THE PURPLE

A DATALEND RESEARCH PUBLICATION
SEPTEMBER 2016 | ISSUE 1

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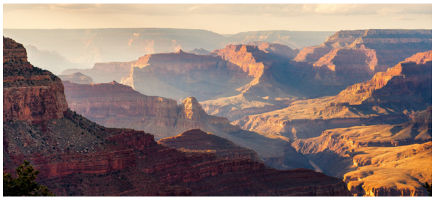

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Contact Jonathan Hodder at *jonathan.hodder@equilend.com* **or +44 207 426 4419 if you are interested in sponsoring our next issue, to be released in January 2017 with distribution at the IMN US and PASLA conferences.**

DEAR READERS,

WELCOME to the very first edition of The Purple, the latest product extension of DataLend, the preeminent market data provider in global securities finance.

It is a very exciting time at EquiLend! We continue to evolve and transform the technology landscape for our industry. Whether by revolutionizing transaction execution with NGT, connecting to central counterparties for greater capital efficiency, reengineering and improving our post-trade suite of services, creating efficient solutions for the synthetic financing market or by continuing to build upon our award-winning market data product, we stand ready to continue delivering innovative solutions for our clients to give them the advantages they need.

I hope you enjoy this first edition of The Purple. We welcome your feedback on this and any other of our many products and services. And I thank you very much for your support!

Brian Lamb
CEO, EquiLend
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DEAR READERS,

THANK YOU for reading the debut issue of The Purple, a DataLend research publication. You may be familiar with our regular series of infographics highlighting the global securities finance market. Our expectation is for The Purple to expand on this research and serve as an even more robust source of market data and information on our industry.

Each issue will include country and regional intelligence provided by DataLend analysts, topical feature articles written by independent journalists and details of enhancements and upcoming features in DataLend and other services throughout the company. We hope The Purple becomes an easy reference guide for lenders, borrowers and beneficial owners alike as they navigate the securities finance markets.

Finally, I want to thank everyone who helped to make The Purple possible, including our marketing team, our relationship managers and especially our DataLend analysts, all of whom have worked tirelessly to bring you unprecedented insight into the global securities finance market.

We hope you enjoy issue one. I welcome your feedback.

Nancy Allen
Global Product Owner, DataLend
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VIEW FROM THE BENEFICIAL OWNER

As the securities finance market has evolved in recent years due to regulatory changes and market conditions, many beneficial owners have opted to become more actively involved in their securities lending programs. As they and their agents adapt to the new environment, some beneficial owners are considering new opportunities as they double down on their lending programs—including the possibility of extending the use of term trading; broadening the range of acceptable collateral; and using independent market data providers to help them analyze and assess the performance of their portfolios and their agents. *Brian Bollen reports*

WHILE the incremental revenues generated by securities lending remain modest, an additional two or three basis points over a five-, 10- or 20-year time horizon can provide a welcome boost to a fund, says Matthew Chessum, an investment dealer at Aberdeen Asset Management (AAM) in London.

The list of experienced lenders comprises some of the world's most well known investment names. One large beneficial owner—Norges Bank Investment Management (NBIM), the Norwegian wealth fund—had about 6% of its net asset value on loan at the end of 2015, according to the NBIM Global Pension Fund Annual Report 2015. That translated to securities lending revenue of about five basis points for the total portfolio last year, totaling NKR 3.3 billion (equivalent to almost $409 million at the end-2015 mid-exchange rate recorded by Norges Bank), up from NKR 2.7 billion ($334 million) in 2014, according to Marthe Skaar, a spokesperson for the fund.

Roelof van der Struik, investment manager at Dutch pension advisory specialist and pension fund manager PGGM, says PGGM has lent out securities for nearly 15 years through a number of agent lenders (currently numbering five) and has a high-value, low-volume policy. In that time, securities lending has brought in a steady stream of revenue without any major incidents or losses. Although those revenues are only several basis points on the portfolio, when measured against on-loan positions, van der Struik calculates that they are consistently above the 1% mark. He describes that as a very significant return for a beta-plus fund on a collateralized investment with virtually no risk and minimal loss of liquidity. PGGM does not have a maximum cap for stock on loan; however, only around 3% of its equities are typically out on loan, he says.

Portfolio managers have a duty to wring every last basis point out of their securities, another market player says, and at a time when lower-for-longer interest rates have made delivering a positive return on investment difficult, securities lending can help.

"This has never been truer than now," says Mick Chadwick, a 20-year repo market veteran prior to heading up the securities finance business at Aviva Investors for the past decade. The additional return generated for beneficial owners will depend upon the combination of assets and the lender's risk appetite, but it will be unlikely at the overall portfolio level to exceed a single-digit number of basis points per annum, he adds. For passive funds and index

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trackers, engaging in securities lending can move the performance needle and boost the viability of offering these funds, he says.

Performance Measurement

WITH evidence that beneficial owners are continuing to invest in or even ramp up their lending programs, performance measurement and reporting tools have become ever more essential to them.

Chessum and his colleagues lend on behalf of Aberdeen's global funds and U.K.-domiciled funds. AAM has used the same two agents since the inception of its lending program 15 years ago. Emphasizing the stability of a well-designed and structured program, Chessum says that AAM runs quarterly performance reviews where its agents provide regional performance benchmarking. The reviews look at outliers and market trends, and this filters into its lending strategy. AAM is actively looking to expand lending activity outside Europe and is seeking to improve its own risk-reward profile by lending out less stock for higher fees, Chessum says. He and other industry participants are keen to emphasize the importance of market data to them and their programs.

"We also run exclusives, so performance data [is] essential to be able to work out whether we are receiving any outperformance in relation to running a discretionary program," he says. The data enables AAM to ask optimistic "wannabe" providers why they think they can deliver the figures they quote. He advises them not to overcook their estimates to win business; when pitching for securities lending mandates, do not over-promise and then under-deliver, he says. The vast improvements that have taken place among market data providers help beneficial owners to gauge which numbers being suggested for additional income are realistic and which are not.

For PGGM's van der Struik, benchmark information is vital in carrying out five twice-yearly agent lender reviews. "I need sophisticated benchmarking information to be a worthy player," he says. "Pension boards also expect me to respond to them on a monthly basis, and benchmarking information gives them confidence that I am doing my job. They need to be sure that our performance delivery is in alignment with what was promised."

Data tools also have another role to play, as they enable beneficial owners to work with traders to create an optimal lending strategy. "I see traders making hundreds of trades which are in fact loss-making," van der Struik says. "I say: Concentrate on the 10% of trades that make 80-90% of the income, and if utilization of a stock is very high, perhaps raise its price. Conversely, if utilization is very low, perhaps they need to drop the price."

Henning Varner is head of Risk Management at Skagen Funds in Norway and worked at NBIM for eight years overseeing its securities lending activity, amongst other responsibilities. Varner is another firm believer in the importance of market data: "You should fetch estimates on the security level from several security lenders and compare them to arrive at an indication of your potential annual earning power," he says. "It is not uncommon for the bulk of securities lending income from a global portfolio to be driven by just a smaller part of that portfolio, meaning that additional portfolio performance from lending securities is very name-specific. Also, a low turnover will make a portfolio more attractive to borrow from, as chances of recalls are smaller."

Aviva's Chadwick utters a word of caution about benchmarking in securities lending; he says that while there is little wrong with the underlying data or the uses to which it is put, market data in itself is something of an imprecise science because of the very nature of the business. Every program is effectively a peer group of one given that each has its own bespoke features relating to counterparties, collateral, cash reinvestment and rules on term lending, with further variations caused by jurisdiction and regulation, Chadwick says.

The true value, Chadwick believes, lies

in the opportunity the data providers create for trend analysis. Lenders can use performance data to track performance trends in a program. They can, for instance, show how much lenders make in equities versus fixed income over time, and how well their program is performing overall compared to a few years ago. The use of these tools helps him to demonstrate that he is optimizing the use of securities in the Aviva portfolios, he says.

Jayne Forbes is global head of Securities Financing at AXA Investment Managers, which prides itself on being a low-volume, high-margin securities lender. She echoes Chadwick's comments, with some clarification: "When it comes to securities lending, every fund and beneficial owner is rightly unique, and individual anomalies are difficult to benchmark, but the data providers have worked very hard to help their client group in challenging circumstances. The key is to create a like-for-like weighted analysis at the fund, client and program level. The more exact matching that can be done, the better the benchmarking. When we review performance, we compare each fund to a peer group weighted to our inventory, consisting of funds of the same structure that accept the same collateral."

> **Pension boards … expect me to respond to them on a monthly basis, and benchmarking information gives them confidence that I am doing my job. — *Roelof van der Struik, PGGM***

The New Landscape

SKAGEN Funds does not currently lend securities. Varner says that is partly due to its active management style, which increases the likelihood of stock recalls; the cost/risk/reward ratio; and regulatory burdens. Skagen Funds does, however, monitor the opportunity on an ongoing basis and regularly carries out reviews into the possibility. "The main reason we haven't had [securities lending] in Norway has been due to regulatory restrictions on tri-party lending," Varner says. "Only principal lending—to one counterparty only—was permitted. The risk and additional workload versus additional return was not deemed favorable." Now that normal tri-party lending has been approved, it is time for a review.

Varner describes just one example in the evolving regulatory landscape impacting securities lending businesses around the globe. Agent lenders in particular are facing the brunt of the impact, resulting in rising capital costs and tighter spreads. Beneficial owners in turn are feeling the trickle-down effect, with well-publicized questions circulating about the viability of existing indemnification clauses and fee splits.

In order for their securities lending businesses to continue to remain profitable, some beneficial owners may consider broadening their acceptable collateral types or extending their use of term lending.

"One trend, especially with balance sheet constraints kicking in, is that the value of collateral will become a factor," says van der Struik. "We are not against term lending, but it is very impractical." Term lending, he says, requires close monitoring, and unless there is a significant increase in yield as a result, it is generally not worth the effort.

While most beneficial owners may be unwilling to dial up risk in pursuit of a higher revenue target, some funds with a liquidity profile measured in decades might be amenable to longer-term lending, Chadwick says. "That is increasingly where the demand is on the sell side," he says. "The longest we will go out on a business-as-usual mandate would be a year, but it must be worth it to do the trade; it must deliver value for clients. We would be open to bespoke transactions for longer maturities, but there is a much lengthier and more rigorous approval process involved, and only a small subset of our funds can go out that long."

As for collateral, according to Chessum, AAM has added main index equities to its collateral schedule as a result of the changing landscape. The change was implemented not just to remain competitive amongst its peers, but also because it makes sense from a correlation and risk perspective, he says. "Given that UCITS funds cannot lend for more than a maximum of seven days, and that we lend only overnight, changing the collateral profile in an intelligent way is one route that we can take to distinguish ourselves from the competition," he says. However, he adds that AAM would never lend fixed income against equities, for instance.

Optimizing Programs

IT is no small feat for beneficial owners to extract optimal value from their lending programs while actively managing risk appropriately and complying with the evolving requirements of regulators. With the help of industry standard market data, beneficial owners are finding greater transparency in their securities lending programs, allowing them to structure programs that meet the risk-reward parameters of their underlying funds.

