMU.

In the event that the EU regroups with an enhanced commitment to the union, it seems inevitable that CMU will proceed. This is more likely without the UK lobbying against the changes. In such an event, the FTT inevitably would need to be abandoned. However, this would not stop the pressure to protect the market share of the remaining member states' markets.

Alternatively, the EU may fragment or move to a looser affiliation given the pressures from certain other countries (for example, the Netherlands and Denmark). In such a scenario, the possible reduced influence of the EU institutions would itself remove the glue necessary for the FTT to be put into effect. Accordingly, it would appear that the future of the FTT is indeed doomed irrespective of the future of the EU.

What are market participants currently doing?

THE various pressures are resulting in significant de-risking in the tax profile of market participants. They are primarily earning their revenue from clearing trades or widening of lending programs. The days of tax-driven trades and assumption of systemic tax risks have now passed.

Street-side market agreements and legal agreements are now being enhanced with specific tax indemnification language to mitigate the risk of any subsequent penalty, having previously been largely silent on taxation risks. This trend is only going to increase over time, especially where the work is outsourced to third parties.

Overall, there is a systematic de-risking in the markets. De-risking in the context of securities lending should be considered from both an architecture and transaction basis. As this major rescaling takes place across the industry, there will be a renewed focus on the architectural setup, including documentation of counterparties, entitlements and tax language (for both principal/agency and street-side agreements) to determine the appropriateness of the business model. Similarly, transactional scrutiny regarding the types of trades, reinvestments, appropriateness of counterparties (for example, EU protective claims and fiduciary responsibilities) and most importantly the determination of the expected tax withholding amounts will become the industry standard.

Business planning

THE constant state of flux in the global approach to taxation has had a significant impact on the nature of the securities lending business. The recent trend to de-risking is only going to accelerate.

The continuing fragmented nature of the overall tax system means that countries are inclined to look after their own self-interest. The experience with FTT demonstrates that even the EU is unable to force through measures with any speed.

There also remains a significant degree of contradiction between the various measures. For example, CMU remains incompatible with the proposals for FTT. In the absence of a coordinated approach, market participants will continue to have to make difficult strategic decisions.

Ali Kazimi is a managing director and Colleen Waddell is a senior principal at Hansuke Consulting, a specialist consultancy delivering tax advice to the securities finance industry.

NORDICS

LAST year's global selloff in oil prices roiled the world markets, and the Nordic region was no exception. Although oil prices have since stabilized and appear to be on the rebound, each country in the region still faces its own economic challenges and uncertainties. Post-Brexit recession fears are worrying Finland and Denmark: Finland's unemployment rate has risen amongst weak domestic demand and falling business investment while Denmark's industrial production dropped. Iceland has seen its exports drop by double digits for several quarters in a row. Depressed oil prices continue to beleaguer Norway and its large offshore drilling industry. Sweden has seen a surge in housing demand and big government stimulus and is presently viewed as one of Europe's fastest-growing economies. But some are worried it may be overheating.

It is against this economic backdrop that DataLend's attention turned to the Nordic securities lending market. Traditional agent lender to broker-dealer securities lending activity in the Nordic region shows a daily average on-loan balance of $38.8 billion in 2016. Normally the Nordics region carries an on-loan balance between $31 to $36 billion, but the busy spring season typically shows it grow to over $56 billion, somewhat skewing the yearly average. Broker-to-broker balances have averaged around $8.6 billion for the same time period. The daily lendable balance of the Nordics region averaged $311 billion last year, implying an average utilization of around 12.5% for the entire market. DataLend estimates that the Nordic region grossed a little over $675 million for securities lenders last year.

The Nordic region's securities lending market is dominated by equities with an average on loan value of a little over $30 billion for the last 12 months, approximating 79% of the average total

on-loan balance for the region. The average lendable balance for equities was a little over $215 billion during the same timeframe, giving equity securities a utilization of 14%. Fixed income daily on-loan values for the Nordics averaged approximately $8 billion with an average lendable balance of $95.4 billion, giving Nordics fixed income assets an average utilization of 8.4% over the past 12 months.

Similar to patterns observed last year, the Nordic region's securities lending market generally trades warmer than the rest of Europe with fees to borrow equities averaging around 262 bps over the past 12 months.

