IHS Markit®

Securities Finance 2020 review

H2 2020

Welcome to the IHS Markit Securities Finance 2020 market review. A happy New Year to all our clients and friends and we wish you all a healthy, prosperous, and successful year ahead.

As we begin the new year, it feels appropriate based on what has gone before, to look forward with optimism. Whilst global securities finance revenue experienced a 7% YoY decline to $9.3bn in 2020, revenues increased by 12% YoY in December, the most for any month since June and the fourth consecutive month of increasing returns, a most welcome end to 2020. Looking back over the last twelve years, 2020 doesn't stack up too badly when compared to the mean over this period, and the advent of new participants taking lendable to a new all-time high in December to $30 Trillion. Importantly the industry wide adoption and implementation of SFTR in Europe, where IHS Markit played a leading role, has broadly been successful and highlighted once again the collaborative approach the securities finance industry takes to addressing the most complex challenges.

December also saw our last new release of the year which included some ground-breaking new functionality including:

- **Corporate Actions Integration:** In collaboration with our market-leading Managed Corporate Actions business we can now provide notifications of more than 15 corporate actions types, alerting customers to record dates, effective dates and meeting dates of upcoming corporate actions.
- **Securities Transaction Execution Analytics Report (STEAR):** A daily analytical report that can complement a firm's approach to best execution for securities finance.
- **Stability Metrics in Performance Measurement:** Clients now have an additional option to align their program and peer group by stability/turnover of the fund ranging from most stable to most unstable funds.
- **Daily China Public Disclosure Data:** The platform now includes daily disclosure data on short positions from the Shanghai Stock Exchange and Shenzhen Stock Exchange.

If we have learned anything about the securities finance industry over the last decade it's the ability to adapt, innovate and embrace challenges and change. It is for this reason that we should be optimistic. As noted, new participants are entering the market all the time and have driven available inventory to record levels. ESG is now prevalent across all areas of the investment horizon, and this may be a catalyst for broader demand from lenders for individual (as opposed to omnibus) lending programs and collateral accounts. With increased inventory but broadly flat demand, differentiating inventory by additional factors such as credit quality, stability, collateral flexibility, ESG requirements, etc. are going to become increasingly important leverage points, which in turn, will place increasing burden on the need for efficient technological solutions. That being said, there will be continued focus, discussion and adaption of ESG drivers, including a higher degree of focus on Governance, oversight and management of securities lending programs. The new global performance measurement standards proposed by ISLA are a long overdue and positive step in the right direction that will really help in this regard.

I hope you share my optimism and I sincerely hope 2021 is positive for you, your businesses and families. Your continued support and feedback is most appreciated and encouraging to us.

Regards,

Paul R. Wilson

Managing director and global head of
Securities Finance, IHS Markit

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Securities Finance Year-End Snapshot

H2 2020: Securities lending revenue totals $4.57b

- H2 revenues decline 10% YoY
- Q4 IPO boom boosted US equity returns
- EMEA specials boost H2 revenue past H1 total
- Lack of specials subdues APAC revenues

Global securities finance returns totalled $4.57bn over the 2nd half of 2020 (H2), a 10% YoY decline. The utilization of lendable assets declined substantially from the March 2020 peak as market valuations recovered. Increasing demand for US and EMEA equity specials, US Treasuries and global ETFs drove revenue growth for those asset classes. The YoY revenue shortfall was caused by lower average fees, while loan balances grew YoY for most asset classes and regions. Returns varied substantially over the course of H2, with Q3 revenues declining 16% YoY, while Q4 revenues only declined by 3% YoY.

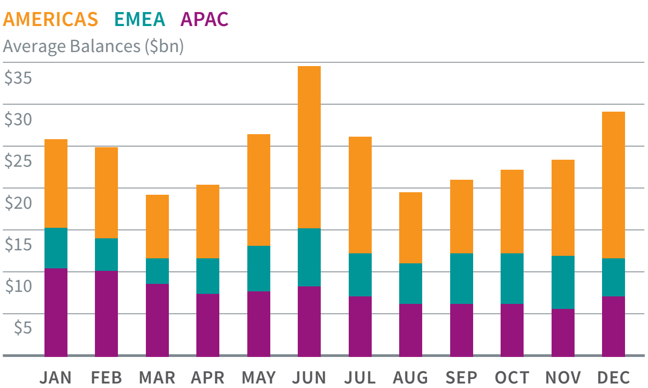
GLOBAL SECURITIES FINANCE H2 2020 REVENUES

Asset Class	SL Revenue ($B)	Rev YoY %Chg	Avg Balances ($B)	Bal YoY %Chg	Avg Fee	Fee YoY %Chg	Avg Utilization	Util YoY %Chg
All Securities	$4.57	-10%	$2,133	6%	0.42%	-15%	6.5%	-7%
All Equities	$3.65	-11%	$971	2%	0.74%	-13%	3.8%	-15%
Americas Equity	$1.90	-9%	$474	-5%	0.79%	-5%	3.0%	-25%
Asia Equity	$0.71	-27%	$203	1%	0.69%	-28%	5.1%	-10%
EMEA Equity	$0.70	16%	$191	11%	0.73%	4%	5.0%	9%
ADRs	$0.11	-53%	$33	37%	0.67%	-67%	7.1%	-11%
Exchange Traded Fund	$0.20	40%	$64	25%	0.62%	11%	10.7%	8%
Government Bond	$0.70	5%	$968	14%	0.14%	-8%	23.2%	9%
Corporate Bond	$0.20	-29%	$178	-7%	0.22%	-24%	3.6%	-19%

Note: Includes only fee revenue

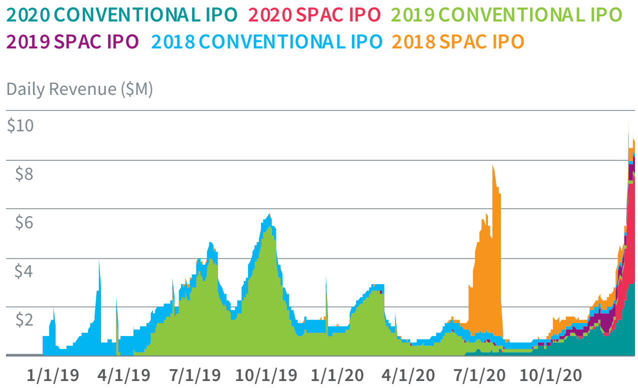
US equity revenues came in at $1.7bn for H2 2020, a 0.3% YoY decline. The YoY shortfall was driven by the slow-down in activity during late summer, with returns thereafter moving shortly higher through Q4. The core demand driver for the late-2020 upswing was around traditional and SPAC IPOs. The 2019 traditional IPO class generated $540m in 2019, with Beyond Meat contributing just over $300m; During 2020 the 2019 IPO class delivered $208m, with the most concentrated contributors being Peloton Interactive Inc and SmileDirectClub Inc, which combined to earn $113m of the total. The 2020 IPO class delivered $146m, with the majority coming in H2. Insurance firm Lemonade Inc was the most revenue generating 2020 traditional IPO, delivering $42m in 2020 return, 29% of the total.

2020 GLOBAL EQUITY SPECIAL BALANCES BY REGION



Notes: Average balances with fee > 500bps
Source: IHS Markit Securities Finance

DAILY US EQUITY FINANCE REVENUES FROM RECENT IPO CLASSES



Source: IHS Markit Securities Finance

FY 2020 EMEA equity finance revenues fell well short of 2019 returns, with FY 2020 revenues declining 16% YoY; however, the shortfall was entirely concentrated in H1 (-35% YoY), with H2 revenues of $704m reflecting a 16% YoY increase. The upswing was led by hard to borrow shares like Varta Ag, which saw borrow fees trend higher over the latter half of the year, and corporate action related borrow demand from tradable rights and convertible bond issuance. 2020 is the first year on record where EMEA H2 revenues exceeded H1. Average EMEA special balances, those with an average fee greater than 500bps, averaged $5.4bn in H2, a 14% increase compared with H1.

APAC equity finance H2 2020 revenues of $707m reflect a 27% YoY decline. Average special balances decreased 26% in H2 as compared with H1. The shortfall over the latter half of 2020 was driven both by the short sale ban in South Korea and a lack of high-fee lending opportunities in Japan. Despite a lack of specials, H2 APAC equity on-loan balances increased by 0.7% YoY. Lendable balance growth outpaced the marginal growth in loan balances, leading to a 10% YoY decline in H2 utilization.