EUROPE

BREXIT has dominated headlines in Europe and around the globe since U.K. voters on June 23 opted for the country to leave the European Union. In the securities lending market, despite speculation that the financials sector in particular may see an increase in fees and on-loan value after the Brexit vote, an analysis of our data shows that this doesn't seem to have been the case.

On the whole, Europe is the second-largest region in the securities lending market globally with an average on-loan balance of $489.53 billion and $3.53 trillion in lendable assets. Europe's on-loan balance typically changes during the busy spring season, and 2016 was no exception: On-loan balances started the year at $441 billion and reached a peak of just over $611 billion by late May. Balances then shrank back down to approximately $465 billion as of July 31. We see a similar pattern occur with utilization during that timeframe, giving Europe an average utilization of 14%.

The top revenue-earning countries in Europe have shifted since last year. At present, France and Sweden appear to be the two most profitable markets in 2016 with revenues of approximately $387 million and $285 million, respectively, year to date. The U.K. is third with $231 million, and Germany comes in at number four with $225 million. In 2015, we saw Germany beating out France and the U.K. with total revenues of $632 million; it appears unlikely that Germany will generate equivalent revenues by the end of this year.

The total revenue for European securities lending activity thus far in 2016 is $1.81 billion. We estimate that Europe grossed approximately $2.83 billion in revenue last year, so it appears as if the region may fall a little short of

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that figure by the end of 2016.

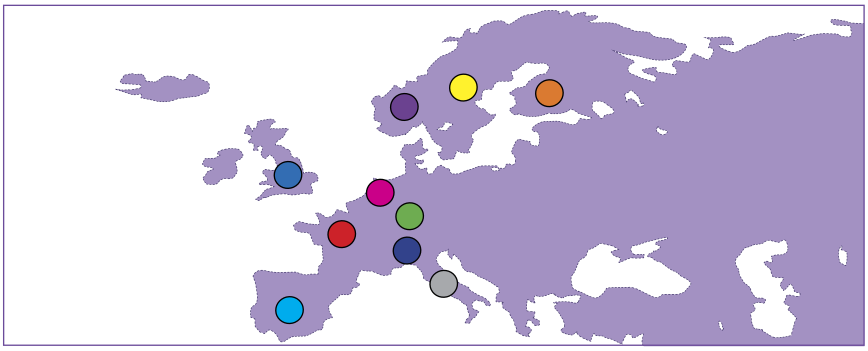
Information technology is the hottest sector in Europe this year with volume-weighted average fees of 286 bps and an average on-loan balance of $13.37 billion across more than 300 securities. This was driven by the technology hardware and equipment industry, which yielded fees of 546 bps on average year to date. Financials is the second hottest industry in Europe with average fees of 191 bps and an average on-loan balance of $31.28 billion across almost 700 securities.

Autumn in the Swiss Alps, Switzerland

LENDABLE	ON LOAN	YTD REVENUE
$3.53 TRILLION	$489.53 BILLION	$1.81 BILLION

TOP 10 EUROPEAN COUNTRIES BY GROSS REVENUE (MILLIONS)

Country	Revenue
France	$387
Sweden	$285
UK	$231
Germany	$225
Finland	$103
Norway	$98
Italy	$94
Netherlands	$90
Switzerland	$72
Spain	$62

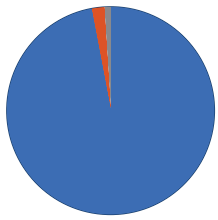


EQUITIES

TOP MARKETS BY REVENUE

COUNTRY	FRANCE	SWEDEN	UK	GERMANY	FINLAND
TOTAL REVENUE	$325m	$281m	$151m	$146m	$101m
ON LOAN	$31bn	$14bn	$40bn	$23bn	$7bn
LENDABLE	$273bn	$99bn	$611bn	$290bn	$34bn

ON LOAN - ALL EUROPE



TOTAL: $192.94 BILLION

- COMMON SHARES 97%
- DEPOSITORY RECEIPTS 2%
- ETF/ETN 0%
- OTHER 1%

TOP 5 HOTTEST SECTORS BY FEE

	Sector	Fee	HOTTEST INDUSTRY
1	IT	286bps	TECH HARDWARE & EQUIPMENT
2	FINANCIALS	191bps	BANKS
3	ENERGY	175bps	OIL & GAS DRILLING
4	UTILITIES	159bps	GAS UTILITIES
5	TELECOMMS	141bps	ALTERNATIVE CARRIERS

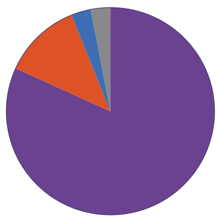
FIXED INCOME

TOP MARKETS BY REVENUE

COUNTRY	UK	GERMANY	FRANCE	NETHERLANDS	LUXEMBOURG
TOTAL REVENUE	$80m	$79m	$62m	$27m	$14m
ON LOAN	$72bn	$87bn	$56bn	$24bn	$4bn
LENDABLE	$237bn	$216bn	$172bn	$84bn	$17bn

Fixed income classified by issuer country of risk.

ON LOAN - ALL EUROPE



TOTAL: $296.59 BILLION

- SOVEREIGN DEBT 81%
- CORPORATE DEBT 13%
- AGENCY DEBT 3%
- OTHER 3%

FRANCE

THE Euronext Paris stock market slid from its December highs throughout the first half of 2016, reversing course not long after the Brexit vote in late June. In the securities lending market, France remained a top European revenue generator for lenders in 2016.

In terms of on-loan and lendable balances, it is one of the largest markets in Europe, close to neighbors Germany and the U.K. On-loan balances in France started the year around $64 billion, reaching a peak of $126 billion during Europe's busy spring season, then it ebbed back down to around $70 billion as of July 31, typical of other markets in the region.

The French securities lending market is dominated by fixed income assets, which make up an average of 64% of the total on-loan balance. This proportion of fixed income on loan is aligned with the rest of Europe, which on the whole has seen a 60/40 fixed income to equities split on average this year.

Within the French fixed income market, some 86% of this balance is composed of French sovereign debt, followed by roughly 12% corporates and the rest agency and other debt. Equities make up an average of 36% of the French securities lending market, and of that total 98% are common shares.

Like most of Europe, a large percentage of France's equities on loan trade GC, with about 40% trading at 20 bps or lower on average, year to date. Another roughly 25% percent of equities were trading between 20 and 50 bps, followed by around 20% between 50 and 250 bps and a very small number trading hotter than 300 bps on a regular basis—around 20 securities. However, France's securities lending market is still quite profitable, grossing $387 million year to date. The market may be poised to meet or exceed the 2015 total revenue figure of $586 million, but it is uncertain whether it is on pace to reach the $896 million mark from 2014.

The financials sector is France's hottest with fees averaging around 313 bps for the year through July 31. That is driven by the banks industry, which has generated volume-weighted average fees of 356 bps.

The next hottest sector is energy, with fees averaging 305 bps, fueled by the oil and gas equipment and services industry, which is averaging 376 bps so far this year. Interestingly, fees for the French energy sector are not cooling as rapidly as those in other markets.

Total is the top-grossing name for the French securities lending market, as it has been in the past. The energy company has generated some $52.91 million in fees thus far in 2016.

Another familiar name is consumer discretionary giant Vivendi, which has grossed $30.77 million as of July 31. Financial services firm AXA comes in third with $18.41 million in gross revenues thus far in 2016.

Plateau of Valensole, Provence, France

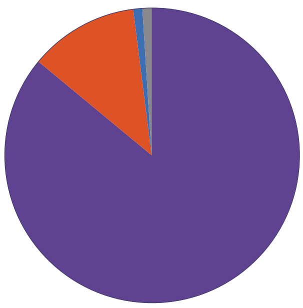
LENDABLE	ON LOAN	YTD REVENUE
$497.13 BILLION	$87.01 BILLION	$386.92 MILLION

MOST PROFITABLE SECURITIES

SECURITY	REVENUE	SECURITY	REVENUE
1. TOTAL	$52,913,004	6. CASINO GUICHARD PERRACHON	$12,931,047
2. VIVENDI	$30,765,748	7. SOCIETE GENERALE	$11,433,576
3. AXA	$18,409,356	8. ORANGE	$7,556,762
4. SANOFI	$17,889,004	9. CARREFOUR	$6,636,784
5. BNP PARIBAS	$14,563,436	10. CREDIT AGRICOLE	$6,633,578

AVERAGE ON LOAN BY ASSET CLASS

FIXED INCOME



SOVEREIGN DEBT
86%

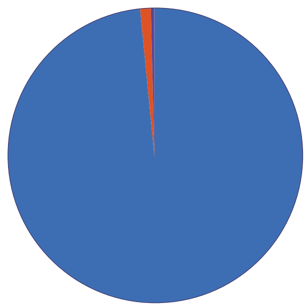
CORPORATE
12%

AGENCY
1%

OTHER
1%

TOTAL ON LOAN:
$55.63 BILLION

EQUITIES



COMMON SHARES
98.45%

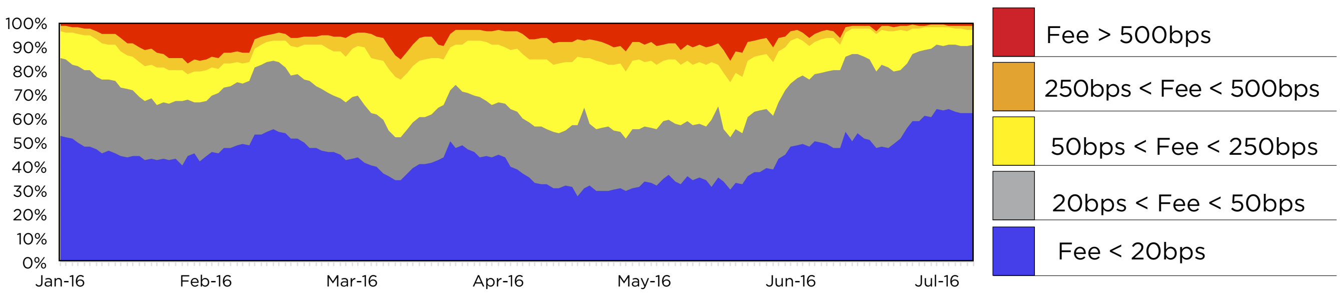
DEPOSITORY RECEIPTS 1.16%

ETF/ETN
0.37%

OTHER
0.02%

TOTAL ON LOAN:
$31.38 BILLION

EQUITY HEAT MAP (AVERAGE FEE)



TOP 5 HOTTEST SECTORS BY FEE

	1	2	3	4	5
Sector	FINANCIALS	ENERGY	TELECOMMS	UTILITIES	CONSUMER DISCRETIONARY
Fee	313bps	305bps	217bps	204bps	180bps
HOTTEST INDUSTRY	BANKS	OIL & GAS EQUIPMENT & SERVICES	INTEGRATED TELECOMMS SERVICES	GAS UTILITIES	MEDIA

NETHERLANDS

THE on-loan value for the Netherlands securities lending market has been fairly consistent thus far in 2016. Balances have grown steadily from $26.9 billion in January to reach a peak of $40 billion during the busy spring season, averaging $34.4 billion for the year so far. Dutch lendable balances have also grown during the same timeframe from $192 billion to $217 billion, averaging $267 billion for the year. Both figures take into account the busy European spring season.