>>

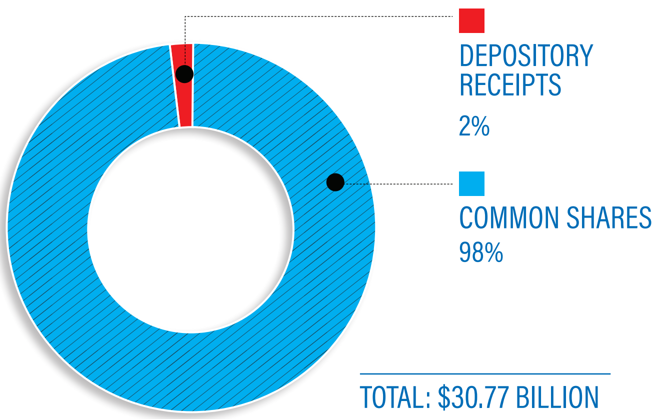
NORDICS

FIGURES ARE AVERAGES FROM JANUARY 1 TO DECEMBER 31, 2016, AND REPRESENT LENDER TO BROKER ACTIVITY ONLY

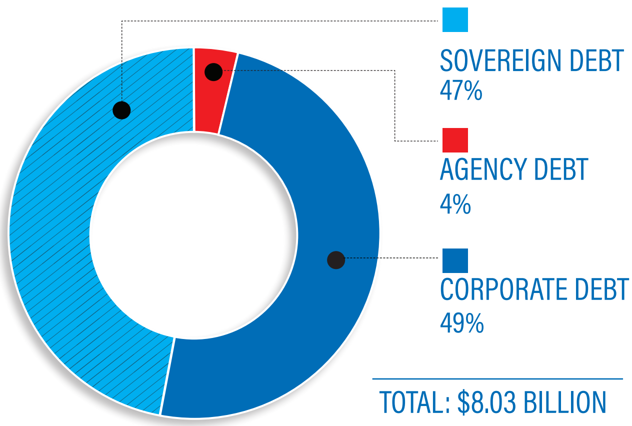
LENDABLE	ON LOAN	REVENUE
$311 BILLION	$39 BILLION	$675 MILLION

ASSET CLASS BREAKDOWN BY ON-LOAN BALANCE

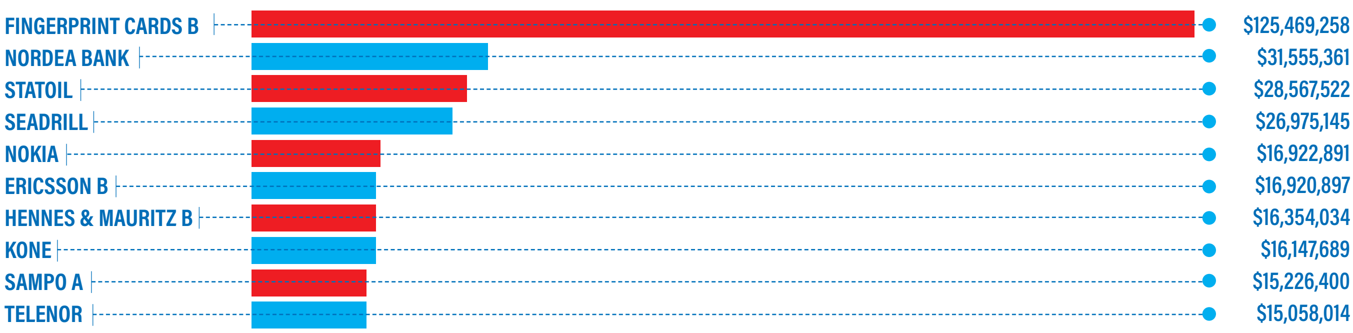
EQUITIES



FIXED INCOME

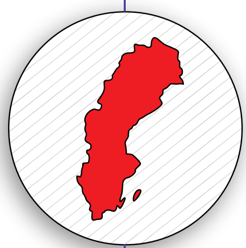


MOST PROFITABLE SECURITIES



REVENUE & AVERAGE FEE (ALL ASSET TYPES)