Global ETF revenues were $199m for H2, a 40% YoY increase, almost exactly matching the H1 return, though return drivers evolved over the course of the year. Both equity and fixed income exchange traded products saw surging revenues during the Q1 sell-off. Equity revenues maintained a higher plateau relative to the start of 2020, after declining from the March peak, as did fixed income albeit by a much smaller margin.

Fee-based revenue for government bond lending came in at $696m for H2, a 5% YoY increase, resulting primarily from larger loan balances. For beneficial owners, returns from lending US Treasury securities in 2020 were substantially bolstered by reinvestment of cash collateral in H1, the impact of which faded in early H2. Looking purely at fee spread income, UST revenues declined by 15% for H2 compared with H1, while EUR sovereign issue revenues increased by 3% for H2 as compared with H1.

The supply of corporate bond lendable assets has substantially outpaced borrow demand growth, leading to relatively few issues with any friction between supply and demand. Corporate lending revenues of $200m in H2 reflect a 29% YoY decline and the lowest H2 return since 2010.

Conclusion:
The first half of 2020 was characterized by the COVID-related market decline in February and March, which resulted in increased lending returns for some asset classes. Returns for reinvestment portfolios resulted from the Fed rate cut, while increased equity utilization resulted from deleveraging on dealer balance sheets while the surge in Q2 special balances was a result of event driven strategies such as warrant and convertible arbitrage. The return drivers from H1 were still having an impact at the outset of H2, but quickly faded in July, with August reaching a near stand-still for lending activity. From there, capital markets activity in the US took off with conventional and SPAC IPO issuance. With interest rates rising, borrow demand for US Treasury securities increased as well. EMEA specials balances posted substantial YoY gains. APAC equity revenues, still subdued in part by the South Korea short sale ban, posted incremental specials balance growth in Q4. The year ended on a high note, with December generating the second most revenue for any month of 2020.

Looking ahead, the IPO market in the US is likely to generate a lineup of borrow demand events ahead lockup expiries throughout 2021, which will only be bolstered by the surge in SPAC deals. In Europe, the expected reinstatement of dividends in 2021 will likely boost lending returns. In addition, arbitrage trades driven by capital raising, such as rights issues and convertible bonds, may continue to drive EMEA specials balances. In APAC, the conclusion of short sale bans may be a tailwind for 2021, while some markets such as Hong Kong SAR are currently seeing increased borrow demand. At the end of tumultuous year there is cause for optimism heading into 2021!

FY 2020 Snapshot:
Global securities finance revenue $9.3bn for 2020, a 7% YoY decline. The primary growth drivers for equities were increased borrow demand during the Q1 market decline followed by borrow demand tied to capital raising during the recovery. Peak monthly revenue for 2020 was observed in June, when a trio of US equities delivered outstanding lending returns on the back of corporate action related arbitrage opportunities. Lendable assets reached a new all-time in December, nearly $30T, adding to the challenge of increasing utilization going forward, though a similar statement could have been made at lower levels entering 2020 before the surge in utilization during the Q1 decline.

GLOBAL SECURITIES FINANCE 2020 REVENUES

Asset Class	SL Revenue ($B)	Rev YoY %Chg	Avg Balances ($B)	Bal YoY %Chg	Avg Fee	Fee YoY %Chg	Avg Utilization	Util YoY %Chg
All Securities	$9.3	-7%	$2,112	4%	0.44%	-11%	6.9%	-4%
All Equities	$7.4	-8%	$956	-3%	0.77%	-6%	4.2%	-13%
Government Bond	$1.5	8%	$960	15%	0.15%	-6%	23.5%	10%
Corporate Bond	$0.4	-29%	$179	-7%	0.24%	-24%	3.8%	-19%

Note: Includes only fee revenue

APAC Equity

Lowest H2 revenue since 2015

Asian equity lending delivered $707m in H2 revenues, down 27% from H2 2019. The declining revenues made the second half of 2020 the least revenue generating since 2015. The lower revenue was primarily the result of narrower fee spreads, with balances increasing by 0.7% YoY. On-loan balances with fees greater than 500bps decreased 42% YoY to average $6.4bn in H2. Special balances decreased 26% in H2 as compared with H1, though did start to trend up toward the end of Q4. Asia equity lendable assets reached an all-time high of $2.5T at the end of 2020. Utilization of lendable assets reached the 2020 peak 8% in late March, subsequently decreasing to 4% by the end of the year.

Japanese H2 equity revenues totaled $305 million, a 26% decline compared with H2 2019. September had the highest average loan balance for H2, $164bn. The H2 low point for Japanese equity balances came in November $108bn, with December posting a small increase to end the year. The most revenue generating JP equity, Anges Inc, delivered $11.1m in H2, with borrow demand picking up as the share price declined 35% in July and remaining elevated thereafter.

Hong Kong equity lending delivered $165m in H2 revenue, a 15% YoY increase. The most revenue generating HK equity in H2 was Tianneng Power International Ltd., which delivered $19.6m in revenue, or 12% of the HK total. HK equity loan balances increased steadily during Q4, with December having the largest average loan balance for any month of 2020. Utilization of HK equities decreased over H2 because lendable balances grew by more than loan balances.

The short sale ban in South Korea limited lending revenue during H2. SK equity balances, fees and utilization declined sharply YoY and sequentially in the months following the imposition of the ban, however, loan balances were steady over the last four months of the year.

Overview

H2 Revenues
$707M ▼ 27%

Average Balances
$203B ▲ 1%

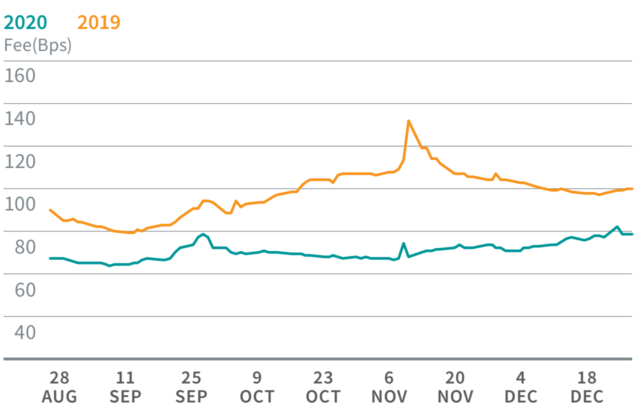
Weighted Average Fee
0.69% ▼ 28%

Average Lendable
$2.2T ▲ 17%

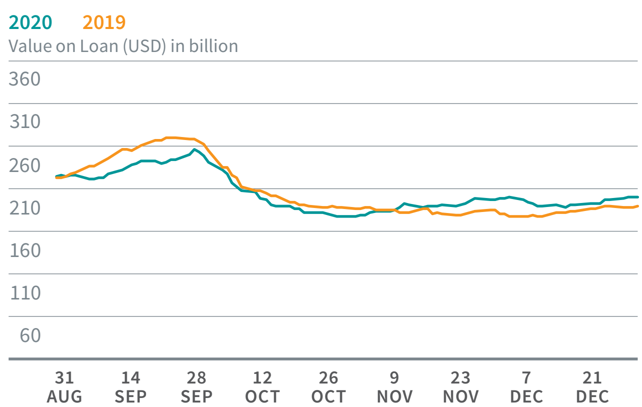
Utilization
5.14% ▼ 11%

As noted in the ETF section, funds which invest in Chinese equities represented five of the top 10 funds, while lending returns for ETFs which are listed in Asia continue to trend upward.