The Dutch securities lending market is fairly typical for the European region: a mostly GC market that heats up during the spring, then cools back down in the summer. Roughly 40% of the Dutch market was at 20 bps or below on average, while nearly all of the remaining balance was trading between 20 and 50 bps. Only a handful of names trade above 500 bps on a regular basis. Having said that, the Netherlands has still grossed close to $90 million in lending revenues year to date in 2016. It is the eighth highest revenue grossing market in Europe in 2016, just after Norway and Italy.

The Dutch market is dominated by fixed income, which constitutes 69% of the total on-loan balance. This is fairly reflective of the greater European market, which shows a 60%/40% average on-loan split between fixed income and equities. The Netherlands' fixed income on-loan balance is mostly sovereign debt (76%) and corporate debt (22%). Common shares dominate the equities on loan (88%), while depository receipts are the next largest class of equities at 12%.

Although healthcare is the hottest sector in the Dutch securities lending market, yielding 281 bps on average this year, this average is across only a handful of names with around $39 million on loan thus far in 2016—so it is not quite the revenue driver it may seem. Financials is the second hottest sector in the Netherlands at 254 bps, but it is considerably larger than the healthcare sector, with on-loan balances averaging around $1.8 billion for the year.

Insurance company NN Group N.V. was the largest revenue earner for the Netherlands, yielding $12.1 million in gross revenues for securities lenders thus far in 2016. Royal Dutch Shell, a name from last year's top earners for the Netherlands, comes in as the second largest earner at $9.3 million.

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Blooming heather in Posbank, The Netherlands

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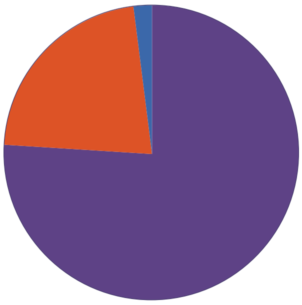
LENDABLE	ON LOAN	YTD REVENUE
$267.15 BILLION	$34.44 BILLION	$89.92 MILLION

MOST PROFITABLE SECURITIES

SECURITY	REVENUE	SECURITY	REVENUE
1. NN GROUP NV	$12,122,125	6. ROYAL DUTCH SHELL CL A	$3,404,481
2. ROYAL DUTCH SHELL CL A	$9,345,897	7. AEGON	$2,388,463
3. ARCELORMITTAL	$9,058,656	8. KONINKLIJKE DSM	$2,232,496
4. KONINKLIJKE PHILIPS	$5,338,724	9. AKZO NOBEL	$2,076,569
5. UNIBAIL RODAMCO REIT	$3,960,864	10. NETHERLANDS 3.25 07/15/21	$1,680,341

AVERAGE ON LOAN BY ASSET CLASS

FIXED INCOME



SOVEREIGN DEBT 76%

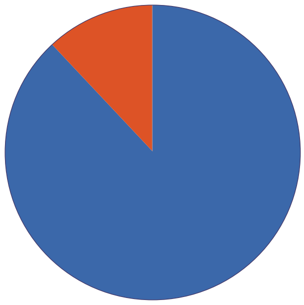
CORPORATE 22%

AGENCY 2%

OTHER 0%

TOTAL ON LOAN: $23.80 BILLION

EQUITIES



COMMON SHARES 88%

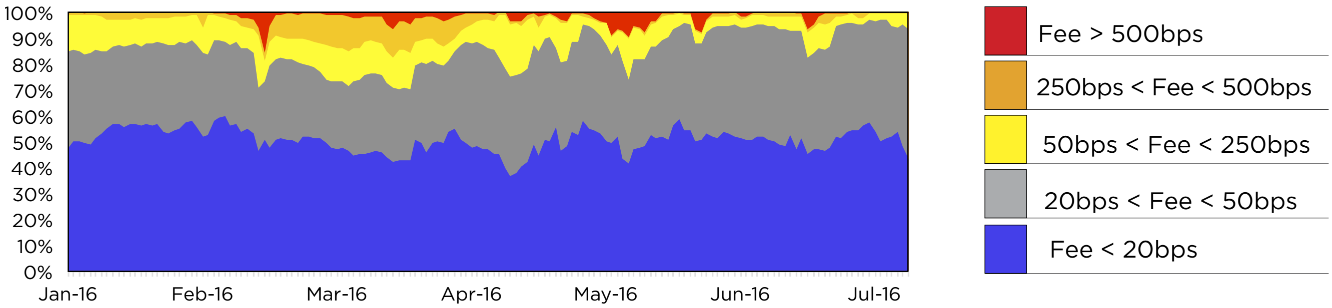
DEPOSITORY RECEIPTS 12%

ETF/ETN 0%

OTHER 0%

TOTAL ON LOAN: $10.64 BILLION

EQUITY HEAT MAP (AVERAGE FEE)



TOP 5 HOTTEST SECTORS BY FEE

	1	2	3	4	5
Sector	HEALTH CARE	FINANCIALS	INDUSTRIALS	MATERIALS	ENERGY
Fee	281bps	254bps	199bps	179bps	86bps
HOTTEST INDUSTRY	BIOTECHNOLOGY	INSURANCE	CAPITAL GOODS	CHEMICALS	INTEGRATED OIL & GAS

SWEDEN

SWEDEN appears to be the hot new market in European securities lending this year. This year, Sweden is poised to be the number two revenue-generating country in Europe, outpacing larger Germany and U.K. and coming in just behind France.

Sweden is viewed by many as one of Europe's fastest growing economies, and the Swedish securities lending market is certainly the largest of the Nordic region with an average on loan balance of $16.6 billion and a lendable balance averaging about $136 billion in 2016 through July 31, giving the country an average utilization of a little over 12%. Like many other countries in Europe, Sweden enters a busy season in the spring where the on-loan balance temporarily inflates. This year, that balance peaked at $25.6 billion in April before shrinking back down to $13 billion by the end of July. This on-loan balance is driven almost entirely by equities (86% of the total on loan). The remaining $2.3 billion in fixed income on loan is mostly corporates (74%) and sovereign debt (22%). This is different from the on-loan balance of some of the larger European markets, which tend to have more fixed income than equities on loan.

Fees to borrow Swedish assets have been rising steadily thus far in 2016, from 146 bps in early January up to 179 bps in late July, a 23% increase year to date, making Sweden one of the hotter countries in Europe this year. These high fees combined with a stable utilization yielded $285 million in securities lending revenues by the end of July. The information technology sector in Sweden has been a driver of these fee increases, commanding a volume-weighted average fee of a staggering 997 bps so far in 2016. One extremely hot stock in this sector is biometric company Fingerprint Cards, which generated revenues of almost $75 million by late July. The financials sector is another hot market within Sweden, generating fees of 608 bps so far in 2016. Lenders of Nordea Bank, the second most profitable security in this market, have grossed just over $31 million in revenues through July 31.

Although it seems unlikely that Sweden will overtake France as the largest revenue-generating country in the European securities lending market by the end of this year, Sweden remains a close second.

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Abisko National Park, Sweden

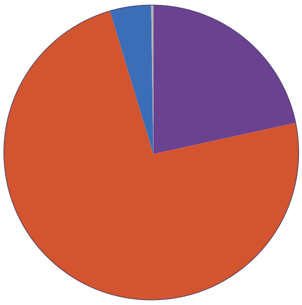
LENDABLE	ON LOAN	YTD REVENUE
$135.51 BILLION	$16.58 BILLION	$284.89 MILLION

MOST PROFITABLE SECURITIES

SECURITY	REVENUE	SECURITY	REVENUE
1. FINGERPRINT CARDS	$74,633,572	6. SVENSKA HANDELSBANKEN	$12,153,278
2. NORDEA BANK	$31,295,532	7. SE BANKEN	$11,288,885
3. ERICSSON	$16,395,562	8. VOLVO	$7,374,365
4. HENNES & MAURITZ	$14,657,368	9. SVENSKA CELLULOSA	$7,139,364
5. SWEDBANK	$12,724,153	10. SANDVIK	$5,983,424

AVERAGE ON LOAN BY ASSET CLASS

FIXED INCOME



SOVEREIGN DEBT 22%

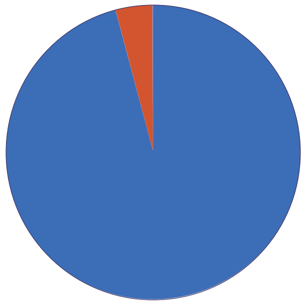
CORPORATE 74%

AGENCY 4%

OTHER 0%

TOTAL ON LOAN: $2.29 BILLION

EQUITIES



COMMON SHARES 96%

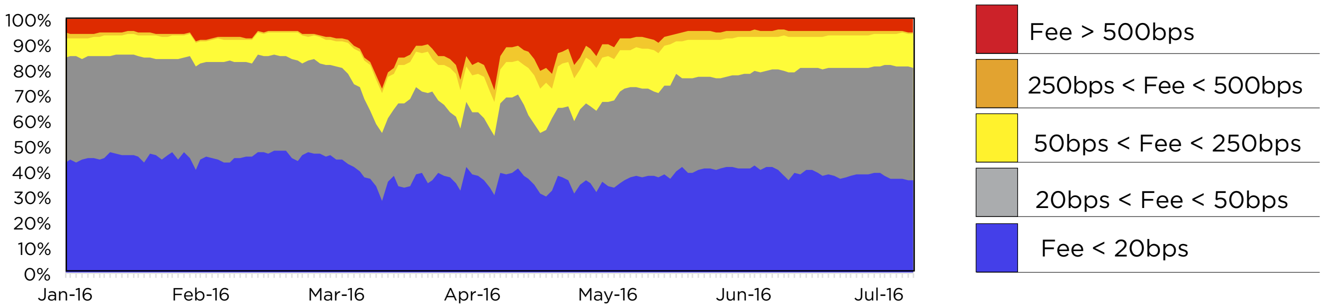
DEPOSITORY RECIEPTS 4%

ETF/ETN 0%

OTHER 0%

TOTAL ON LOAN: $14.29 BILLION

EQUITY HEAT MAP (AVERAGE FEE)



TOP 5 HOTTEST SECTORS BY FEE

1	2	3	4	5
IT	FINANCIALS	UTILITIES	MATERIALS	TELECOMMS
997bps	608bps	437bps	266bps	249bps
HOTTEST INDUSTRY	HOTTEST INDUSTRY	HOTTEST INDUSTRY	HOTTEST INDUSTRY	HOTTEST INDUSTRY
TECHNOLOGY HARDWARE & EQUIPMENT	BANKS	INDEPENDENT POWER & RENEWABLE ELECTRICITY	METALS & MINING	INTEGRATED TELECOMMS SERVICES

IN EVOLVING REGULATORY ENVIRONMENT, A NEW DAILY GRIND

Antelope Canyon, Colorado, United States

The onset of new securities lending regulation in the U.S. has been felt on many fronts, impacting the cost of lenders' default protections; beneficial owners' collateral acceptability and eligible borrower base; and borrowers' choice of counterparty type and collateral preferences. How are participants dealing with these ongoing changes?

