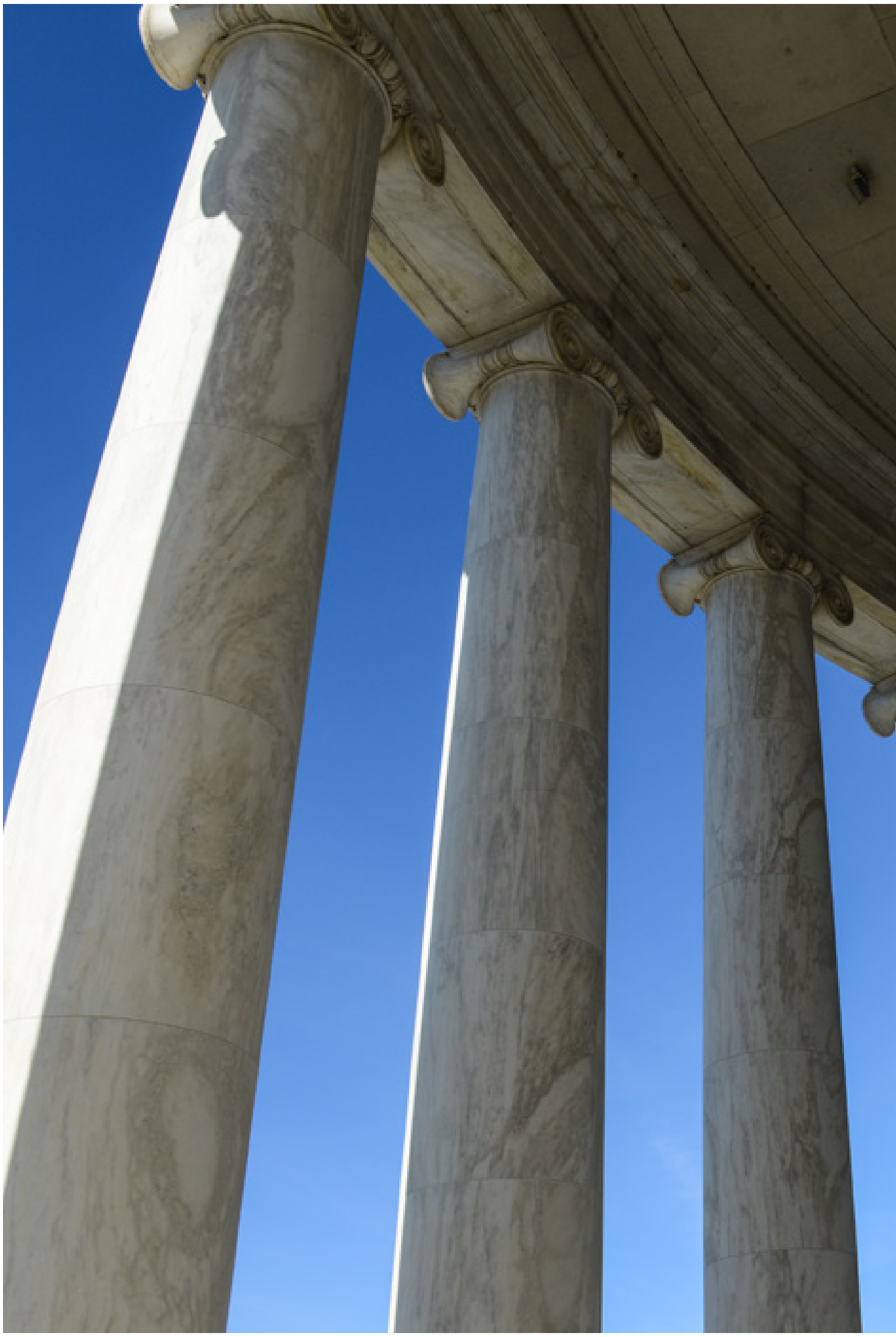
Securities Finance Q2 2023 Snapshot



S&P Global
Market Intelligence

Securities Finance Q2 2023 Snapshot

Securities lending revenues continue to push higher, generating $3.605B during Q2 2023

- Quarterly revenues push higher marking the best Q2 in recent history
- US equity specials generate highest quarterly specials revenues on record
- Fixed income assets continue to benefit from elevated fees
- Balances decline as recessionary fears ease