H2 FEE TREND



H2 BALANCE TREND



OVERVIEW

Hong Kong, Malaysia, Thailand & New Zealand see H2 YoY revenue growth

Loan balances increase YoY in top three markets by revenue

HK equities atop leader board

Six consecutive quarters with YoY decline in special balances

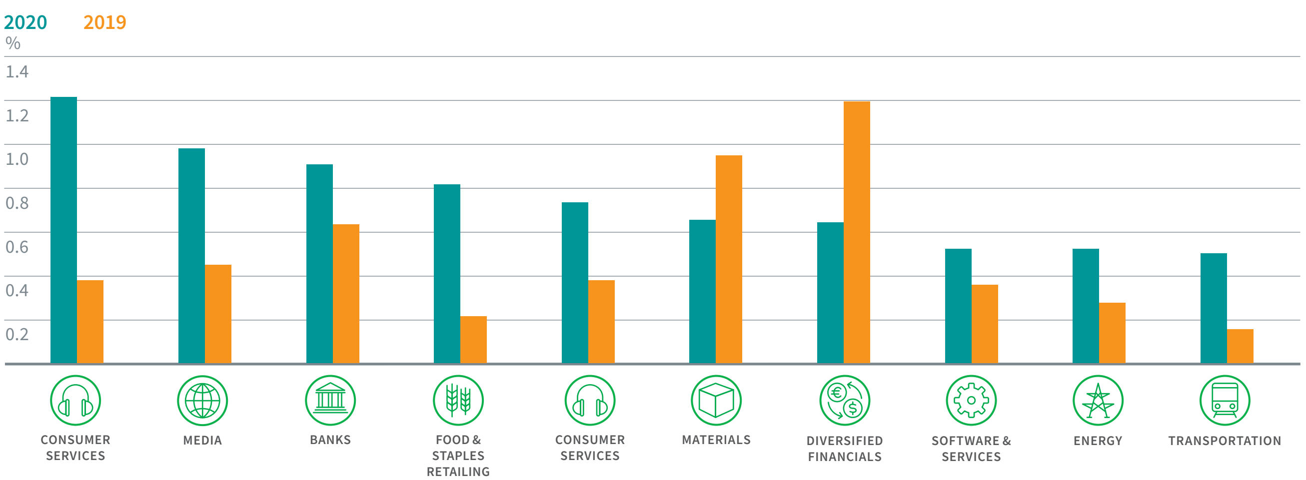
COUNTRY DETAILS

Country	H2 Revenue (USD M)	YoY Change	Average Value on Loan (USD Bn)	YoY Change	Weighted Fees	YoY Change	Average Lendable (USD Bn)	YoY Change	Average Utilization	YoY Change
Japan Equity	305.7	-26%	126.9	2%	0.5%	-28%	869.10	10%	6.15	-8%
Hong Kong Equity	164.5	15%	35.4	14%	0.9%	0%	454.47	8%	4.81	-12%
Taiwan Equity	91.4	-16%	12.1	37%	1.5%	-38%	58.75	2%	5.55	5%
South Korea Equity	67.2	-70%	8.2	-38%	1.6%	-51%	119.69	-3%	2.82	-46%
Australia Equity	50.2	-6%	16.5	-16%	0.6%	13%	298.67	-5%	4.23	-11%
Singapore Equity	14.2	-7%	2.1	0%	1.3%	-4%	45.47	-10%	3.34	2%
Malaysia Equity	6.5	14%	0.6	24%	2.0%	-15%	11.01	-25%	3.09	28%
Thailand Equity	5.7	13%	0.5	-27%	2.4%	50%	14.66	-14%	2.66	3%
New Zealand Equity	1.6	8%	0.7	-10%	0.5%	19%	9.39	14%	4.97	-18%

TOP 10 REVENUE GENERATING STOCKS

Instrument Name	Ticker	Sector	Country	Revenue Generated ($)
Tianneng Power International Ltd	819	Automobiles & Components	HK Equity	19.60
Anges Inc	4563	Pharmaceuticals, Biotechnology & Life Sciences	JP Equity	11.10
China Evergrande New Energy Vehicle Group Ltd	708	Health Care Equipment & Services	HK Equity	10.21
Globalwafers Co Ltd	6488	Semiconductors & Semiconductor Equipment	TW Equity	8.98
Hlb Inc	028300	Consumer Durables & Apparel	KR Equity	7.05
Hengten Networks Group Ltd	136	Retailing	HK Equity	6.73
Gome Retail Holdings Ltd	493	Retailing	HK Equity	6.24
Kmw Co Ltd	032500	Technology Hardware & Equipment	KR Equity	5.95
Koolearn Technology Holding Ltd	1797	Consumer Services	HK Equity	5.81
Ana Holdings Inc	9202	Transportation	JP Equity	5.18

AVERAGE % OF SHARES ON LOAN



EMEA Equities

Specials deliver in some markets

H2 European (EU) equity lending revenue of $704m reflects a 16% YoY increase. The average H2 return over the prior five years was $692m. The top-level statistics may be less helpful than the market level breakout, given the wide range of outcomes driven by concentrated returns in a small number of equities. The Netherlands & Germany saw H2 revenues more than double YoY, while France, Italy & Spain saw returns decline 28%, 19% and 18% YoY, respectively.

Varta Ag led H2 revenues in Europe with $84m, second only to Nikola Motors globally. Borrow demand for Varta picked up in the early part of 2020, with fees steadily rising throughout the year. Varta and Deutsche Lufthansa represented the entirety of the 100% YoY increase in German equity revenues. The H2 special driven return picked up from where Wirecard left off, having led H1 EMEA revenues with just over $51m.

UK equity lending returned $83m in H2, a 7% YoY increase. Tui Ag led UK revenues in H2, with fees steadily rising after the Q1 share price decline resulted in an increase in borrow demand and decrease in lendable shares. The second most revenue generating UK equity, Hammerson Plc, attracted borrow demand relating to the firm's rights issue in September and scrip dividend in November.

H2 French equity revenues of $111m reflected a 28% YoY decline. Total Sa and Casino Guichard Perrachon Sa continue to be the most revenue generating French equities, combining for $31m in H2 revenues, compared with $38m in H1. Air France KLM also contributed $8.5m, with fees increasing over the latter half of 2020 as lendable shares became scarce.

H1 revenues for Netherlands equities were led by Just Eat Takeaway.com Nv, which generated 32% of the return. Another singular contributor emerged in H2, Unibail-Rodamco-Westfield SE, which delivered $44m in H2 revenue, 60% of the total, with a substantial portion of the borrow demand related to the firm's capital raise.

Overview

H2 Revenues
$704M ▲ 16%

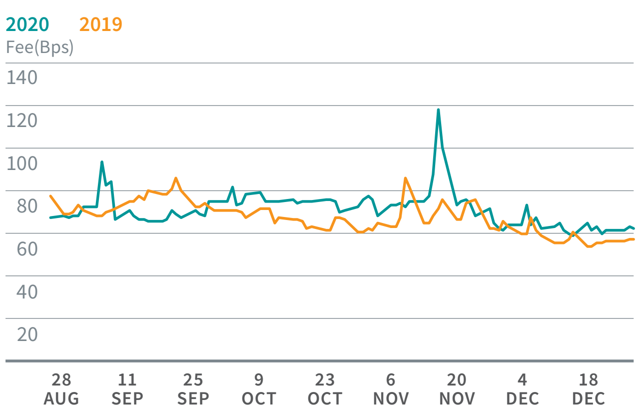
Average Balances
$191B ▲ 11%

Weighted Average Fee
0.7% ▲ 4%

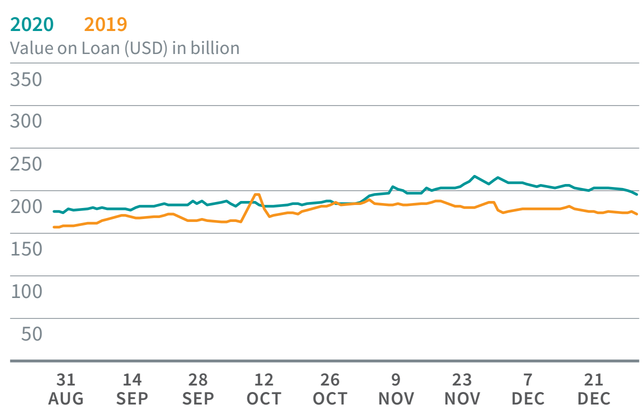
Average Inventory
$2.8T ▲ 8%

Utilization
4.99% ▲ 8.8%

H2 FEE TREND



H2 BALANCE TREND



OVERVIEW

H2 YoY revenue increase in 11 of 18 markets

Varta Ag top EMEA equity revenue contributor each month from August to December

EMEA equity H2 revenues exceed H1 for first time on record

EMEA revenues, on-loan balances, fees, utilization and lendable balances all increased YoY in H2