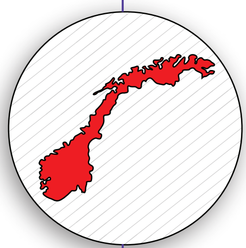
SWEDEN



$371,654,839

238 BPS

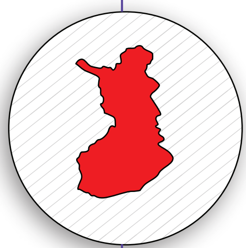
NORWAY



$143,396,104

180 BPS

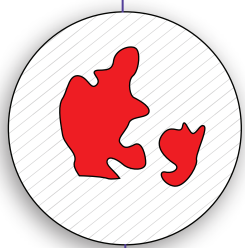
FINLAND



$113,274,573

121 BPS

DENMARK



$46,904,943

79 BPS

When breaking down the data by country, some differences in trading patterns across the Nordics constituents emerge.

DENMARK

The size of Denmark's securities lending market remains fairly steady with on loan balances ending 2016 at around $5.6 billion, averaging about $5.9 billion for the year. Like many other countries in Europe, the on-loan balance and utilization for Denmark rise significantly during the spring season, to $13.1 billion on loan in 2016. Denmark's lendable balance also has dropped a bit, from $81 billion in late June to $75.5 billion in late December. Overall utilization, however, has remained fairly stable, averaging around 16% for 2016. Fees to borrow Danish equities were the lowest of the Nordics in 2016, averaging 95 bps for the year.

When looking at some of the top-earning securities in Denmark, a few familiar names emerge that DataLend has covered in this market in years past. They include construction and mining machinery company FLS Industries, which grossed $13.8 million in revenue, although fees to borrow this name have been decreasing since the spring as its share price has strengthened. Pharmaceutical firm Novo Nordisk was another familiar name, which earned approximately $11.4 million. Healthcare equipment and supplies firm Ambu was the third most profitable asset in the Danish securities lending market with revenue of $2.4 million. Transportation and shipping company A P Moller-Maersk was the fourth most profitable name, generating $1.8 million worth of securities lending revenue.

FINLAND

Finland's securities lending market is larger than Denmark's, with on-loan balances ending 2016 at around $8.4 billion, following a daily on-loan balance averaging around $9.3 billion for the past 12 months. Finland's lendable balance conversely has seen solid growth in 2016, rising from a low of $44 billion in February 2016 to $51.7 billion by year's end. The overall utilization for Finland averaged close to 17% for the year. Fees to borrow Finnish equities were higher than those of Denmark at 169 bps (but lower than Norway's or Sweden's average fees on equities).

The top-earning name in the Finnish securities lending market in 2016 was a familiar top earner from years past: telecommunications firm Nokia, which generated $16.9 million in revenues. Industrial company KONE is another name we've profiled in the past, which earned a total of $16.1 million. Insurance firm Sampo was Finland's third largest revenue earner at $15.2 million, while paper products manufacturer Upm Kymmene grossed $10.4 million.

NORWAY

The size of Norway's securities lending market is similar to that of Denmark with an end-of-year on-loan balance of a little over $6 billion, a 20% increase from the $5 billion observed in the beginning of 2016. Norway's lendable balance also saw some solid growth in 2016, from $40 billion to $45 billion by the end of the year. Fees to borrow Norwegian equities averaged 229 bps for the year. Norway's average utilization for 2016 was 14%.

Similar to last year, a number of the top-earning names in the Norwegian securities lending market in 2016 are energy names. Those include Statoil, which generated a total of $28.5 million in revenues. Close behind that is oil and gas drilling firm Seadrill, a name DataLend has profiled as a top earner in the securities lending market in years past. Globally, Seadrill earned a total of $64 million for securities lenders in 2016, with $26.9 of that total from trades originating in Norway as the company, and many other deep-water drillers, still found themselves under selling pressure despite a rebound in oil prices. Securities lenders also earned $15 million in telecommunications company Telenor and $13.6 million in banking firm DNB.

SWEDEN

The Swedish securities lending market is the largest of the Nordic region with an on-loan balance of $12.2 billion at the end of 2016. Sweden's average daily on-loan balance for 2016 was approximately $15.5 billion. Sweden was also the hottest country within the Nordics region with fees to borrow Swedish equities averaging a very warm 272 bps in 2016. Sweden's lendable balance averaged $173.5 billion for 2016, suggesting an average utilization of 11.3% for the year.