Dave Simons reports

OVERSIGHT gaps that were made plain in the aftermath of the 2008 financial crisis have led to numerous regulatory and capital rule changes, impacting portions of the securities lending industry in the process. With its latest round of proposed reporting and disclosure requirements announced late last year, the SEC has sought to further improve the process of securities lending data collection. These include Form N-Port, requiring registered funds to electronically furnish securities lending data to the SEC on a monthly basis, as well as Form N-CEN, a census-type investment report issued annually.

Such clarity, however, may come with a cost, contend critics, who argue that the new restrictions have weighed on certain beneficial owners, including mutual funds. For example, recent research by the Investment Company Institute (ICI) indicates that only 2.3% of registered funds currently have assets on loan, due in part to current regulations barring funds from using stock assets as borrower collateral. Accordingly, asset managers continue to seek changes to the SEC's Customer Protection Rule 15c3-3, with an eye toward lifting these equity restrictions.

Meanwhile, the imposition of new capital and liquidity requirements has made it more challenging for banks and dealers to intermediate. In the U.S., for instance, short-term liquidity coverage ratio (LCR) guidelines include the provision that banks' 30-day net cash outflows consist of high-quality liquid assets (HQLA). As a result, borrowers have increasingly turned to collateral optimization strategies as well as treasuries-for-term and other financing arrangements comprising quality assets. Such developments represent a potentially golden opportunity for beneficial owners with the right risk profile.

The inexorable march toward centrally cleared OTC derivatives products is also likely to have an impact, as regulatory regimes like Dodd-Frank and EMIR bring with them the need for higher-quality collateral. Additionally, the onset of new buy side-facing OTC margin requirements could help advance the cause of centrally cleared lending facilities, which, to date, have only made partial inroads stateside. As the capital realities of Dodd-Frank and Basel III continue to sink in, however, the lure of enhanced lending efficiency through CCPs will continue to gain traction, experts say.

Some Tweaks Needed

WHICH is not to say that some of the measures drafted over the years wouldn't benefit from the occasional revision. Many observers believe that regulators should focus on several key areas when considering such adjustments, including levels of liquidity, lending profitability relative to capital requirements, as well as the impact of collateral management on lending activity.

As collateral management and securities lending have been indelibly linked, changes within the derivatives markets—including increased OTC and clearing requirements resulting from new regulation—have affected both collateral needs as well as the manner in which collateral is managed, which in turn has profoundly impacted lending as a whole, and repo in particular.

Nor has it helped that regulation conceived in the immediate aftermath of the financial crisis may not have anticipated the sustained low-leverage conditions that have come to define the markets in the years since. Accordingly, the pullback in demand has to a large extent masked the intended outcome of these new requirements—and it remains to be seen what that impact may be once market conditions ultimately normalize.

Nevertheless, regulation has helped the industry price resources deployed within the market with much greater accuracy, observes Greg Markouizos, global head of Fixed Income Finance at Citigroup. "In that sense, the effect has been both as intended and ultimately good for the markets as a whole," says Markouizos, "because if you're utilizing resources in a thoughtful manner and therefore making an appropriate return, you're more likely to stay put should the market hit a speed bump."

Contrary to popular opinion, history doesn't always repeat itself, Markouizos says, thus when assessing financial-market behavior, one must consider the various nuances that distinguish current cycles from seemingly similar yet ultimately disparate events of the past.

"We are in a very unusual environment, no doubt; however, I don't believe this combination of reduced economic growth and historically low inflation will prevail indefinitely," he says. Accordingly, the markets will eventually require a different approach to funding and leverage—which ultimately will have an impact on (and be impacted by) the configuration of the repo markets.

"I expect that in the not-too-distant future, there will be some exogenous factor that could push the markets in a different direction, which will allow us to see how the current set-up of the market responds," Markouizos says. "While some say a substantial blow-up isn't out of the question, I believe the markets eventually reach an equilibrium on price levels, which in turn helps reveal how much supply and demand actually exists."

The real challenge for policymakers and market participants alike will be knowing when the appropriate supply-demand balance has been achieved. "If, for example, there isn't enough hedging taking place because it is deemed too expensive, the markets may become more vulnerable to residual risk, leading to potential stress points within the real economy," says Markouizos. "That's the kind of problem that could take some time to surface—the markets could stumble along without hedging taking place and thinking everything was just fine, and suddenly there's a blow up, which in reality had been building up for some time, and ultimately becomes a much bigger problem than it would have been had it been detected early on. These are the kinds of subtleties that the markets must be vigilant about. However, based on the conversations we've been having, it seems that the regulatory community already understands the situation and the risks involved, and therefore I don't believe these issues are going unnoticed. So that fills me with hope as we move forward."

Despite the challenging environment, Kristin Missil, head of financial analysis and reporting for Northern Trust Global Securities Lending, says that participating lenders still have been able to generate meaningful revenues from securities lending products. "The binding constraints and sensitivity of the various rules on both agent lenders and borrowers can vary by institution, so there is no single universal impact from these regulations," Missil says.

Accordingly, participating lenders need to remain actively engaged in their programs, setting parameters that accurately reflect their specific needs and risk tolerance. "Those lenders that can be the most flexible in their securities lending program parameters will be in the best position to capitalize on opportunities that come about as a result of borrowers and agent lenders making adjustments to their product offerings in order to meet the new regulatory requirements," Missil says.

> **We are in a very unusual environment, no doubt; however, I don't believe this combination of reduced economic growth and historically low inflation will prevail indefinitely.**
> ***— Greg Markouizos, Citigroup***

Indemnification Solutions

GENERALLY speaking, the onset of new regulations has helped boost the cost of providing borrower default indemnification to lenders, says Missil. "The impact may vary from one institution to the next depending on the types of constraints put on the lending agent as an organization or the securities lending business specifically. What we are seeing from clients is a willingness to discuss the cost of indemnification, as well as the relative importance of being indemnified in order to continue their participation in lending activities."

Discussions around indemnification inevitably include the outlook for centrally cleared lending, which, in the U.S. at least, is still in the early days: At present, Chicago's Options Clearing Corporation (OCC) represents the lone stateside CCP (and currently exclusively serves broker-dealers at that). To many, the ability for CCPs to get a leg up in the U.S. depends in large part on whether the SEC will ultimately see fit to amend Rule 15c3-3, which in its present form essentially prohibits broker-dealers from pledging equities as collateral when borrowing from their customers. While it may take several years for these changes to take place, agents should act now and begin sharpening their collateral skills in order to ensure viability in an increasingly non-cash world.

Particularly as it relates to bank-owned broker-dealers' capital requirements, Scot Warren, executive vice president for Business Development at OCC, sees regulation supporting increased migration to cleared solutions. As of July, OCC's securities lending CCP activity for new loans was up 24% from the same time last year with nearly 144,000 total transactions; additionally, year-to-date stock loan activity was up 41% from 2015. In August, the average daily loan value for securities lending transactions cleared by OCC was $149.69 billion.

"While OCC's clearing services are currently focused on supporting broker-dealers, we are working with our clearing members, agent lenders and regulators to expand participation in our clearing solution," says Warren.

The drive toward central clearing in the securities finance market is evident in the vendor market as well. In July, industry-owned technology provider EquiLend acquired AQS, in part due to its existing connectivity offering to the OCC. Now called EquiLend Clearing Services, the service will offer to clients straight-through processing of matched securities finance loans for central counterparty clearing through the OCC.

For his part, Warren sees sustained interest among clearing firms and agent lenders to modify CCP solutions in order to facilitate direct and expanded participation. "The OCC's working group, which is comprised of clearing firms and agents, has been actively seeking plausible strategies for allowing beneficial owners to participate in a cleared solution," says Warren, "and continues to address the legal and regulatory requirements, operational processes as well as technologies needed to make such a solution possible. Additionally, we continue to focus on addressing the business and risk management demands of these participants."

As a AA-rated Systematically Important Financial Market Utility (SIFMU), OCC guarantees the principal of loans through the provision of its clearing services, Warren says. "We believe that agents understand the real advantages of providing indemnification against OCC's performance versus other counterparties. The cost of indemnification provides further motivation for market participants to explore centrally cleared solutions."

Rule 165-e, which limits each counterparty's total exposure to 15%, has forced both borrowers and lenders to become more diversified in their approach to lending. Additionally, under Dodd-Frank's Collins Amendment, leverage and risk-based standards have been imposed on the depository institutions of domestic bank holding companies, including the U.S.-based intermediate holding arms of foreign banking institutions, among others.

Thus, a key sticking point continues to be the need for broker-dealers to obtain longer-term loans comprising quality assets in order to help mitigate the effects of LCR as well as the Net Stable Funding Ratio (NSFR) at a time when many would-be lenders of HQLA have instead opted to keep such assets close to the vest (on an overnight basis, in some instances).

"It can be challenging to explain to owners that they now have to engage in some form of term lending in order to achieve the utilization levels of the past," says Lance Wargo, managing director and head of Securities Lending, North America, at BNP Paribas. "However, many remain reticent, particularly those who were impacted following the crisis."

Offering indemnification can go a long way toward keeping lenders in the game for longer periods, however. "This is particularly relevant when working with owners with large stockpiles of HQLA," says Wargo. "The ability to structure longer-term loans helps satisfy dealers while securing favorable terms for the owner in the process. And that's been working quite well for us of late—at present we have nearly 95% of our lendable treasuries assets out on loan."

Still Needing Lending

WHILE some beneficial owners continue to take a wait-and-see approach to lending and other ancillary strategies, those needing to address funding shortfalls continue to face a market with few alpha-oriented alternatives. What appeared to be a pivot point for interest rates following the Fed's long-awaited quarter-point tightening at the start of the year quickly returned to business as usual, as macro upsets such as the perplexing Brexit vote helped put further monetary moves on hold. Thus, with interest rates continuing to scrape bottom, pension plans and other lenders remain amenable to carefully crafted lending programs. Giving beneficial owners greater access to information such as counterparty creditworthiness, on-loan securities valuations as well as other integral data will help keep participants on the field, while encouraging those on the sidelines to suit up as well.

Despite criticisms that regulators have been heavy handed with respect to the lending practice, Citigroup's Markouizos argues that much of the intervention has in fact been justified. "Particularly pre-crisis there were a number of strategies that lacked proper risk management, both from a liquidity as well as credit-risk point of view," says Markouizos. "Accordingly, I didn't think that regulation was a bad thing, because at the very least it imposed a minimum set of standards that would have to be adhered to."