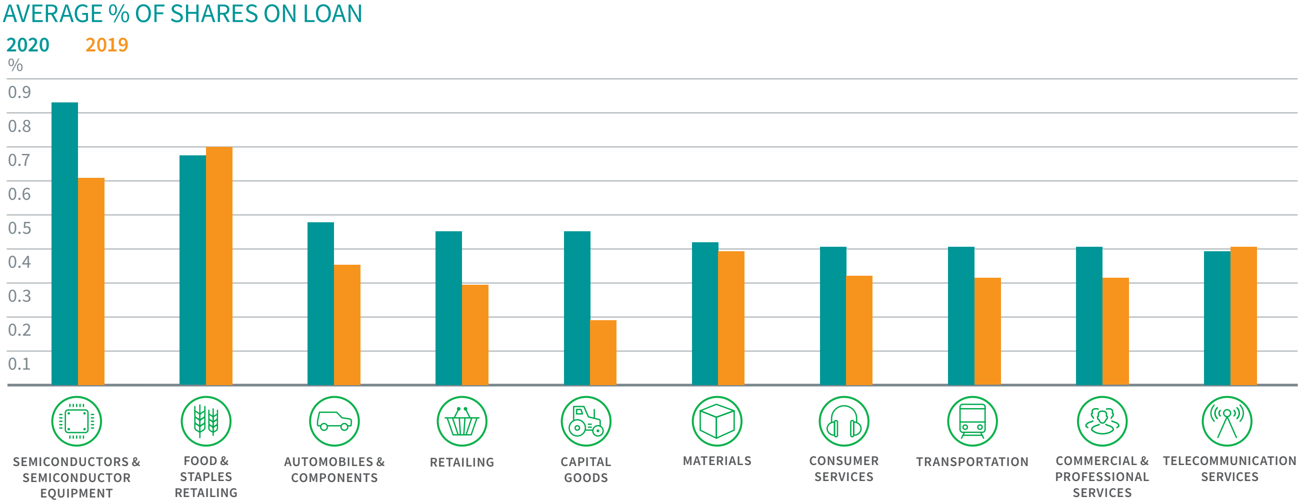
COUNTRY DETAILS

Country	H2 Revenue (USD M)	YoY Change	Average Value on Loan (USD Bn)	YoY Change	Weighted Fees	YoY Change	Average Lendable (USD Bn)	YoY Change	Average Utilization	YoY Change
Germany Equity	189.9	100%	28.60	12.0%	1.3%	79%	274.73	-4%	6.00	12%
France Equity	111.1	-28%	41.50	46.0%	0.5%	-54%	382.95	2%	6.94	49%
UK Equity	83.0	7%	31.20	-13.0%	0.5%	26%	682.61	-8%	3.34	-10%
Netherlands Equity	72.9	180%	13.60	74.0%	1.1%	61%	159.72	20%	4.63	37%
Sweden Equity	57.5	14%	15.90	17.0%	0.7%	-3%	121.74	8%	7.18	-8%
Italy Equity	42.5	-19%	7.90	-6.0%	1.1%	-13%	89.95	-1%	5.07	-5%
Switzerland Equity	39.1	10%	24.10	9.0%	0.3%	1%	404.20	16%	4.06	2%
Norway Equity	26.3	19%	3.50	-6.0%	1.4%	27%	30.68	-13%	7.71	14%
Spain Equity	16.6	-18%	7.10	-7.0%	0.4%	-12%	90.51	-11%	5.71	21%
Turkey Equity	16.5	21%	0.50	-37.0%	6.1%	89%	5.76	-17%	10.34	17%
South Africa Equity	12.9	-67%	3.50	-40.0%	0.7%	-36%	42.68	-28%	4.26	-28%
Finland Equity	12.5	25%	4.70	28.0%	0.5%	1%	38.71	-7%	7.93	22%
Austria Equity	10.1	117%	1.30	-16.0%	1.6%	159%	10.46	-16%	9.36	20%
Belgium Equity	8.8	-40%	3.60	-12.0%	0.5%	-27%	44.06	-14%	4.94	-12%
Denmark Equity	8.7	-49%	5.80	-12.0%	0.3%	-43%	79.10	26%	4.09	-40%
Greece Equity	2.9	-66%	0.05	-64.0%	12.3%	-5%	1.82	-4%	2.36	-51%
Poland Equity	2.9	18%	0.60	21.0%	1.0%	5%	7.08	-30%	5.31	44%
Portugal Equity	1.2	24%	0.60	19.0%	0.4%	3%	8.16	7%	4.96	18%

TOP 10 REVENUE GENERATING STOCKS

Instrument Name	Ticker	Sector	Country	Revenue Generated ($)
Varta Ag	VAR1	Capital Goods	DE Equity	84.12
Unibail Rodamco We Stapled Unt	URW	Real Estate	NL Equity	44.18
Deutsche Lufthansa Ag	LHA	Transportation	DE Equity	24.86
Total Se	FP	Energy	FR Equity	22.62
Grenke Ag	GLJ	Diversified Financials	DE Equity	12.80
Tui Ag	TUI	Consumer Services	UK Equity	12.11
Hammerson Plc	HMSO	Real Estate	UK Equity	8.54
Casino Guichard Perrachon Sa	CO	Food & Staples Retailing	FR Equity	8.50
Air France Klm Sa	AF	Transportation	FR Equity	8.45
Stadler Rail Ag	SRAIL	Capital Goods	CH Equity	7.66

AVERAGE % OF SHARES ON LOAN



Americas Equities

Varied results, ended well

Americas equities generated $1.9bn in H2 revenues, a 9% decline compared with 2019, matching the H1 return despite a very different set of circumstances. Returns for Q3 totaled $881m, a 21% YoY decline, while Q4 revenues of $1.0bn reflect a 4.8% YoY increase and 15% increase compared with Q3. Loan balances grew steadily over H2, with $533bn in December average balances the most for any month. Average fees increased from the low point in August, with December having the highest average since July.

US equity revenues totaled $1.7bn in H2, a 0.3% YoY decline. Q3 started off well, following a stellar June, however corporate action related borrows, like the Carnival convertible or Nikola warrant redemption, faded quickly leading to a late summer slow-down in activity. August saw the lowest average special balances of 2020, thereafter trending higher through Q4. Special balances, those with a fee greater than 500bps, averaged $12.5bn in Q4, up from $9.6bn in Q3. For H2, special balances averaged $11.1bn, a 5% YoY increase.

A substantial portion of the H2 specials upswing was related to US SPAC and traditional IPOs. Current and former SPACs, going back to 2017, delivered $79m in H1 revenues, nearly all resulting from borrow demand for Nikola Corporation shares around the warrant redemption in June. Over H2, the current and former SPACs delivered $264m in revenue, though it is worth noting that $106m of the H2 SPAC return was the remainder of the Nikola warrant arbitrage trade in July. The 2019 non-SPAC IPO class delivered substantial revenues in H1 ($187m), but faded over the latter half of 2020, with revenues declining to $22m. The 2020 non-SPAC IPO class delivered $137m in H2, up from $9m in H1.

Canadian equities delivered $163m in H2 revenues, a YoY decline of 42%. A dearth of special balances, formerly dominated by the Cannabis sector substantially declined after Q1, resulting in there not being any Canadian equities it the top 10 revenue generators. Despite the lack of concentrated revenue producing shares, overall demand to borrow Canadian equities was robust. CA equity loan balances averaged $37bn for H2, up from $34bn in H1.

ADR revenues totaled $112m for H2, reflecting a 53% YoY decline. The YoY decline is mostly the result of electric-carmaker NIO, Inc., where the substantial rise in share price, along with equity issuance, reduced the borrow demand and lowered lending fees. Despite the absence of a revenue generator to rival Nio, it's worth noting that H2 on-loan balances did increase by 37% YoY.