One significant trend in Sweden has been rising fees to borrow equity securities. Much of this increase can be attributed to the Swedish IT sector, which jumped from 87 bps to 1266 bps during the same timeframe. Since then fees have dropped a bit for Swedish IT stocks, ending the year at an average of around 675 bps.

Red-hot biometrics firm Fingerprint Cards was responsible for much of the fee increase we saw across the Swedish IT sector. Indeed, the stock was the top revenue-earning security not only within the Nordics region, but Europe as a whole for 2016, generating a total of almost $125.5 million in revenue in 2016. Short sellers had targeted the stock on concerns that the company was expanding too rapidly and that Chinese competitor Goodix may be taking market share in the smartphone biometrics space. Shares of Fingerprint Cards have been on the decline since September. Nordea Bank was the second top revenue-generating security for Sweden, bringing in $31.5 million in revenue, while Ericsson grossed $16.9 million for securities lenders in 2016.

Although the Nordics continue to face economic challenges going into 2017, the securities lending industry in the region continues to show healthy on-loan balances, compelling fees and plenty of revenue opportunities for agent lenders and beneficial owners alike.

A NEW INDUSTRY EVENT FOR CLIENTS ON
OPPORTUNITIES AND CHALLENGES IN SECURITIES FINANCE

Finadium Investors in Securities Lending Conference

April 26 - April 27, 2017

Grand Connaught Rooms, London

SPONSORS

BNY MELLON
Brown Brothers Harriman
citi
State Street
J.P.Morgan
eSecLending
SECURITIES FINANCE TRUST COMPANY
IHS Markit
DATALEND
Scotiabank

TEL.1-978-318-0920
EMAIL. info@finadium.com
WEBSITE: finadium.com/conferences

FINADIUM

FRANCE

FRANCE has had a very challenging year in the global fight against Islamic terrorism. A side effect of these attacks was that investors seemed to avoid French sovereign debt in late 2016 on concerns that next year's presidential elections may bring another unexpected shock to the Eurozone through the possible election of far-right politician Marine Le Pen, according to a *Financial Times* report. Time will tell.

In the securities lending world, France is one of the largest markets in Europe in terms of on-loan and lendable balances, just behind Germany and Great Britain. On-loan balances for France started 2016 around $67 billion, reaching a peak of $129.5 billion during Europe's busy season in the spring, then ebbing back down to around $85 billion by the end of the year; this gave France a daily average on-loan balance of around $86.8 billion for the year. Securities lending in France generated an impressive $555 million in fees averaging 64 bps across both equities and fixed income assets in 2016. That is slightly less than the $586 million in revenue generated in 2015, but still very significant for the region.

The French securities lending market is dominated by fixed income assets, which make up an average of 66% of the total on-loan balance. This concentration in fixed income on loan is in line with the rest of Europe, which saw about a 65%/35% fixed income versus equities split for 2016. Within the French fixed income market, an average of around 57% of this balance is composed of French sovereign debt, followed by roughly 7% corporates and the rest a smattering of agency debt. Equities make up an average of 34% of the French securities lending market, the vast majority of which are common shares. French common shares were the hottest asset class of 2016 with average fees of 150 bps for the year.

The energy sector was France's hottest sector in 2016 with fees averaging around 290 bps for the year. Integrated oil and gas was the hottest industry within France's energy sector with fees averaging 299 bps. Financials was the second hottest sector for France with fees averaging 255 bps to generate just under $57 million for the year. Banks was the hottest industry within financials with fees averaging 291 bps for the year.

Utilities followed the financials as the third hottest sector in France with fees averaging 238 bps. The hottest industry within utilities was gas utilities, which averaged 475 bps in fees. The fourth hottest was the real estate sector with average fees of 223 bps for 2016, and finally Telecomms with 205 bps.

Total was the top-grossing name for the French securities lending market in 2016 as it has been in the past. The energy company generated approximately $104.3 million in revenue for securities lenders last year. Consumer discretionary giant Vivendi was the second highest revenue-generating security, grossing $30.9 million in 2016. A new entrant to our list of top-grossing French securities in 2016 is utility company Engie, which generated close to $19.5 million for securities lenders.