USA

THE U.S. stock market has rallied this year, and the dollar remained strong as traders were betting in late summer on a long-awaited rise in interest rates by Federal Reserve Chair Janet Yellen.

In that context, the U.S. securities lending market continued to be a predominantly GC market peppered with a few very hot specials, just as it has in past years. Approximately 70% of the total on loan in the U.S. securities lending market traded at 20 bps or below through July 31, similar to patterns seen in years past.

Thanks to an appreciating market, the on-loan value for the U.S. securities lending market has grown steadily in 2016, beginning the year at around $943 billion on loan to reach a peak of $1.11 trillion in mid June, averaging slightly over $1 trillion year to date.

The lendable value also has increased, from $7.58 trillion in early January to reach a peak of $8.58 trillion in July, averaging $7.71 trillion for that period. The average utilization for the U.S. market has been close to 13% so far this year.

Energy has once again proven to be the hottest sector for the U.S. securities lending market thus far in 2016, driven by still-low oil prices and a struggling coal and consumable fuels industry. Energy has cooled substantially from 2015, dropping from 161 bps last October to around 60 bps in late July to an overall average of 90 bps for the year through July 31. Coal and consumable fuels is the hottest industry within the energy sector with fees averaging 302 bps this year. Fees for this industry also dropped considerably over time, from 778 bps in November 2015 to 96 bps as of July 31.

The trade many U.S. equity securities lending desks are undoubtedly talking about this year involves the players in the proposed Tesla Motors/SolarCity merger. The announcement sent fees to borrow and utilization in both stocks soaring in June. That catapulted these already hot stocks to become the top-two revenue-generating stocks in the U.S. as well as in the overall securities lending market by the end of July; lenders earned $190 million in gross revenues for Tesla and $94 million for SolarCity.

Another top earner that made our list last year is Chesapeake Energy, although fees to borrow this name have dropped significantly in recent months as the price per share seems to have bottomed out and rebounded off of the lows seen in February.

Grand Canyon, Arizona, United States

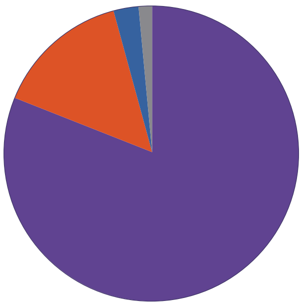
LENDABLE	ON LOAN	YTD REVENUE
$7.71 TRILLION	$1.01 TRILLION	$2.52 BILLION

MOST PROFITABLE SECURITIES

SECURITY	REVENUE	SECURITY	REVENUE
1. TESLA MOTORS	$190,280,507	6. MANNKIND	$26,417,556
2. SOLARCITY	$94,018,904	7. INSYS THERAPEUTICS	$24,500,929
3. CAL MAINE FOODS	$80,350,068	8. WAYFAIR CL A	$21,215,430
4. CHESAPEAKE ENERGY	$31,843,199	9. WEIGHT WATCHERS	$21,099,908
5. CHARTER COMMUNICATIONS	$30,209,783	10. CREDIT ACCEPTANCE	$20,764,442

AVERAGE ON LOAN BY ASSET CLASS

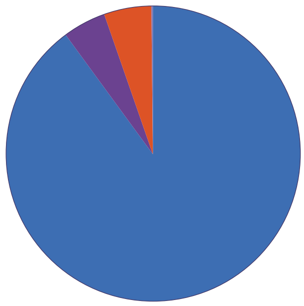
FIXED INCOME



- SOVEREIGN DEBT 81%
- CORPORATE 15%
- AGENCY 3%
- OTHER 1%

TOTAL ON LOAN: $459.59 BILLION

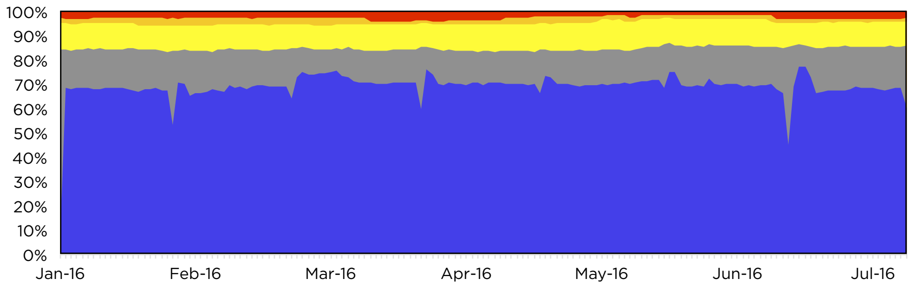
EQUITIES



- COMMON SHARES 90%
- DEPOSITORY RECEIPTS 6%
- ETF/ETN 4%
- OTHER 0%

TOTAL ON LOAN: $552.79 BILLION

EQUITY HEAT MAP (AVERAGE FEE)



- Fee > 500bps
- 250bps < Fee < 500bps
- 50bps < Fee < 250bps
- 20bps < Fee < 50bps
- Fee < 20bps

TOP 5 HOTTEST SECTORS BY FEE

	SECTOR	FEE	HOTTEST INDUSTRY
1	ENERGY	90bps	COAL AND CONSUMABLE FUELS
2	CONSUMER STAPLES	89bps	HOUSEHOLD AND PERSONAL PRODUCTS
3	HEALTH CARE	85bps	BIOTECHNOLOGY
4	CONSUMER DISCRETIONARY	84bps	AUTOMOBILES & COMPONENTS
5	TELECOMMS	74bps	ALTERNATIVE CARRIERS

CANADA

THE S&P/TSX Composite Index, the headline index for the Canadian equity market, has been steadily climbing since January. Like the U.S., the world's largest securities lending market, Canada is mostly a GC market, punctuated by a few specials. It is one of the largest securities lending markets in the world with an average on-loan balance of approximately $101 billion and an average lendable balance of over $744 billion as of July 31.

Canada's steady securities lending market reflects the stability of its overall economy. Around 72% of Canada's equities on loan trade at 20 bps or below, followed by about 10% trading between 20 and 50 bps as of the end of July 31. The remainder mostly trades between 50 and 250 bps, with a small proportion trading higher than 250 bps.

The on-loan balance for Canadian equities has increased since the beginning of 2016, from $47.4 billion to reach a peak of $66 billion on July 1. Demand for fixed income remains solid with an average on-loan balance of approximately $46 billion.

The hottest sector in Canada so far this year is healthcare, with fees averaging 132 bps for 2016. The life sciences tools and services industry within healthcare is contributing to this, with high fees averaging around 879 bps.

The financials sector dominates the top revenue-earning securities for Canada so far in 2016. Banking firm Home Capital has brought in over $18 million in revenues by July 31, with a nearly 100% utilization for most of the year. Royal Bank of Canada is another top-earning financial services firm, bringing in more than $21 million so far in 2016.

Once again, the Canadian market appears to be steady-as-she-goes, just as it did in years past, with the proportion of hot trades thinning out again while GC trades still dominate.

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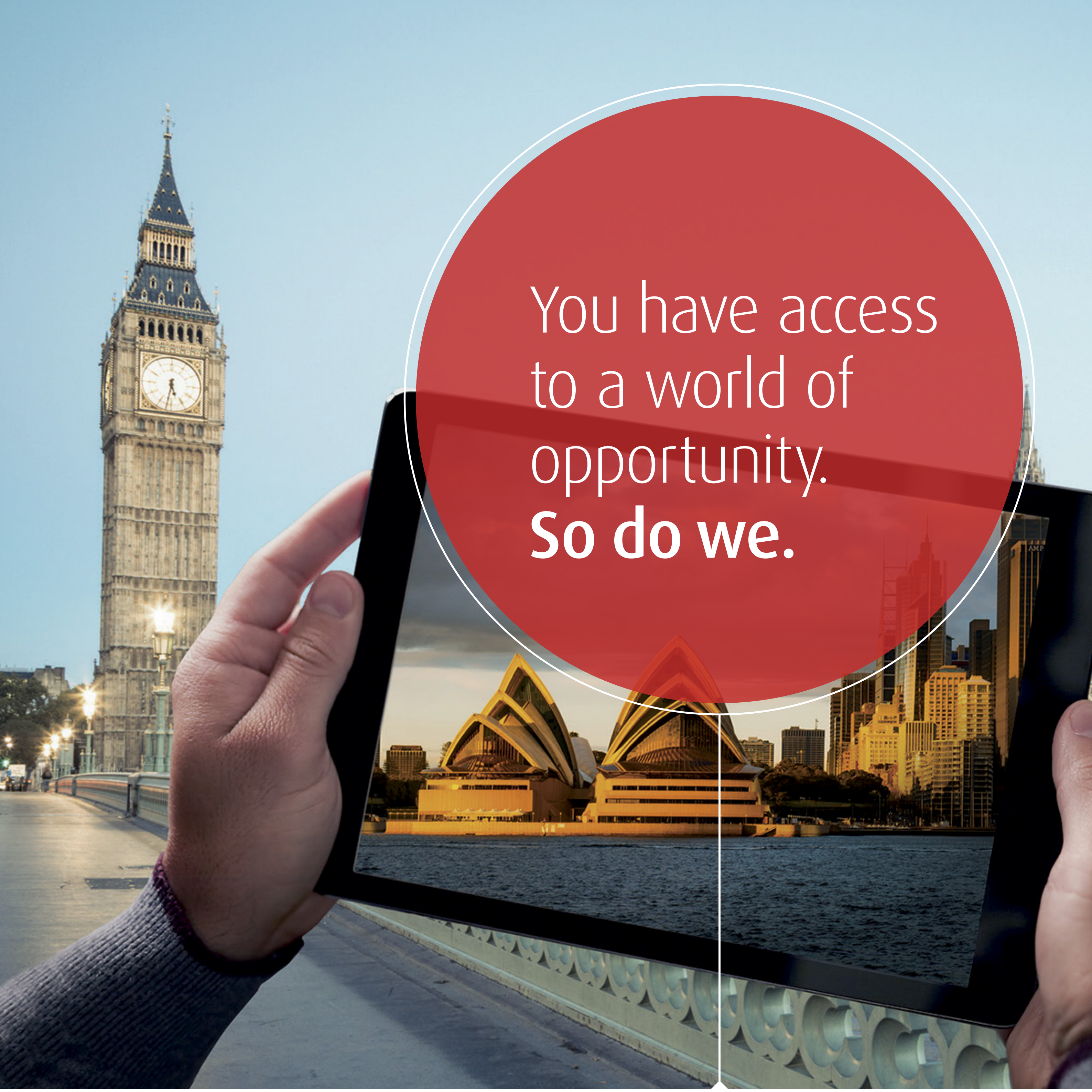
Banff National Park, Alberta, Canada



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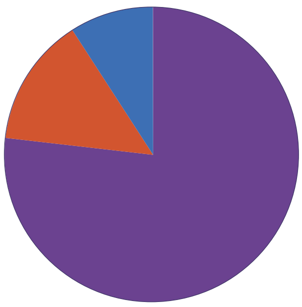
LENDABLE	ON LOAN	YTD REVENUE
$744.19 BILLION	$101.22 BILLION	$292.68 MILLION