Global Securities Finance Snapshot - Q2 2023

Asset Class	Q2 Revenue ($M)	Rev YoY %Chg	Avg Balances ($B)	Bal YoY %Chg	Avg Fee	Fee YoY %Chg	Avg Lendable ($B)	Lendable YoY Chg	Avg Utilization	Util YoY %Chg
All Securities	$3,605	7%	$2,600	-11%	0.56%	20%	$31,957	0%	6.1%	-14%
All Equity	$2,798	5%	$1,245	-6%	0.90%	11%	$23,540	1%	3.7%	-7%
Americas Equity	$1,408	13%	$654	-2%	0.86%	16%	$16,705	0%	2.9%	-3%
Asia Equity	$525	4%	$211	4%	1.00%	0%	$2,552	4%	4.7%	-2%
EMEA Equity	$590	3%	$250	-16%	0.93%	22%	$3,478	2%	5.6%	-19%
ADR	$87	27%	$28	0%	1.25%	27%	$237	-4%	8.5%	0%
ETP	$155	-35%	$96	-17%	0.64%	-22%	$462	1%	10.3%	-17%
Government Bond	$484	9%	$1,065	-18%	0.18%	33%	$4,171	4%	20.0%	-25%
Corporate Bond	$296	28%	$265	-6%	0.45%	37%	$3,939	-6%	5.8%	0%

Note: Includes only transactions with positive fees
Source: SPGMI Securities Finance

The second quarter of 2023 provided an animated backdrop for all investors. The quarter started with the hangover of the regional banking crisis in the US and with financial markets digesting the news that one of Europe's biggest banks was to be taken over by its rival, UBS. Despite any contagion being limited, the issues facing US regional banks remained in focus throughout the first half of the quarter and concluded in the sale of First Republic Bank to JP Morgan, marking the second biggest bank failure in US history.

Global economies remained glued to economic data throughout the period as central banks continued to fight inflation with higher interest rates. In the US, interest rates finished the quarter at a 16-year high, following the fastest hiking cycle in four decades. The Bank of Canada was one of the first central banks to take a pause in its hiking cycle to digest the economic data but concluded that further increases were necessary during June. In Europe, the European Central Bank raised rates to a twenty-two year high and the Bank of England, despite being one of the first central banks to start hiking, carried on its path to a higher-than-expected terminal rate, as core inflation remained stubbornly high.

Across the APAC region, despite inflation being less of an issue, the general tightening cycle was also reflected. The only two outliers to this were the bank of Japan, which maintained its yield curve controls and loose monetary policy throughout the quarter and the People's Bank of China which cut its main policy rate for the first time in ten months as new data worries raised concerns about a weakening post-COVID rebound in the country's economy. The second quarter marked a point of divergence for global central banks as economies increasingly started to move to local rhythms.

Debt ceiling discussions in the US made their way into the headlines towards the end of the quarter as market participants started to position their portfolios for what was expected to be one of the biggest showdowns between Republicans and Democrats to date. Despite an increase in the borrowing of T-Bills expiring towards the infamous X-date, seen in both the repo and securities finance markets, an agreement was reached with little to no impact upon the broader financial sector.

The second half of the quarter experienced an explosion in interest regarding artificial intelligence.

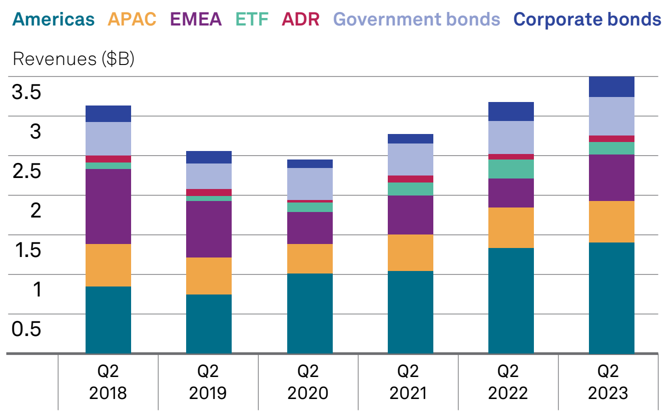
The arrival of Chat GPT and similar large language models led to a significant desire to understand more about the impact that generative AI could bring to company profits and workflows. As a result, technology companies such as microchip and semiconductor manufacturers and information technology firms saw their share prices rally. The NASDAQ experienced its best opening six months of the year ever, after a dismal Q4 performance. Likewise, the S&P 500 gained circa 13% during H1, helping it recoup any losses incurred since the Fed started to raise interest rates during March 2022. The index moved into bull market territory following a +20% increase when compared with its most recent low on the 12th October 2022. Across the globe a similar story took place. The Nikkei in Japan reached a 33 -year high as the country experienced the benefits of recent changes to its corporate governance policy and acted as a beneficiary of divestment in China. Across Europe, many stock markets marched higher and the German DAX reached an all-time high. In the securities lending markets this led to short covering and a reduction in balances.