Overview

H2 Revenues
$1.9B ▼ 9%

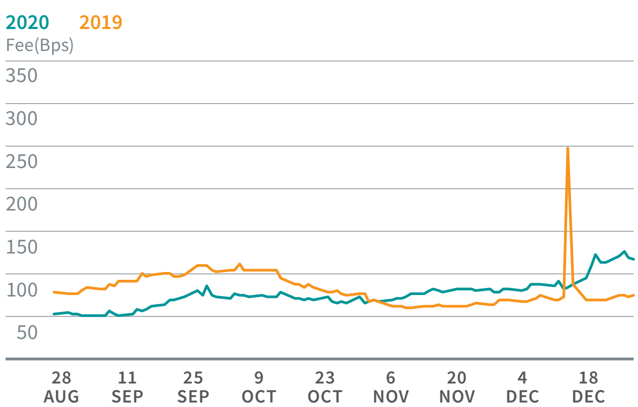
Average Balances
$474B ▼ 5%

Weighted Average Fee
0.79% ▼ 5%

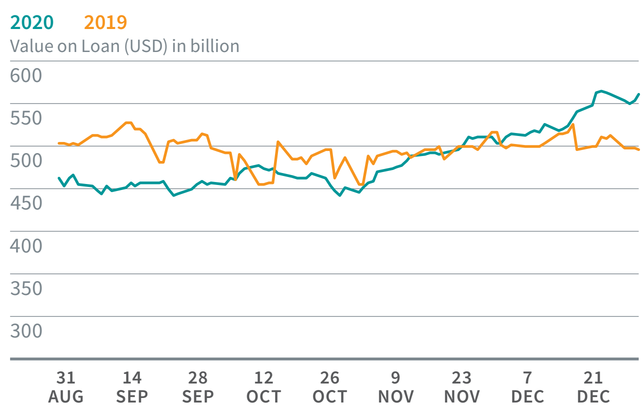
Average Inventory
$12.5T ▲ 22%

Utilization
3.00% ▼ 25%

H2 FEE TREND



H2 BALANCE TREND



OVERVIEW

US equity revenue growth held back by late-summer slump

Nikola Corporation top earner in H2, after being third in H1

2020 non-SPAC IPOs deliver $137m in H2 revenue

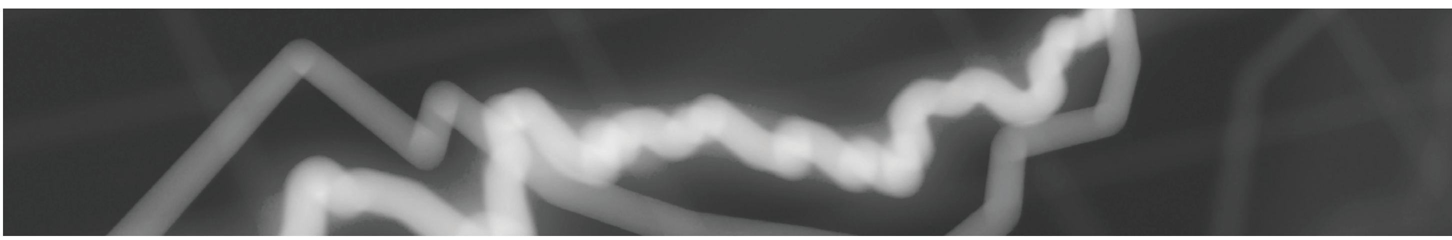
Quantumscape Corp delivers $64.8m in revenue, leading SPAC IPOs in H2

COUNTRY DETAILS

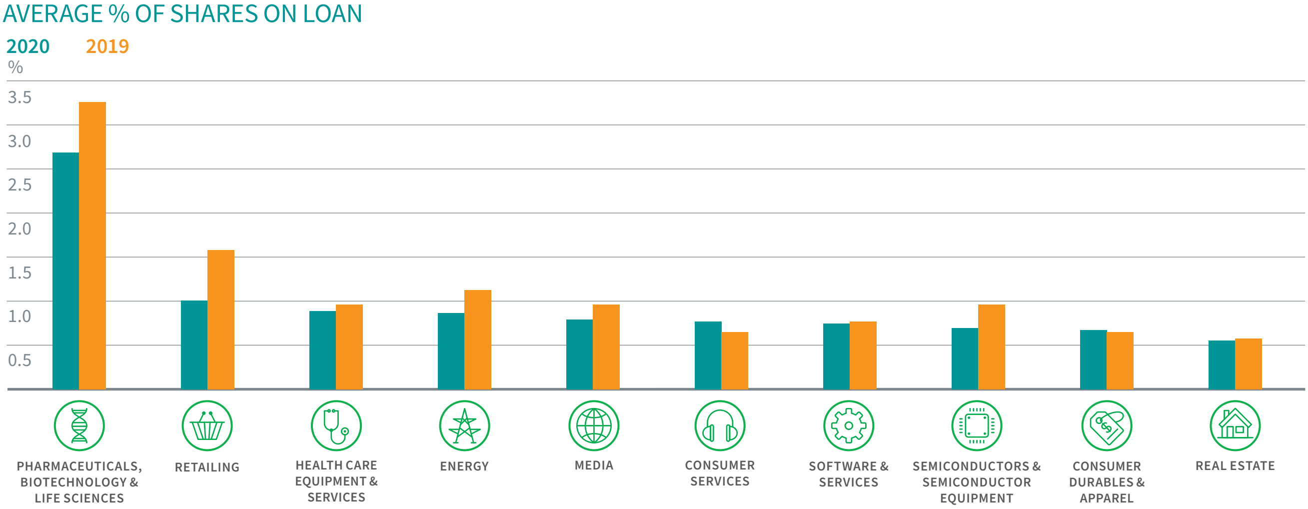
Country	H2 Revenue (USD M)	YoY Change	Average Value on Loan (USD Bn)	YoY Change	Weighted Fees	YoY Change	Average Lendable (USD Bn)	YoY Change	Average Utilization	YoY Change
USA Equity	1,731.21	-0.3%	436.30	-4.0%	0.8%	3%	9,871	11.6%	2.88	-25.3%
Canada Equity	162.70	-52.3%	37.00	-8.0%	0.9%	-48%	478	-2.9%	5.60	-12.8%
Brazil Equity	1.30	-60.6%	0.30	-11.0%	0.8%	-56%	1	-45.2%	2.24	-63.5%
Mexico Equity	1.26	-0.5%	0.60	-1.0%	0.4%	3%	24	-11.4%	2.21	23.1%
American Depository Receipts	112.90	-53.0%	32.50	37.0%	0.7%	-67%	264	22.3%	7.08	-10.7%

TOP 10 REVENUE GENERATING STOCKS

Instrument Name	Ticker	Sector	Country	Revenue Generated ($)
Nikola Corporation	NKLA	Capital Goods	US Equity	132.38
Quantumscape Corp	QS	Automobiles & Components	US Equity	64.84
Inovio Pharmaceuticals Inc	INO	Pharmaceuticals, Biotechnology & Life Sciences	US Equity	60.72
Sorrento Therapeutics Inc	SRNE	Pharmaceuticals, Biotechnology & Life Sciences	US Equity	47.12
Lemonade Inc	LMND	Insurance	US Equity	42.19
Gamestop Corp	GME	Retailing	US Equity	34.27
Amc Entertainment Holdings Inc	AMC	Media and Entertainment	US Equity	34.26
Brookfield Property Partners Unt	BPY	Real Estate	US Equity	32.17
Visa Inc	V	Software & Services	US Equity	31.39
Dillard'S Inc	DDS	Retailing	US Equity	30.03



AVERAGE % OF SHARES ON LOAN



Exchange Traded Products

Equities lead H2 revenues

ETP lending revenues totaled $199m in H2, a 40% YoY increase, nearly matching the H1 return of $200m. The 2020 FY return of $399m was the most on record, exceeding the 2018 revenue by $1m. ETP loan balances reached an all-time high in December around the Tesla Motors Inc. inclusion into the S&P 500.

Despite the similar level of revenue to the first half of 2020, the H2 drivers were quite different. Fixed income products delivered 21% of H1 revenue, boosted by demand for high-yield and loans products. There were three such products in the top 10 ETP revenue generators for H1. The percentage contribution declined in H2, with fixed income only contributing 15% of revenues, with only one fixed income product in the top ten.

European ETP H2 revenues of $35m reflect a 15% YoY increase and 18% of all global ETP return. It is notable that two of the top 10 H2 revenue generators are the UCITS ETFs. The Ireland listed iShares High Yield Corporate Bond UCITS ETF earned more in H2 than its US listed counterpart for the first time.

While still a relatively small part of overall ETP revenues, the growth in Asia listed fund revenue is notable. H2 APAC ETP revenues increased by 77% YoY. The upswing is primarily the result of increasing fees for funds with Hong Kong SAR listed constituents or Mainland China A-Shares, with two of the top 10 ETPs for H2 listed in HK.

Global ETP AUM first reached $6T in Q4 2019 and ended the year with $6.2T, before dipping to $5.2T at the end of Q1 2020. From the low point in H1, ETP AUM surged along with market valuations. Global ETP AUM set a record in Q3 and then blew that record away in Q4, ending the year with $7.89T in global AUM. The increased use of the products by institutional investors is reflected by the growth of lendable assets in securities lending. Global ETP lendable assets averaged $377bn for Q4, the highest quarterly average on record. Despite the growth in lendable assets, utilization also increased YoY in H2.