MOST PROFITABLE SECURITIES

SECURITY	REVENUE	SECURITY	REVENUE
1. ROYAL BANK OF CANADA	$21,310,820	6. CIBC	$9,217,331
2. HOME CAPITAL	$18,710,249	7. GENWORTH MI CANADA	$9,116,068
3. TORONTO DOMINION	$14,815,926	8. POTASH CORP	$8,649,691
4. BANK NOVA SCOTIA	$14,065,155	9. BANK OF MONTREAL	$8,563,384
5. ENBRIDGE	$10,092,826	10. TRANSCANADA	$7,153,968

AVERAGE ON LOAN BY ASSET CLASS

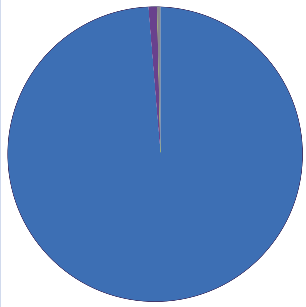
FIXED INCOME



- SOVEREIGN DEBT 77%
- CORPORATE 14%
- AGENCY 9%
- OTHER 0%

TOTAL ON LOAN: $45.55 BILLION

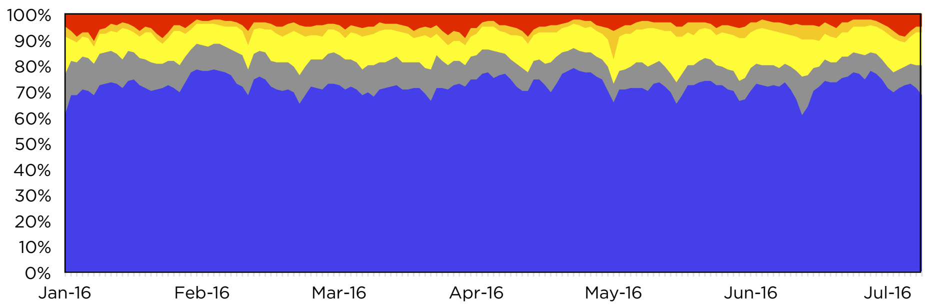
EQUITIES



- COMMON SHARES 99%
- DEPOSITORY RECEIPTS 0%
- ETF/ETN 1%
- OTHER 0%

TOTAL ON LOAN: $55.67 BILLION

EQUITY HEAT MAP (AVERAGE FEE)



- Fee > 500bps
- 250bps < Fee < 500bps
- 50bps < Fee < 250bps
- 20bps < Fee < 50bps
- Fee < 20bps

TOP 5 HOTTEST SECTORS BY FEE

	1	2	3	4	5
Sector	HEALTH CARE	FINANCIALS	MATERIALS	ENERGY	CONSUMER DISCRETIONARY
Fee	132bps	127bps	88bps	67bps	53bps
HOTTEST INDUSTRY	LIFE SCIENCES TOOLS & SERVICES	BANKS	CONSTRUCTION MATERIALS	COAL & CONSUMABLE FUELS	CONSUMER SERVICES

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ASIA

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ASIA is the hottest region in the securities lending world by a large margin. However, Asia has its own set of challenges, usually as a result of regulatory constraints. Countries across the region have varying tax treatments and settlement requirements. Domestic lenders oftentimes require higher-than-normal margins due to regulations. Fines for settlement fails or perceived internal control lapses can be extremely punitive.

Despite these challenges, the region has seen astronomical growth over the past few years, and the trend appears to be continuing. The region's on-loan balance has increased in 2016, up from around $150 billion in early January to reach a peak of $197 billion in late March, with an average year to date of $172 billion.

Lendables also have increased from $1.38 trillion to reach a peak of $1.53 trillion during the same timeframe, although some of these rising balances can be attributed to market appreciation. The lendable average for the period was $1.45 trillion.

Almost 78% of the average total on-loan balance for Asia is composed of equities; 98% of those equities are common shares. Within the relatively small fixed income market, 76% is sovereign debt (mostly Australian and Japanese), 17% are corporates and the balance comprises agencies and supranational issues.

South Korea has been receiving a lot of attention in recent years after the country lifted a five-year ban on short selling in November 2013. The on-loan balances for the Korean market have increased by 17% so far in 2016, from $8.7 billion in early January to $10.2 billion at the end of July.

Already hot fees to borrow Korean assets rose during the same timeframe, increasing almost 34% from 328 bps to 439 bps. That means Korea is likely the hottest market in Asia and therefore the world. The market has grossed almost $227 million in securities lending revenue so far this year, just below Japan's $254 million, a market eight times its size. So far this year, Korea appears poised to match or eclipse last year's revenues of $267 million.

Taiwan is another market that has been heating up in 2016. We've seen fees to borrow in this market rise from 179 bps in early January to 264 bps in late July. Interestingly, however, utilization appears to be on a bit of a decline during the same timeframe, from 19% down to 14%. The rising fees seem to have offset the drop in utilization, and gross revenues year to date are approximately $109 million.

Conversely, we've seen Hong Kong cooling considerably from years past. Fees to borrow Hong Kong securities have decreased from 190 bps in early January to 120 bps as of July 31. The on-loan balance has remained fairly steady, having begun the year at $26 billion and averaging $24.6 billion in late July.

As Hong Kong is often seen as a proxy for China, the decrease in fees might be an indication that the market is not quite as worried about an economic slowdown in that region as in previous years. Or perhaps it is a sign that the Hong Kong economy is stabilizing and maturing.

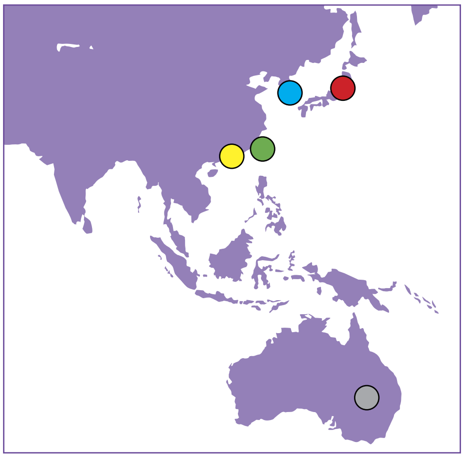
LENDABLE
$1.45 TRILLION

ON LOAN
$171.55 BILLION

REVENUE
$953.47 MILLION

TOP 5 ASIAN COUNTRIES BY GROSS REVENUE

Country	Gross revenue
JAPAN	$253,842,151
SOUTH KOREA	$226,643,375
HONG KONG	$223,389,668
TAIWAN	$109,404,610
AUSTRALIA	$78,866,284

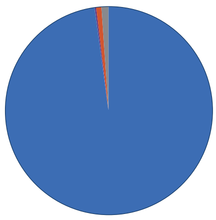


EQUITIES

TOP MARKETS BY REVENUE

COUNTRY	JAPAN	KOREA	HONG KONG	TAIWAN	AUSTRALIA
TOTAL REVENUE	$227m	$226m	$216m	$109m	$63m
ON LOAN	$61bn	$10bn	$25bn	$8bn	$21bn
LENDABLE	$568bn	$90bn	$252bn	$43bn	$207bn

ON LOAN - ALL ASIA



TOTAL: $133.51 BILLION

- COMMON SHARES 98%
- DEPOSITORY RECEIPTS 1%
- ETF/ETN 0%
- OTHER 1%

TOP 5 HOTTEST SECTORS BY FEE

	Sector	Fee	HOTTEST INDUSTRY
1	HEALTH CARE	319bps	BIOTECHNOLOGY
2	IT	133bps	SEMICONDUCTORS & EQUIPMENT
3	ENERGY	133bps	COAL & CONSUMABLE FUELS
4	MATERIALS	123bps	PAPER & FOREST PRODUCTS
5	CONSUMER STAPLES	111bps	FOOD, BEVERAGE & TOBACCO

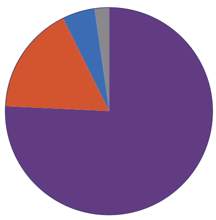
FIXED INCOME

TOP MARKETS BY REVENUE

COUNTRY	JAPAN	AUSTRALIA	HONG KONG	CHINA	INDONESIA
TOTAL REVENUE	$27m	$16m	$7m	$4m	$2m
ON LOAN	$20bn	$13bn	$964m	$683m	$841m
LENDABLE	$52bn	$52bn	$2bn	$4bn	$9bn

Fixed income classified by issuer country of risk.

ON LOAN - ALL ASIA



TOTAL: $38.05 BILLION

- SOVEREIGN DEBT 76%
- CORPORATE DEBT 17%
- AGENCY DEBT 5%
- OTHER 2%

JAPAN

THE size of the Japanese economy has been climbing in recent years since Prime Minister Shinzo Abe's Abenomics fiscal plan was put into place, although "the pace of improvement remains subdued," according to a Financial Times analysis.

The yield on some Japanese government bonds fell below zero in recent months, following the downward slide of many global government bonds. In the securities lending market, average fees to borrow the Japanese fixed income securities that are on loan—which consist almost exclusively of sovereign debt—have been on a similar decline in recent months, as have their on-loan balance following a temporary spike from January through March.

The Japanese equities market is fairly warm with around 50% of the total on-loan balance for the country trading between 20 and 50 bps. However, when viewed against other regional markets such as South Korea, Hong Kong or Taiwan, this well-developed market appears quite GC by comparison and is often overshadowed by these hotter markets. That said, Japan is still a big revenue driver for the region based on its size, grossing $254 million thus far in 2016.

Generally speaking, fees have been on an upward trend in Japan thus far in 2016, starting the year off at around 47 bps and climbing to 54 bps as of July 31. Utilization for Japanese securities averages a little over 13% year to date.

Healthcare is the hottest sector within Japan for 2016 with volume-weighted average fees coming in at 109 bps. This is fueled by the red-hot biotechnology industry, yielding fees to borrow of a very high 587 bps. Healthcare equipment and supplies company Cyberdyne was one of the top revenue-generating securities for Japan in 2016, earning over $8 million in fees year to date.

Information technology was the second-hottest sector with volume-weighted average fees yielding 93 bps year to date, driven by the software and services industry, which averaged around 160 bps in fees.

One company in this sector that has been a big revenue generator for securities lenders in Japan for several years now is GungHo Online. GungHo, with fees to borrow still gradually climbing, has grossed more than $5.2 million in revenues thus far in 2016.

The #1 revenue generating security in Japan thus far in 2016 has been consumer electronics firm Sharp. The long-beleaguered company saw a jump in share price in February after it announced a proposed merger with Taiwanese firm Foxconn, but after a few weeks the status of the deal remained unclear. The uncertainty injected some volatility in the securities lending market, raising fees significantly at one point. While fees have dropped somewhat since then, the stock is still hot.