IN LOOKING at lender to broker securities lending activity for French sovereign bonds in 2016, DataLend analyzed what affect, if any, the maturity of the underlying sovereign debt issues had on fees, utilization and revenue. For the analysis, the maturities of French sovereign debt were split into two broad categories: shorter term (where a bond's maturity was within 10 years from the analysis date) and longer term (where the maturity was greater than 10 years), then looked back at securities lending activity for these two categories in 2016.

Generally speaking, the utilization for shorter-term maturity French sovereign debt was higher than that of longer-term debt: The utilization for shorter-maturity French sovereigns averaged 48% versus 21% for the longer-term maturity. When looking at the fee differential between shorter- and longer-term maturities, there didn't seem to be any difference with French sovereigns. Both shorter and longer-term maturities saw average fees of a little over 15 bps for 2016.

Although the fees to borrow shorter- versus longer-term French sovereigns were the same, the utilization figures between the two maturities were quite different, as previously noted. The different utilizations created a difference in revenue-generating shorter- or longer-term French sovereigns in 2016. Shorter-term French sovereigns grossed a little over $64.5 million last year versus $13.8 million lending longer-term debt.

Regardless of maturity, French sovereign debt grossed a little over $78.4 million in revenue for securities lenders last year and will continue to be profitable assets in the securities lending markets for years to come.

FRANCE

FIGURES ARE AVERAGES FROM JANUARY 1 TO DECEMBER 31, 2016, AND REPRESENT LENDER TO BROKER ACTIVITY ONLY

LENDABLE	ON LOAN	REVENUE
$514 BILLION	$87 BILLION	$555 MILLION

EQUITIES

HOTTEST SECTORS

ENERGY	FINANCIALS	UTILITIES	REAL ESTATE	TELECOMMS
290 BPS	255 BPS	238 BPS	223 BPS	205 BPS

MOST PROFITABLE SECURITIES

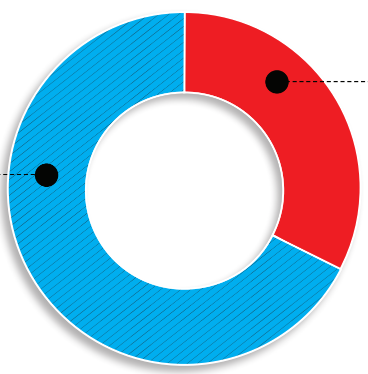
TOTAL	$104,292,578
VIVENDI	$30,922,608
ENGIE	$19,436,090
AXA	$18,675,385
SANOFI	$18,429,580
BNP PARIBAS	$14,700,087
CASINO GUICHARD PERRACHON	$14,505,825
ORANGE	$13,047,472
SOCIETE GENERALE	$11,525,921
LVMH MOET HENNESSY LOUIS VUITTON SE	$9,699,012

FIXED INCOME

DEBT MATURITIES

LONG (>10 YEARS) SHORT (<10 YEARS)