Overview

H2 Revenues
$199M ▲ 40%

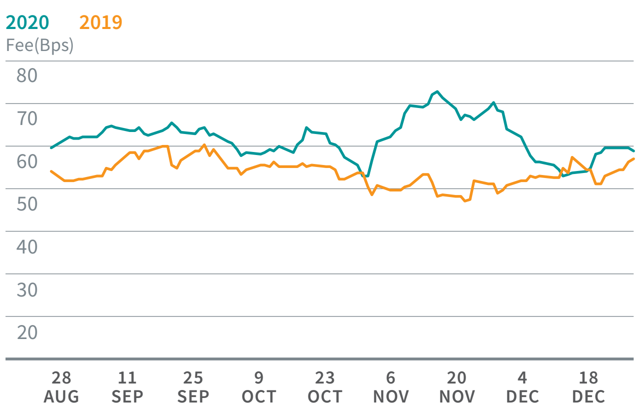
Average Balances
$63.6B ▲ 26%

Weighted Average Fee
0.62% ▲ 11%

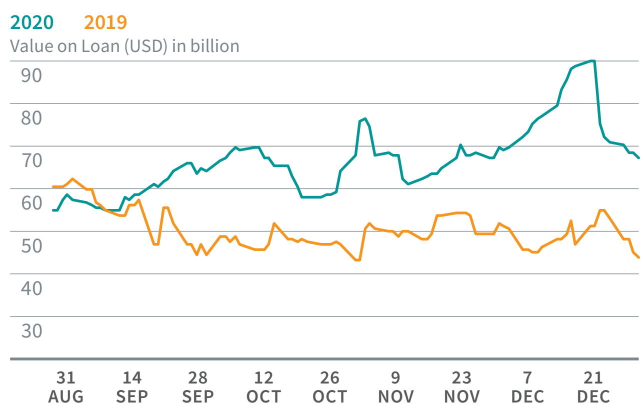
Average Inventory
$370B ▲ 17%

Utilization
10.74% ▲ 8%

H2 FEE TREND



H2 BALANCE TREND



OVERVIEW

Global ETP H2 revenues increase 40% YoY

Loan balances increase YoY in each region

ETP loan balances reach all-time high in December

China focused products lead top revenue contributor table

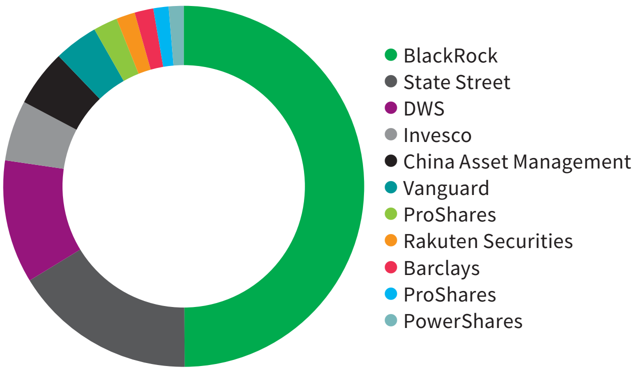
COUNTRY DETAILS

Country	H2 Revenue (USD M)	YoY Change	Average Value on Loan (USD Bn)	YoY Change	Weighted Fees	YoY Change	Average Lendable (USD Bn)	YoY Change	Average Utilization	YoY Change
Americas ETP	138.01	43.5%	55.60	26%	0.49%	13%	219.60	24%	14.38	4%
European ETP	35.53	15.1%	5.20	19%	1.36%	-4%	56.03	7%	5.11	11%
APAC ETP	17.21	77.6%	1.40	22%	2.45%	49%	2.30	21%	13.96	-18%

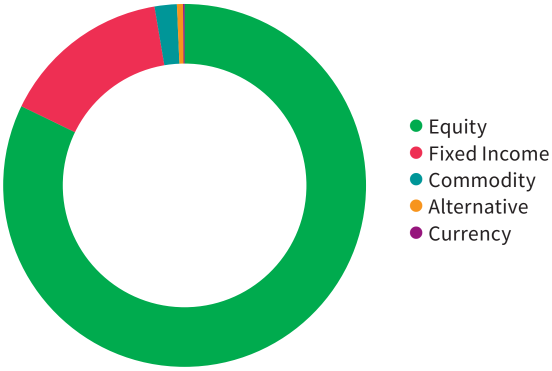
TOP 10 REVENUE GENERATING FUNDS

Instrument Name	Ticker	Listing Country	Asset Class	Revenue Generated ($M)
Xtrackers Hvst Csi 300 China A-Shs Etf	ASHR	US ETF	Equity	13.31
Ishares Russell 2000 Etf	IWM	US ETF	Equity	10.41
Chinaamc Csi 300 Index Etf Rmb	3188	HK ETF	Equity	7.85
Ishares China Large-Cap Etf	FXI	US ETF	Equity	7.49
Spdr S&P Biotech Etf	XBI	US ETF	Equity	6.21
Spdr S&P 500 Etf Trust	SPY	US ETF	Equity	4.90
Ishares Msci Emerging Markets Etf	EEM	US ETF	Equity	2.70
Ishares High Yield Corp Bd Ucits Etf Eur Dist	IHYG	IE ETF	HY Credit	2.61
Csop Ftse China A50 Etf Rmb	2822	HK ETF	Equity	2.53
Ishares Msci China A Ucits Etf Usd (Acc)	CNYA	IE ETF	Equity	2.50

LENDING REVENUES BY ISSUER



LENDING REVENUES BY ASSET CLASS



Corporate Bonds

Supply (still) > demand

Corporate bond lending revenues continue to decline from the post-GFC peak in 2018. The $201m in H2 fee-based revenues reflects a 29% YoY decline and the lowest H2 return since 2010. Demand related metrics, including average on-loan values, fees, utilization and revenues all declined YoY. While demand declined, lendable supply continued to increase with $4.5T in H2 average lendable the most on record.

While the spread income for 2020 was underwhelming, it’s worth considering the proportion of corporate loan balances collateralized with cash and the return generated by reinvestment portfolios when interest rates were cut. The reinvestment returns drove a YoY increase in revenues in H1; however, the impact of the rate cut on reinvestment portfolios had substantially run its course by H2, which saw a YoY decline in H2 total return.

USD denominated corporates continue to be the most revenue generating, with $96m in H2 revenues, reflecting a 34% YoY decline. USD issues accounted for 48% of H2 2020 revenue, having steadily declined from 58% in 2018. Average daily loan balances for USD credit paints a more upbeat picture for demand, with balances trending higher during Q4 and December being the first month since February to see YoY growth in on-loan balances.

Euro denominated corporates, the most revenue generating apart from USD, delivered $70m in H2 revenue, a 19% YoY decline. EUR corporate revenues received a boost in H1 from the Wirecard bond, which delivered $1.8m in revenues. The H2 leader was the Webuild Spa 3.75% note due in 2021, which delivered $1.24m in H2 revenue. Five of the top 10 revenue generating corporates for H2 were EUR denominated, matching H1.

Overview

H2 Revenues
$201M ▼ 29%

Average Balances
$178B ▼ 7%

Weighted Average Fee
0.22% ▼ 24%

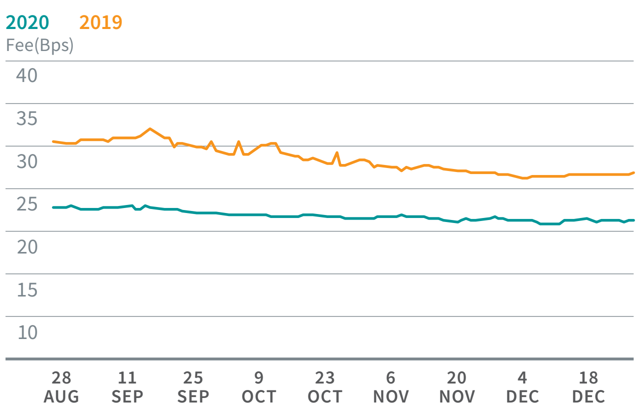
Average Inventory
$4.5T ▲ 16%

Utilization
3.59% ▼ 19%

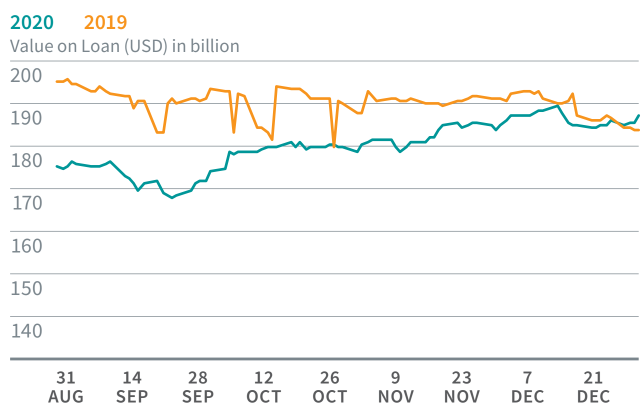
H2 investment grade (IG) bond lending revenues fell 12% YoY compared with a 36% decline for non-Investment grade credit (NIG). IG credits generated 50% of H2 corporate bond revenue, up from 42% in H1 2019.