Mt. Fuji at Lake Kawaguchiko, Japan

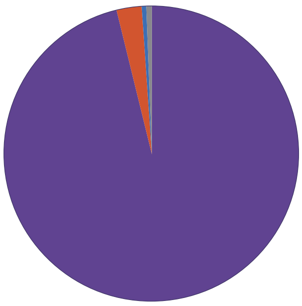
LENDABLE	ON LOAN	YTD REVENUE
$623.94 BILLION	$80.93 BILLION	$253.84 MILLION

MOST PROFITABLE SECURITIES

SECURITY	REVENUE	SECURITY	REVENUE
1. SHARP	$16,268,370	6. JGB 2.300 03/20/39	$3,635,184
2. CYBERDYNE	$8,181,036	7. SANRIO	$3,612,080
3. GUNGHO ONLINE	$5,201,852	8. PEPTIDREAM	$3,406,919
4. JAPAN AIRP TERM	$4,795,765	9. CASIO COMPUTER	$3,117,707
5. SOSEI GROUP	$4,740,353	10. JIG-SAW	$3,110,030

AVERAGE ON LOAN BY ASSET CLASS

FIXED INCOME



SOVEREIGN DEBT 96.65%

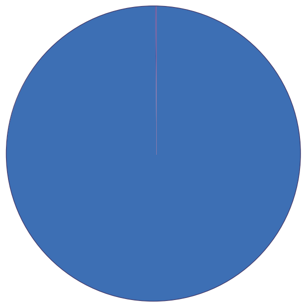
CORPORATE 2.75%

AGENCY 0.50%

OTHER 0.11%

TOTAL ON LOAN: $19.62 BILLION

EQUITIES



COMMON SHARES 99.88%

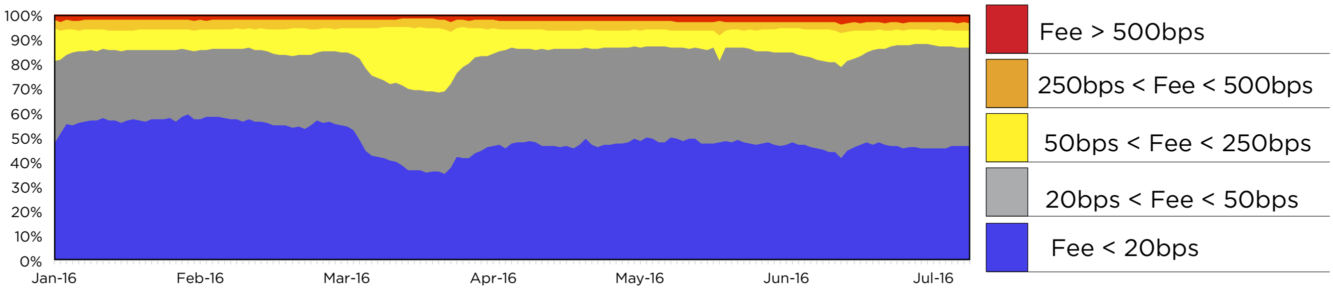
DEPOSITORY RECEIPTS 0%

ETF/ETN 0.12%

OTHER 0%

TOTAL ON LOAN: $61.31 BILLION

EQUITY HEAT MAP (AVERAGE FEE)



TOP 5 HOTTEST SECTORS BY FEE

	1	2	3	4	5
Sector	HEALTH CARE	IT	CONSUMER DISCRETIONARY	ENERGY	FINANCIALS
Fee	109bps	93bps	76bps	61bps	56bps
HOTTEST INDUSTRY	BIOTECHNOLOGY	SOFTWARE & SERVICES	CONSUMER DURABLES & APPAREL	OIL & GAS DRILLING	INSURANCE

TAIWAN

TAIWAN has focused heavily on its burgeoning securities lending market. On multiple occasions over the last several years, securities lending rules have been relaxed or clarified to encourage participation in and transparency of the securities lending market.

The Taiwan Stock Exchange even hit the road this year to encourage cross-border participation in the Taiwanese market from investors on a roadshow throughout Hong Kong, Singapore and Malaysia. Taiwan is committed to the securities lending industry.

Perhaps for good reason. Taiwan is presently one of the hottest markets in Asia with overall volume-weighted average fees eclipsing 200 bps thus far in 2016. The GC space in this market has dwindled significantly, with barely 7% of the total on-loan balance for this market trading at 20 bps or below. Nearly 25% of Taiwan's assets trade in the 250 to 500 bps range, and around 13% trade hotter than 500 bps. The average utilization for Taiwan is just under 19%.

Fees to borrow have increased in Taiwan across virtually every sector in the market, with overall fees in the region growing from 179 bps on January 1 to 269 bps as of July 31. This has caused the Taiwan market to gross some $109 million in securities lending revenue, an impressive figure considering the average on-loan balance for the market is only $8.5 billion.

Lendable assets for Taiwan have also increased during this timeframe from approximately $43 billion in January to peak at $51 billion by late July, averaging $45 billion for the period.

The hottest sector thus far for Taiwan in 2016 has been in the healthcare sector, where fees averaged a very high 658 bps year to date. This was driven by the biotechnology industry, which saw a year-to-date average of about 804 bps in fees to borrow thanks to names such as Taimed Bio and OBI Pharma, Inc., the latter of which is the top-grossing name in the Taiwanese securities lending market.

OBI Pharma grossed nearly $5.3 million in lending revenues from January 1 through July 31. The second top-grossing security is a familiar name that has made our top 10 revenue lists in past years, HTC Corporation, which grossed almost $4.9 million in revenues in the period. Technology hardware and equipment firm Acer Inc., another top revenue name from previous years, has grossed $3.8 million in securities lending fees.

With fees continuing to climb in this market, there are no signs Taiwan will cease to be one of the hottest markets in Asia any time soon.

Sun Moon Lake, Nantou, Taiwan

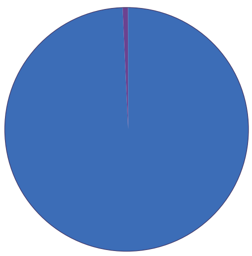
EQUITIES

LENDABLE	ON LOAN	YTD REVENUE
$45.02 BILLION	$8.47 BILLION	$109.40 MILLION

MOST PROFITABLE SECURITIES

SECURITY	REVENUE	SECURITY	REVENUE
1. OBI PHARMA	$5,298,601	6. ECLAT TEXTILE	$3,072,244
2. HTC CORP	$4,868,874	7. CHAILEASE HOLDING	$2,471,621
3. ACER INC	$3,803,808	8. HERMES	$1,736,392
4. CHINA STEEL CORP	$3,486,443	9. EPISTAR CORP	$1,695,580
5. HIWIN	$3,239,175	10. INOTERA MEMO	$1,260,377

EQUITIES ON LOAN



COMMON SHARES 99%

DEPOSITORY RECEIPTS 0%

ETF/ETN 1%

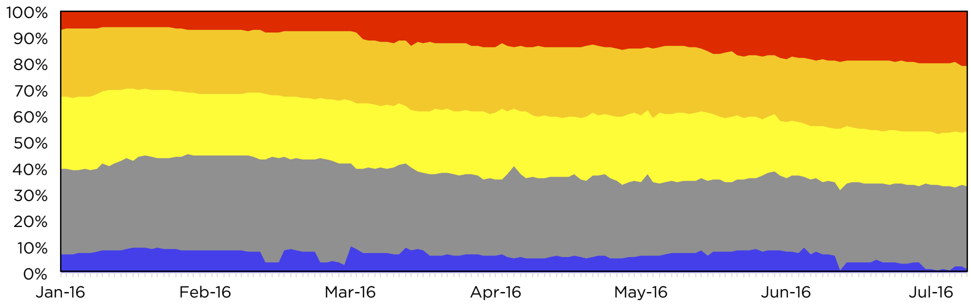
OTHER 0%

TOTAL ON LOAN

$8.47

BILLION

EQUITY HEAT MAP (AVERAGE FEE)



Fee > 500bps

250bps < Fee < 500bps

50bps < Fee < 250bps

20bps < Fee < 50bps

Fee < 20bps

TOP 5 HOTTEST SECTORS BY FEE

1	2	3	4	5
HEALTH CARE	INDUSTRIALS	UTILITIES	CONSUMER DISCRETIONARY	CONSUMER STAPLES
658bps	441bps	335bps	295bps	217bps
HOTTEST INDUSTRY	HOTTEST INDUSTRY	HOTTEST INDUSTRY	HOTTEST INDUSTRY	HOTTEST INDUSTRY
BIOTECHNOLOGY	CAPITAL GOODS	INDEPENDENT POWER & RENEWABLE ELECTRICITY	CONSUMER SERVICES	HOUSEHOLD AND PERSONAL PRODUCTS

AUSTRALIA

Kungkalahayi lookout, Purnululu National Park, Australia

THE Reserve Bank of Australia cut interest rates several times this year, to a low of 1.5% by the beginning of August. The central bank cited global economic conditions, low commodity prices, a decline in business investment and other factors for the cut, intended to stimulate more moderate inflation levels.

In the securities lending market, Australia appears to have cooled a bit during the second half of 2016. Fees to borrow Australian assets started off the year averaging around 43 bps to reach a peak of just below 51 bps by early spring; they have since dropped down to around 32 bps as of July 31. Utilization for Australia has averaged 11.9% year to date and has decreased further to nearly 10% recently.

Compared to the rest of Asia-Pacific, Australia is a well established, fairly GC market with around 30% of its total on-loan value trading at 20 bps or below and roughly 50% of the market trading in the warmer 20 to 50 bps range as of July 31.

The Australian securities lending market has a mix of both equities and fixed income on loan, although equities dominate. Common shares comprise around 57% of the total on loan while Australian sovereign debt is the next largest asset class at 22% of the total. The balance of the market mostly includes corporates, agencies and supranational debt.

Although fees and utilization have been dropping a bit in 2016, we've seen an increase in Australia's on-loan value from $28.3 billion in early January to peak at $37 billion in late April, averaging $33.7 billion year to date. Lendable balances also have risen from $242 billion to reach $295 billion in late July, averaging $282 billion for the period. Despite decreasing fees and utilization, the Australian market has still generated almost $79 million in revenues in 2016 through July 31.

Materials has been the hottest sector, yielding 85 bps in fees. The paper and forest products industry drove this sector higher with fees around 400 bps, mainly driven by high fees to borrow TFS Corporation stock.

Within the materials sector and the Australian market overall, Fortescue Metals Group has been the highest revenue-generating name, yielding more than $10 million in revenue this year through July 31.

Another Fortescue Metals Group issue, the 8.250 11/01/2019 corporate bond, has generated a little over $3.7 million this year. Consumer staples firm Blackmores is another top earner with revenues of $4.4 million through July 31.

Interestingly, Australia is the only country profiled in this issue that has two corporate bonds in the top 10 revenue-generating securities. Recently, there has been a large influx in Australian corporates in both the on-loan and lendable supply figures recorded by DataLend. It could be a signal of increasing interest among securities lenders in the corporates asset class.