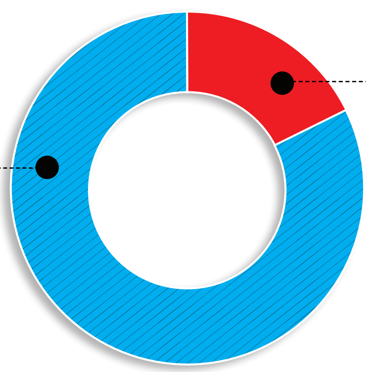
LENDABLE



67% 33%

LONG	$40,411,799,237
SHORT	$82,536,325,289
TOTAL	$122,948,124,526

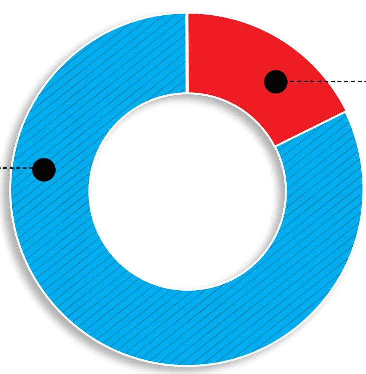
ON LOAN



82% 18%

LONG	$8,864,468,442
SHORT	$40,988,767,143
TOTAL	$49,853,235,585

REVENUE



82% 18%

LONG	$13,875,440
SHORT	$64,574,720
TOTAL	$78,450,160

NETHERLANDS

THE on-loan value for the Dutch securities lending market was fairly consistent in 2016. Balances saw fairly little fluctuation over the course of the year, starting at around $30.4 billion to reach a high of $44 billion in August, then dropping back down to just under $32 billion by the end of the year; this gave the Netherlands a daily on-loan average of $34 billion. Dutch lendable balances also were steady in 2016, beginning the year at $248 billion to grow to $297 billion by the end of the year. The average utilization for the securities lending market in the Netherlands was around 12%.

The Dutch securities lending market is fairly typical for the European region: a mostly GC market that heats up during Europe's busy season in the spring, then cools back down in the summer. Roughly 75% of the Dutch market trades at 20 bps or below while 20% trades between 20 and 50 bps. Only a handful of names trade above 500 bps on a regular basis. Having said that, the Netherlands grossed a little over $141 million in lending revenues in 2016. That made the Netherlands the sixth highest revenue-grossing market in Europe for 2016, just behind Norway and slightly ahead of Italy.

The Dutch market is dominated by fixed income, which averaged around 70% of the total on-loan balance in 2016. That is fairly reflective of the greater European market, which shows a slightly lower 65%/35% average on loan split between fixed income and equities for the same timeframe. Within the Dutch fixed income market for 2016, the on-loan balance was mostly sovereign debt (76%) and corporate debt (22%). Common shares dominated the on-loan balance of equity securities at 84% while depository receipts were the next largest class of equities at 15% last year.

Although healthcare is the hottest sector in the Dutch securities lending market yielding 267 bps, this high fee average is across only a handful of names with an average on-loan balance of approximately $39 million for 2016, so it is not quite the revenue driver it may seem. Financial services is the second hottest sector in the Netherlands with fees averaging 221 bps for the year. The Dutch financial services industry is considerably larger than the healthcare sector with daily on-loan balances averaging just under $1 billion for the year. The Dutch materials sector was the third hottest sector for that country in 2016 with fees averaging around 148 bps. The energy sector yielded 119 bps and industrials 104 bps.

Royal Dutch Shell, a top earner in 2015, was the largest revenue earner for the country in 2016, yielding almost $20.4 million for securities lenders. Insurance company NN Group N.V. was the second largest revenue earner for the Netherlands with revenue of $14 million for the year.

IN LOOKING at lender to broker securities lending activity in Dutch sovereign debt, DataLend analyzed what affect, if any, the maturity of the underlying issues had on fees, utilization and revenue. For the analysis, the maturities of Dutch sovereign debt were split into two broad categories: shorter term (where a bond's maturity was within 10 years from the analysis date) and longer term (where the maturity was greater than 10 years), then looked back at securities lending activity for these two categories in 2016.

Utilization averages for Dutch debt between the two buckets seemed fairly even: Shorter-term Dutch sovereigns saw an average utilization of 39% versus a slightly lower 34% utilization for longer-term maturities. There was, however, a difference in fees between short- and long-term Dutch sovereign debt: The longer-term maturity bonds traded with fees averaging 9 bps versus 13 bps for the shorter maturity debt. As a result, short-term debt yielded $18 million in revenue while the longer-duration issues generated $5.6 million.