Convertible bond lending revenues continue to decline with $7m in H2 revenue representing a 57% YoY decline. The substantial convertible issuance in 2020 did lead to borrow demand for issuer’s equity; however, borrow demand for the convertible notes themselves was subdued, with each month of 2020 seeing at least a 30% YoY decline.

H2 FEE TREND



H2 BALANCE TREND



OVERVIEW

Narrower fee spreads primarily responsible for YoY revenue decline	Decline in on-loan balances and increase in lendable assets weighs on utilization	IG credits deliver 50% of H2 revenue	Lowest H2 corporate bond revenue since 2010

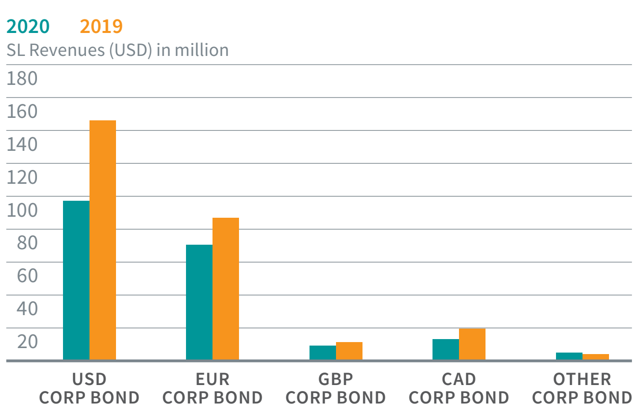
ISSUE TYPE DETAILS

Issue Type	H2 Revenue (USD M)	YoY Change	Average Value on Loan (USD Bn)	YoY Change	Weighted Fees	YoY Change	Average Lendable (USD Bn)	YoY Change	Average Utilization	YoY Change
Conventional Bonds	193	-28%	174.4	-6%	0.22%	-23%	3,588.2	14%	3.95%	-18%
Convertible Bonds	7	-57%	3.3	-34%	0.45%	-33%	48.7	4%	4.12%	-50%
Asset Backed Securities	0.03	-30%	0.2	-57%	0.24%	60%	417.1	35%	0.05%	-60%

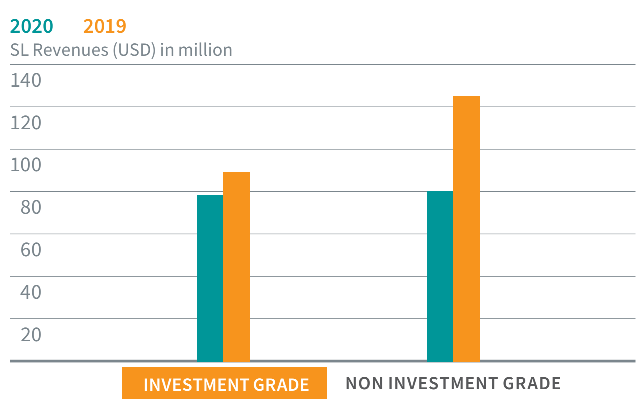
TOP 10 REVENUE GENERATING BONDS

Top Earning Assets	Cusip	Denomonation	Aseet Class	Revenue Generated ($)
Six Flags Entertainment Corp (5.5% 15-Apr-2027)	83001AAC6	USD	Priv.	1.39
Webuild Spa (3.75% 24-Jun-2021)	T8229WAA4	EUR	N.I.G	1.24
China Evergrande Group (6.25% 28-Jun-2021)	G2119WAD8	USD	N.I.G	1.21
Nabors Industries Inc (5% 15-Sep-2020)	629568AV8	USD	N.I.G	1.18
Pennsylvania Real Estate Investment Trust (7.2% Undated)	709102602	USD	N.I.G	0.98
Diamond Sports Group Llc (6.625% 15-Aug-2027)	25277LAC0	USD	Priv.	0.83
K&S Ag (3.25% 18-Jul-2024)	D4S06GAS5	EUR	N.I.G	0.82
Progroup Ag (3% 31-Mar-2026)	D6S035AF5	EUR	N.I.G	0.81
Gestamp Automocion Sa (3.25% 30-Apr-2026)	E5R71WAG3	EUR	N.I.G	0.81
Sappi Papier Holding Gmbh (3.125% 15-Apr-2026)	A35868AJ6	EUR	N.I.G	0.80

H2 REVENUES BY DENOMINATION



H2 REVENUES BY RATINGS CATEGORY



Government bonds

US Treasury spreads widen

Government bond lending delivered $697m in H2 revenues, an 5% YoY increase. Full year spread returns totaled $1.5bn, an 8% YoY increase, though 14% below the post-crisis peak in 2018. Loan balances soared over the course of Q4, ending 2020 with $1.12T on loan at positive spreads, the most since the 2020 peak in March ($1.14T), having gotten as low as $890bn in late-May.

Looking at the agency lending data, we see total returns for government bond lenders, including reinvestment, increased by 33% for FY 2020 as compared with 2019. Reinvestment returns contributed 57% of the H1 return, but the contribution dropped to 45% in H2, with the impact of the Q1 rate cut having run its course.

Returns for lending US debt came in at $396m in H2, an 8% YoY increase. The YoY increase was entirely the result of a 24% increase in loan balances, spreads declined by 13% YoY. One interesting characteristic of 2020 compared with 2019 is the lack of spread income over the month-end periods, though there was a small uptick at year-end.

European government bond lending revenues came in at $235m for H2, a 5% YoY Increase. The increase was driven by increase on-loan balances, with fees declining slightly. Loan balances steadily increased over the 2nd half of the year, reaching the 2020 peak in December.

Overview

H2 Revenues
$697M ▲ 5%

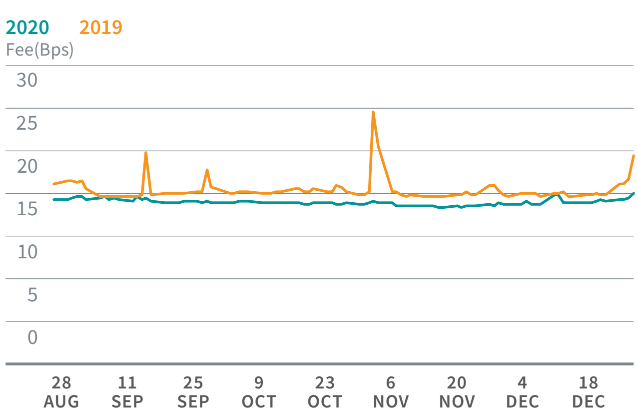
Average Balances
$968B ▲ 14%

Weighted Average Fee
0.14% ▼ 8%

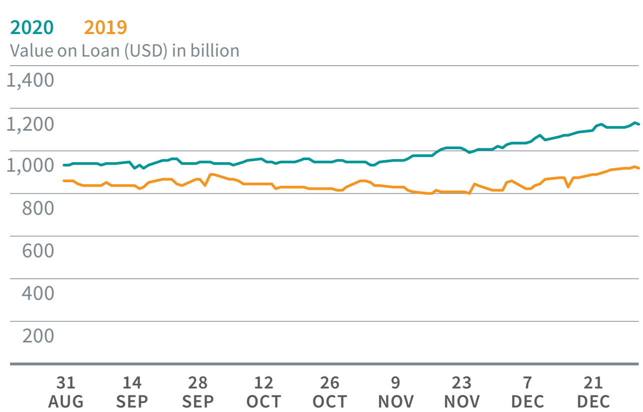
Average Inventory
$3.7T ▲ 11%

Utilization
23.17% ▲ 9%

H2 FEE TREND



H2 BALANCE TREND



OVERVIEW

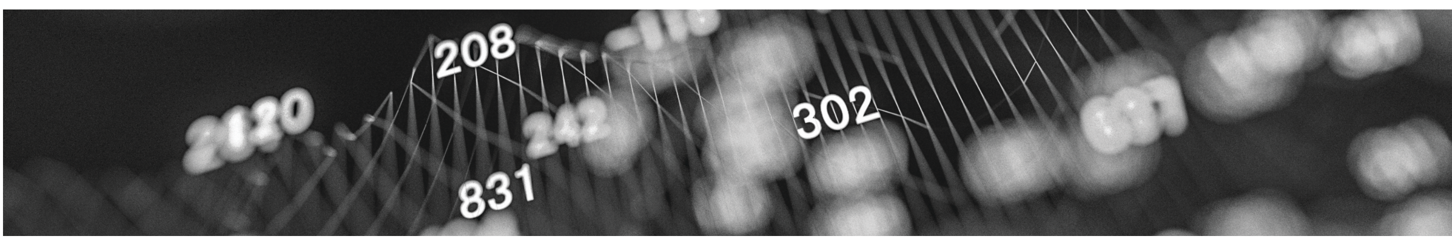
- Notable lack of fee spread expansion around year-end 2020
- Top 10 bonds all issued by UST
- Loan balance growth exceeds lendable asset growth, leading to UST utilization increase
- UST securities generate 64% of H2 revenue