ALL FIGURES ARE AVERAGES FROM JANUARY 1 TO JULY 31, 2016

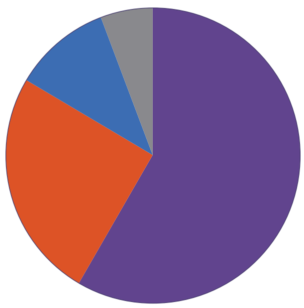
LENDABLE	ON LOAN	YTD REVENUE
$282.42 BILLION	$33.65 BILLION	$78.87 MILLION

MOST PROFITABLE SECURITIES

SECURITY	REVENUE	SECURITY	REVENUE
1. FORTESCUE METALS GROUP	$10,427,923	6. MONADELPHOUS GROUP	$1,773,777
2. BLACKMORES	$4,402,877	7. FMG RESOURCES 9.75% 01/03/22	$1,768,920
3. FMG RESOURCES 8.250 11/01/19	$3,720,578	8. VOCUS COMMUNICATIONS	$1,564,964
4. WOOLWORTHS	$2,456,322	9. COMMONWEALTH BANK OF AUST.	$1,541,746
5. FLIGHT CENTRE TRAVEL GROUP	$2,372,851	10. WESTPAC BANKING CORP	$1,404,230

AVERAGE ON LOAN BY ASSET CLASS

FIXED INCOME



SOVEREIGN DEBT 58%

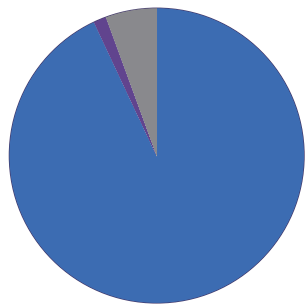
CORPORATE 25%

AGENCY 11%

OTHER 6%

TOTAL ON LOAN: $12.78 BILLION

EQUITIES



COMMON SHARES 93%

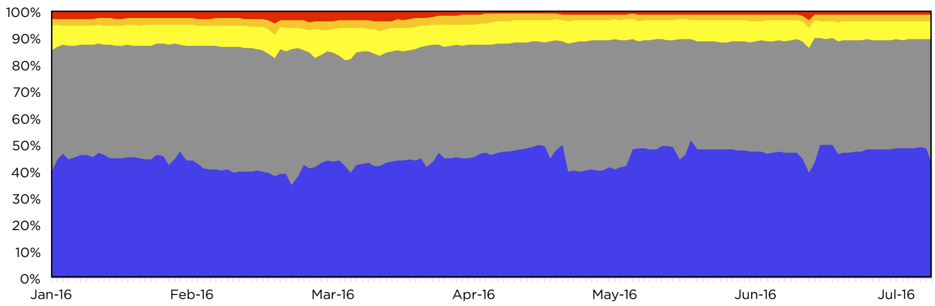
DEPOSITORY RECEIPTS 0%

ETF/ETN 1%

OTHER 6%

TOTAL ON LOAN: $20.87 BILLION

EQUITY HEAT MAP (AVERAGE FEE)



Fee > 500bps

250bps < Fee < 500bps

50bps < Fee < 250bps

20bps < Fee < 50bps

Fee < 20bps

TOP 5 HOTTEST SECTORS BY FEE

	1	2	3	4	5
Sector	MATERIALS	TELECOMMS	INDUSTRIALS	IT	CONSUMER DISCRETIONARY
Fee	85bps	80bps	75bps	66bps	66bps
HOTTEST INDUSTRY	PAPER & FOREST PRODUCTS	ALTERNATIVE CARRIERS	CAPITAL GOODS	SEMICONDUCTORS & EQUIPMENT	CONSUMER SERVICES

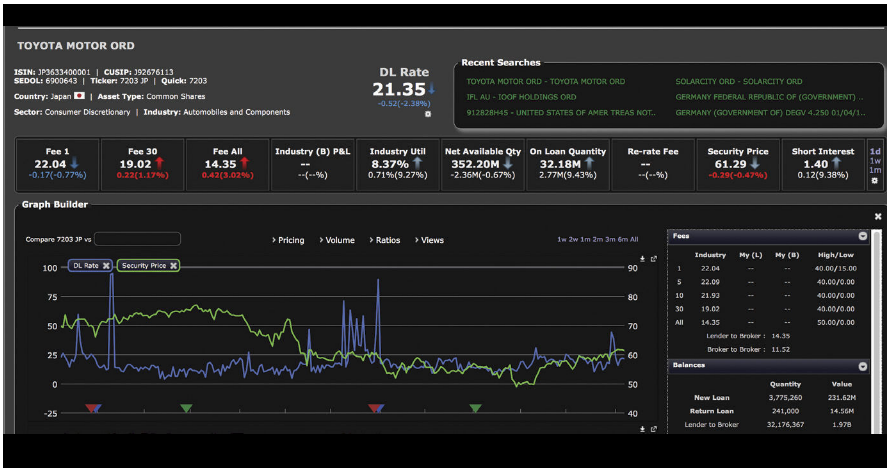
ABOUT **DATALEND**

DATALEND, the securities finance market data division of EquiLend, provides aggregated, anonymized, cleansed and standardized securities finance data covering all asset classes, regions and markets globally. DataLend operates on a "give-to-get" model, processing more than three million global transactions per day. DataLend's data set covers more than 43,400 securities on loan with a daily on-loan balance of $1.88 trillion and a lendable balance of approximately $14.93 trillion.

$14.93 trillion lendable	$1.88 trillion on loan	43,400+ securities on loan

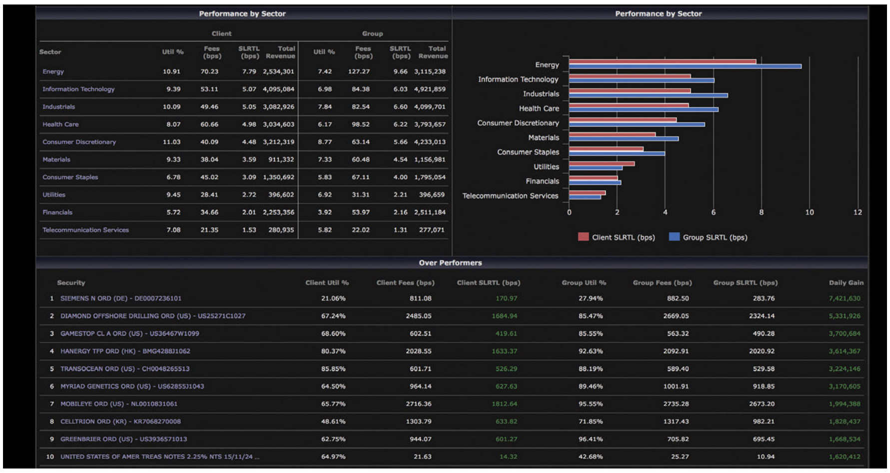
Trading

The Security Search screen is a highly customizable, intuitive view into securities lending activity taking place within a specific security. The tool contains current and historical data, including volume-weighted average fees, utilization, on-loan and inventory balances, short interest, re-rate information, transaction-level data, corporate actions and other information critical to securities lending trading performance.



Client Performance Reporting

We understand that transparency is more important than ever in beneficial owners' securities lending programs. The Client Performance Reporting suite allows agent lenders and beneficial owners to assess their securities lending performance relative to "like peers" over any timeframe. DataLend implements multiple matching criteria (such as fiscal location, legal structure, dividend rate and collateral type) in order to provide a true like-for-like peer group comparison.



Research

The Research screens provide users the ability to identify general market trends while also measuring their portfolio performance relative to the industry. The Macro Analyzer displays trends across asset classes, sectors and securities, while the Organization Variance and Counterparty Variance reports measure security-level performance relative to the industry as a whole. These reports highlight refinancing opportunities and can be customized and sent via an automated email to the user on a daily, weekly or monthly basis.

ACROSS THE COMPANY: WHAT'S NEW

EquiLend Clearing Services

IN JULY, EquiLend acquired Automated Equity Finance Markets, Inc., commonly known as AQS, along with its securities lending technology systems. The business is now known as EquiLend Clearing Services.

EquiLend Clearing Services facilitates connectivity to OCC's Market Loan Program, whereby matched securities finance loans are seamlessly processed for central counterparty clearing through OCC, the world's largest equity derivatives clearing organization.

"Momentum has been building in the past two years in support of CCPs in the securities finance marketplace," says Brian Lamb, CEO of EquiLend. "Balance sheet costs, risk weighting and tougher capital-adequacy requirements have highlighted to the industry the potential benefits of using central clearing services."

By rolling out EquiLend Clearing Services, the securities finance market will have unprecedented access to central clearing services.

EquiLend Clearing Services ultimately will be connected to EquiLend's NGT and Post-Trade Suite, enabling straight-through trade processing capabilities and electronic trade submission to OCC's stock loan clearing solutions.

For more information on EquiLend Clearing Services, please contact:

Dan Dougherty
Global Head of Relationship Management & COO, North America
DAN.DOUGHERTY@EQUILEND.COM

NGT

EQUILEND has continued the global rollout of Next Generation Trading (NGT). NGT increases trade-level transparency, improves workflow automation and generates greater efficiencies for the market.

NGT increases automation and executions beyond the general collateral (GC) universe of tradable securities; leverages targeted and allocated Availability concepts; and features a real-time order book, a needs and inventory broadcasting tool, security and file upload capabilities, and a summary-level trade blotter.

Firms around the globe have been benefitting from NGT, which now represents a significant proportion of trading activity on the EquiLend and BondLend trading platforms, since its introduction in 2015.

For more information on NGT, please contact:

Alvin Oh
Global Trading Product Owner
ALVIN.OH@EQUILEND.COM

Swaptimization

EQUILEND rolled out Swaptimization in spring this year to facilitate greater automation in the total return swaps market. Swaptimization utilizes a proprietary matching algorithm to pair natural positions across market participants to facilitate bilateral security-based Total Return Swaps (TRS) in an efficient, centralized and scalable manner.

As firms focus more on trading synthetically, EquiLend has sought to leverage existing infrastructure, contacts and expertise in securities finance to produce a technological solution for the global swaps market.

We continue to enhance the Swaptimization platform while working closely with our global user base to ensure it delivers the desired efficiencies in this market.

For more information on Swaptimization, please contact:

James Palmer
Swaps Product Owner
JAMES.PALMER@EQUILEND.COM

Post-Trade Suite

EQUILEND has invested significantly in our Post-Trade Suite this year. Early adopters have been using our newly released Unified Comparison screens and providing valuable feedback on enhancements that would benefit all users. Recent enhancements include:

- A "to-do" filter that helps clients quickly focus on high-risk items
- Functionality to support multiple search requests
- More easily readable Excel downloads
- Tracking of comments being read

Additionally, we have added in production a one-click view of 60 days of history per trade and improvements to outbound files to add additional detail.

We have also kicked off production on our new exposure management tools with our Summary Exposure Management screen. It is a real-time screen that calculates all actual and intra-day exposures and will connect to other exposure screens currently being built.

For more information on the Post-Trade Suite, please contact:

Iain Mackay
Product Owner for Post-Trade Services
IAIN.MACKAY@EQUILEND.COM


SHAPING THE
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OF TOMORROW.
FOR YOU.
TODAY.
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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.
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