SPONSORED BY

ING

NETHERLANDS

FIGURES ARE AVERAGES FROM JANUARY 1 TO DECEMBER 31, 2016, AND REPRESENT LENDER TO BROKER ACTIVITY ONLY

LENDABLE	ON LOAN	REVENUE
$283 BILLION	$34 BILLION	$141 MILLION

EQUITIES

HOTTEST SECTORS

HEALTHCARE	FINANCIALS	MATERIALS	ENERGY	INDUSTRIALS
267 BPS	221 BPS	148 BPS	119 BPS	104 BPS

MOST PROFITABLE SECURITIES

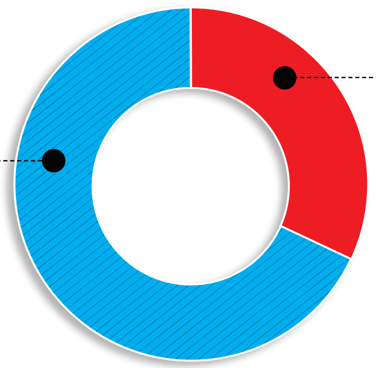
ROYAL DUTCH SHELL CL A	$20,372,385
NN GROUP NV	$14,007,211
ARCELORMITTAL	$7,375,156
ROYAL DUTCH SHELL CL A	$7,361,958
KONINKLIJKE PHILIPS	$5,617,261
AEGON	$5,124,995
UNIBAIL RODAMCO REIT	$4,055,053
KONINKLIJKE DSM	$3,761,601
ALTICE CL A	$3,285,383
NETHERLANDS NLGV 3.250 07/15/21	$3,067,379

FIXED INCOME

DEBT MATURITIES

LONG (>10 YEARS) SHORT (<10 YEARS)

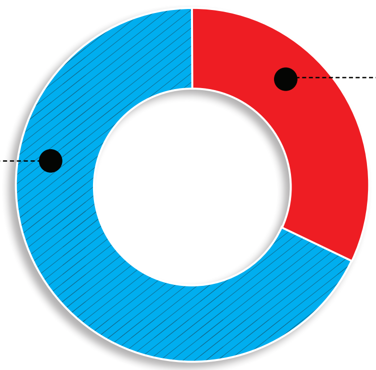
LENDABLE



68% 32%

LONG	$14,958,197,260
SHORT	$31,867,522,841
TOTAL	$46,825,720,101

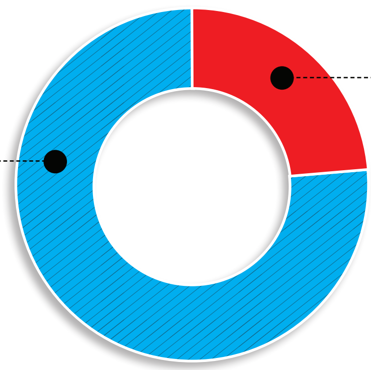
ON LOAN



71% 29%

LONG	$5,254,573,414
SHORT	$12,984,330,259
TOTAL	$18,238,903,673

REVENUE



76% 24%

LONG	$5,653,163
SHORT	$18,078,572
TOTAL	$23,731,735

A DAY IN THE LIFE OF

DON D'ERAMO

In this feature interview, *The Purple* profiles Donato (Don) D'Eramo, Global Head of Securities Lending at RBC Investor & Treasury Services and President of the Canadian Securities Lending Association.

Tell us about your current role.
My financial services career spans more than three decades. Today, I am Global Head of Securities Lending at RBC Investor & Treasury Services (RBC I&TS), located in Toronto. Prior to this, I was Head of Securities Finance, EMEA, at State Street.

Describe a typical day as Global Head of Securities Lending at RBC I&TS.
On a normal day, I am out of bed by 5:00 am. By then, markets in London have been open several hours, and I check on developments across Europe. The need to stay connected and informed with global markets is especially important in times of turbulence. During the Brexit vote and the recent U.S. presidential election, I was up throughout the night, monitoring activity and available to clients for any inquiries they may have had.

Then it is breakfast, although sometimes that is just a coffee. Like my grandfather in Italy, I always make an espresso using the traditional stovetop method. When possible I spend time in the gym en route to work, either cycling or doing plyometric workouts. Next, it's off to the office. There my focus turns to meeting with clients and working with internal partners to drive the strategy and growth of our business. I am continuously collaborating with clients to ensure that our program is successfully optimizing their portfolios, while maintaining ongoing discussion on market trends and the future of the industry. It is also imperative that I engage our borrowers to ensure that my finger remains on the pulse of the demand side so that we effectively balance their needs while optimizing returns for lenders.

My day does not end at the Toronto market close, as it is then time to check in with Asian markets. And a few evenings a week, I meet with clients or business and industry partners to discuss the trends and demand drivers that will help shape solutions and forward-looking product development.

You have been in the business for more than 30 years. What keeps you going?
The challenge that excites me is the search to add value to clients' ever-more-complex scenarios and an evolving regulatory landscape. At RBC I&TS, our securities lending strategy focuses on delivering value and performance for clients, both on the supply and demand sides. This is consistent with RBC I&TS' focus on client-centricity and putting our clients at the centre of all we do.