REGIONAL DETAILS

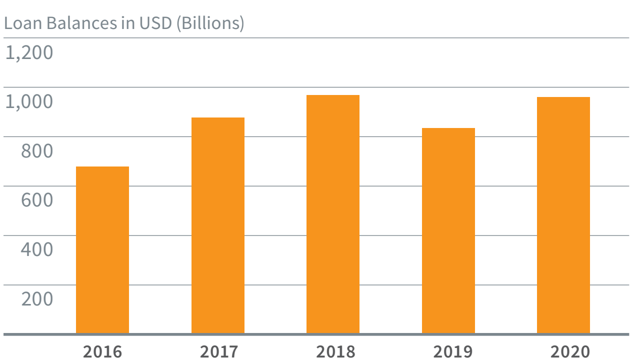
Country	H2 Revenue (USD M)	YoY Change	Average Value on Loan (USD Bn)	YoY Change	Weighted Fees	YoY Change	Average Lendable (USD Bn)	YoY Change	Average Utilization	YoY Change
Americas	447	6%	614.1	19%	0.14%	-13%	2,378.8	17%	22.95%	14%
Europe	15	-24%	19.6	-21%	0.15%	18%	78.5	8%	9.66%	-29%
Asia	235	5%	334.3	7%	0.14%	-16%	1,036.6	8%	24.66%	1%
Emerging Market Bonds	22	-16%	16.4	-3%	0.26%	-7%	305.0	21%	4.86%	-11%

TOP 10 REVENUE GENERATING BONDS

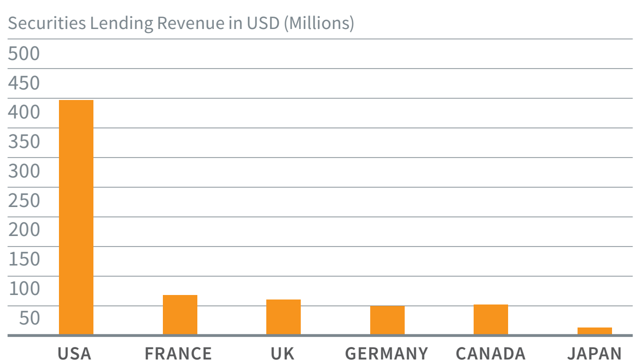
Instrument Name	ISIN	Currency	Issuer	Revenue Generated ($)
United States Treasury (2.75% 15-Nov-2023)	912828WE6	USD	USA	3.89
United States Treasury (1.5% 15-Aug-2026)	9128282A7	USD	USA	3.72
United States Treasury (2.5% 15-Feb-2022)	9128286C9	USD	USA	3.57
United States Treasury (1.625% 15-Nov-2022)	912828TY6	USD	USA	3.29
United States Treasury (2% 31-Oct-2022)	9128283C2	USD	USA	3.24
United States Treasury (1.875% 31-May-2022)	912828XD7	USD	USA	3.22
United States Treasury (1.875% 31-Aug-2024)	9128282U3	USD	USA	3.02
United States Treasury (2.25% 30-Apr-2024)	9128286R6	USD	USA	2.94
United States Treasury (2.75% 15-Feb-2028)	9128283W8	USD	USA	2.82
United States Treasury (1.75% 15-Nov-2029)	912828YS3	USD	USA	2.80



GOVERNMENT BOND BALANCE TREND



H2 REVENUES BY ISSUER



Product update

These stats appear on first page but are updated here:

$30T Lendable Value

$2.8T Loan Value

Corporate Action Event Dates

IHS Markit's Securities Finance team collaborated with our managed Corporate Actions (MCA) team to provide notifications of 15+ corporate actions types. Users will see the Record/ Effective dates and Meeting Dates of upcoming corporate actions events such as annual/special general meeting, stock splits, reverse stock splits, mergers and acquisitions/takeovers etc

Third Party Alliances

IHS Markit entered into several important alliances to broaden the outreach of our data via third party platforms

JPX Integration: IHS Markit partnered with the Japanese Exchange Group (JPX) to incorporate Tokyo Stock Exchange (TSE) daily short and margin trades. The new dataset which will be combined with the MSF dataset is essential for anyone trading in Japan and looking to increase their alternative data and fundamental analysis factors, delivering significant performance improvement for both Long-only and Long/Short portfolio construction in comparison to using the individual datasets independently

Novus: IHS Markit entered into an alliance with Novus to provide securities lending data and insight to capital allocators and managers to enrich and manage their data, extract actionable investment insights, and improve stakeholder communication via visualization and automation

Credit Consensus Data Integration

IHS Markit collaborated with Credit Benchmark (CB) to integrate counterpart credit risk insight into securities lending inventory and loan activity.

Sector Credit Consensus: A new page was added to Web Portal to provide insight on Credit Risk and Consensus on Financial Sectors

Credit Consensus Filter: A new filter has been added to the Performance Measurement product whereby users can now compare the performance of their lending program against other lenders with similar creditworthiness

Counterpart Data based on CB Consensus New enhancements include the credit quality of the counterparts sourced from Credit Benchmark

Instrument Aggregate data based on CB Consensus: A new Security page was introduced detailing instrument level information based on the credit quality of the underlying business entities

Enhancements to Securities Lending Performance Measurement Tools

Minimum Spread - A new feature introduced in April excludes trades below a customizable fee threshold at the asset class level

Market Dropdown - As per your feedback, we included a drop down of all available markets on Performance page filters

New Collateral Flexibility Buckets were implemented in October to align with current industry standards.

New Preference filter on Performance page - A new filter “Lendable Type” was added to analyse SL performance on ‘Total Asset’ or by ‘Lendable’

Compliance with the Best Practices Guide published by the International Securities Lending Association (ISLA) in September 2020

Fund Stability Buckets - Users can now filter their programme and peer group by stability/turnover of the fund

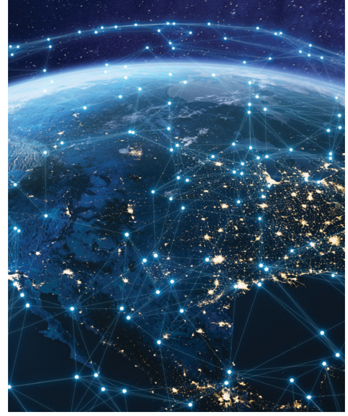
STEAR

(Best Execution Reports)

IHS Markit introduced Securities Transaction Exception Analytics Report (STEAR) to provide Beneficial Owners and Agent/Principal Lenders with daily exception reports to highlight trade exceptions where their fees are lower than market average/low/high based on different parameters

Short squeeze

indicators and ranks were expanded to include Global Equities



Data Mapping Enhancements

New asset classes were added to our Risk platform to correctly map securities to provincial asset classes instead of categorizing them as Government Bonds. We also Improved our instrument reference coverage by adding Bloomberg Ticker and IDs to approximately 4000 instruments

Public Disclosure Data

IHS Markit started publishing daily China short disclosure data in December from both Shanghai and Shenzhen stock exchange broadening the breath of data in region. IHS Markit also expanded history of its public disclosure datafeeds going back to 2015

Learn more

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About IHS Markit

IHS Markit (NYSE: INFO) is a world leader in critical information, analytics and expertise to forge solutions for the major industries and markets that drive economies worldwide. The company delivers next-generation information, analytics and solutions to customers in business, finance and government, improving their operational efficiency and providing deep insights that lead to well-informed, confident decisions. IHS Markit has more than 50,000 business and government customers, including 80 percent of the Fortune Global 500 and the world's leading financial institutions. Headquartered in London, IHS Markit is committed to sustainable, profitable growth.

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