In the securities finance markets, revenues of $3.605B were generated over Q2. This represents an increase of 7% YoY and an increase of 6% QoQ. Average fees remained robust over the quarter with a Q2 average across all securities of 56bps (+20% YoY) representing a 3bps increase on Q1. Balances declined both YoY (-11%) and QoQ (-1%) along with utilization (-14% YoY and -5% QoQ). As a result of rising equity markets over the quarter, lendable supply increased by 3% when compared with Q1.

Equities generated $2.79B over Q2 representing an increase of 5% YoY and 8% QoQ. The second quarter of the year is typically the strongest for equity lending revenues and the healthy increase experienced in comparison to Q2 2022 will be welcomed by lenders. Average fees were 90bps over the quarter. YoY this represents an increase of 11%. This increase follows on from a strong Q1 average fee of 84bps which was an increase of 29% YoY. Utilization declined for equities over the period to an average of 3.7% (-7% YoY and -4% QoQ). This is representative of a common trend over the quarter as balances declined across the vast majority of asset classes. In relation to geographical regions, revenues increased YoY in line with average fees. Americas equities led the charge during Q2 with a high value specials market pushing revenues to all-time quarterly highs. Balances increased in Asia YoY (+4%) but declined across the Americas (-2%) and Europe (-16%). This signals a market of increased borrowing conviction as stocks on loan became more expensive.

In the fixed income markets both government and corporate bond lending remained robust. Revenues continued to increase YoY with both asset classes experiencing near record quarterly revenues. Average fees remained high across both instruments (45bps corporate bonds, 18bps government bonds) despite a fall in balances and utilization. Short-dated government bonds continued to be a priority for borrowers as did investment grade corporate bonds.

Q2 Securities Finance Revenues by Asset Class (USD)



Source: SPGMI Securities Finance

In summary, the second quarter of 2023 was very strong for securities finance markets. Revenues increased across the majority of asset classes both YoY and QoQ despite ever-increasing valuations in equity markets and a slight decline in inflationary concerns. The first half of the year has generated near record revenues for market participants. With central banks closing in on their inflation goals and interest rates starting to bite, Q3 will be critical in deciding whether securities finance revenues will experience an all-time high during the remainder of 2023.

Additional Q2 2023 metrics to note:

Average tenure: All Securities: 135 days (All Equities 75 days, Government Bonds 197 days, Corporate Bonds 90 days)

Cash reinvestment revenues: All Securities $437.3M

Securities lending return to lendable: All Securities 3.03bps (All Equities 3.13bps, All Bonds 2.74bps, Government Bonds 2.95bps, Corporate Bonds 2.47bps)

Cash vs Non-Cash Collateral average: All Securities 59.2% Cash vs 40.8% Non-Cash, (All Equities 63.5% Cash vs 36.5% Non-Cash, Government Bonds 40.4% Cash vs 59.6% Non- Cash, Corporate Bonds 62.8% Cash vs 37.2% Non-Cash)

APAC Equities

Japanese equities push revenues higher while participation in Taiwan surges

The APAC region, ex-Japan, failed to capitalize on the market gains seen across the Americas and some European countries during the quarter. China, Malaysia, and Thailand saw the biggest stock market losses over the period while share prices across India, South Korea and Taiwan all gained slightly. Chinese equities came under pressure over the period as the much-anticipated post-COVID reopening started to fade. A slowdown in consumer spending and weaker than expected demand for exports led to the Peoples Bank of China to lower its main policy rate as the CSI 300 softened throughout the period. The main equity market indices across Hong Kong were lower over the quarter as a result.

In Japan, a weak Yen, reforms to corporate governance, and structural shifts in the Japanese economy, helped to propel the NIKKEI to a 33-year high. Despite the stronger market conditions and signs that inflation was starting to creep back into the Japanese economy, the Bank of Japan decided to maintain its yield controls and loose monetary policy over the quarter as they waited for more robust and consistent signs of stronger inflationary growth.

Revenues across the APAC region increased 4% during Q2. The highest monthly revenues of the quarter were seen during April when $182M was generated (+5% YoY). Average fees remained elevated when compared with recent years, reaching a quarterly average of 100bps. During the month of June, APAC average fees were 106bps which was a YoY increase of 3%. Balances across the APAC region bucked the trend over the quarter after experiencing an increase of 4%.