What's the biggest challenge in your current position?
In previous roles, I had regional responsibilities within a single time zone, while now I have a global mandate in which our desks are essentially open 24 hours a day, five days a week. That presents some logistical challenges—and can also result in me sleeping with one eye open.

What is one thing clients are usually surprised to learn about securities lending?
In an industry with a global focus, it is not widely known that Canada is at the top of the list. Canada is the second largest securities lending market in the world with approximately CAD 1.54 trillion in lendable assets, while the industry as a whole hits over CAD 20 trillion globally. Across both equities and fixed income, the Canadian market has over CAD 171 billion out on loan, of which RBC I&TS captures a 40% share.
(Source: DataLend, as at February 23, 2017)

What's the toughest task you face in demonstrating the value of securities lending to clients?
Key components of my work are ensuring clients' requirements are heard and they understand what we are doing to support them in achieving their goals. This often means translating highly technical terms and complex strategies into clear, actionable approaches for clients and providing tools to help interpret performance. This can be challenging to do effectively.

The value of the securities lending industry can also be difficult to quantify. It exists to promote the smooth and transparent operation of financial markets. The benefits to clients—increased liquidity and enhanced returns—are significant but not necessarily apparent at first glance.

What's the most innovative securities lending solution you have developed?
Years ago, I led the Canadian industry into providing a solution for the acceptance of cash collateral within the local securities lending marketplace. A first of its kind at the time, it certainly ranks up there as an innovative solution for the Canadian market, and a definite highlight of my career.

Today, we have developed an approach that allows clients whose assets are custodied at RBC I&TS to participate in select opportunities without committing to the broader securities lending offering. This model allows clients to take a "walk-before-run" approach.

What does the future of securities lending look like?
Compared to the earliest days of my career, the future is already here—20 years ago, trade tickets were written by hand! Throughout my career, I have seen an exponential rate of change across the industry and going forward, I expect this to continue as we see amplified regulatory requirements, more digitization and new products that broaden the scope of securities lending. I am particularly excited about the potential for increased efficiency gains associated with technology innovation and how this can deliver the capacity to manage larger volumes.

How is "digital disruption" affecting the securities lending business?
Like others in our industry, RBC I&TS is working on optimization initiatives using varying approaches, and seeking further revenue enhancement opportunities for client portfolios. In my view, fintech can help deliver these solutions. Although I am traditional in many respects, disruption and advanced technologies are clearly the path forward.

What do you hope to achieve as President of the Canadian Securities Lending Association (CASLA)?
My goals for CASLA in 2017 are first, to raise the industry's profile and second, to help ensure that regulatory guidelines are consistent across client segments, such as mutual funds, pension plans and insurance companies, in order for beneficial owners to equally benefit from demand opportunities.

What do you do in your spare time?
I have passion for all things Italian. If I retired today, my dream is to live in Tuscany for part of the year, and open a small restaurant with no menu to speak of. Whatever is freshest and in season would be offered. Actually, this flexible approach is very similar to the "agile" methodology adopted by RBC I&TS in delivering solutions, products and technology.

What is the best advice you've ever received?
My grandfather used to always talk about the value of surrounding yourself with bright people and making sure you learn from them. Of course, his world was far away from the world of securities lending, but I have always modeled my actions along those lines—ensuring I cultivate and recognize key talent, promote accountability and growth in my team and benefit from the people around me.

Donato (Don) D'Eramo
Managing Director and
Global Head of Securities Lending
RBC Investor & Treasury Services
donato.deramo@rbc.com
Phone: 416.955.5500
Mobile: 416.540.0491
www.rbcits.com


SHAPING THE DEALING ROOM OF TOMORROW. FOR YOU. TODAY.
At HSBC we understand that financial markets are constantly evolving, and that the key to success tomorrow is preparation today.
Looking ahead to upcoming changes in trading and regulations, we have crafted advanced solutions in Execution and developed innovative tools in Risk Management. Along with solid Financing capabilities, we could help our clients make the most of future opportunities, now.
See how we can help your business at
www.gbm.hsbc.com/markets
HSBC
Issued by HSBC Holdings plc.