Japan and Taiwan remained the highest revenue generating markets. Securities lending activity in Japan was very active over the month and the market experienced a 32% increase in revenues (YoY) despite having one of the strongest performing equity markets in the region. South Korea also experienced a strong increase in revenues over the quarter (+10% YoY). Average fees hit 210bps during June as utilization hit a 2023 high of 6.79%. Outside of these three markets, revenues declined YoY, with Australia experiencing one of the largest declines across the region (-25% YoY). Securities lending revenues have been slowly climbing over H1 and general performance has been improving. As short selling restrictions ease throughout the remainder of 2023, performance across the region should see further signs of improvement.

Specials activity contributed $249M to regional revenues over the quarter, equating to 47% of all revenues. June saw a peak in specials activity ($87M) making it the highest specials revenue generating month of the year so far. Specials activity accounted for 6% of all on loan balances over the three-month period.

Overview

Q2 Revenues
$525M ▲ 4%

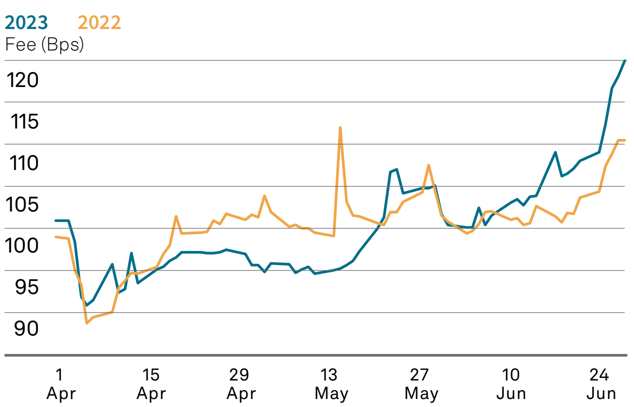
Average Balances
$211B ▲ 4%

Weighted Average Fee
1.0% ▲ 0%

Average Lendable
$2.6T ▲ 4%

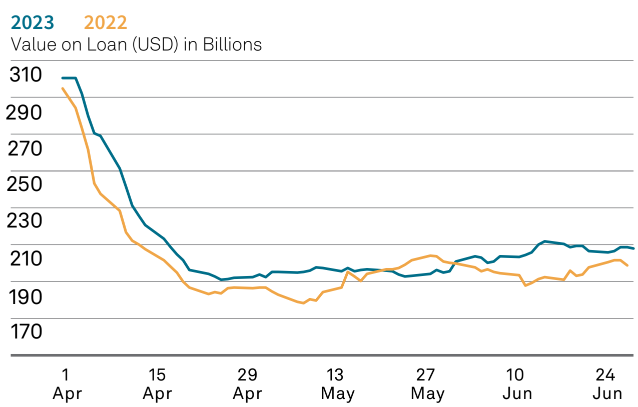
Average Utilization
4.7% ▼ 2%

Q2 Fee Trend



Source: SPGMI Securities Finance

Q2 Balance Trend



Source: SPGMI Securities Finance

Japan revenues increased by 32% YoY

APAC revenues increased by 4% YoY

APAC balances climbed by 4% YoY

Lendable assets in Taiwan increased by 51% YoY

Country Details

Country	Q2 Revenue ($M)	Rev YoY %Chg	Avg Balances ($B)	Bal YoY %Chg	Avg Fee	Fee YoY %Chg	Avg Lendable ($B)	Lendable YoY Chg	Avg Utilization	Util YoY %Chg
Japan Equity	149	32%	116.89	9%	0.50%	21%	1,082	6%	5.2%	0%
Taiwan Equity	144	1%	22.53	0%	2.56%	1%	152	51%	6.6%	-41%
Hong Kong Equity	93	-11%	28.54	-16%	1.31%	7%	545	-3%	4.1%	-10%
South Korea Equity	93	10%	19.51	10%	1.91%	0%	165	0%	6.7%	12%
Australia Equity	33	-25%	19.45	13%	0.68%	-33%	477	-1%	3.4%	13%
Malaysia Equity	5	-16%	0.45	0%	4.17%	-15%	11	-15%	3.3%	3%
Singapore Equity	4	-17%	2.28	31%	0.65%	-37%	63	3%	2.9%	29%
Thailand Equity	4	-9%	0.71	-14%	2.27%	6%	19	9%	3.1%	-28%
New Zealand Equity	1	-62%	0.38	-22%	0.73%	-50%	10	3%	3.4%	-18%

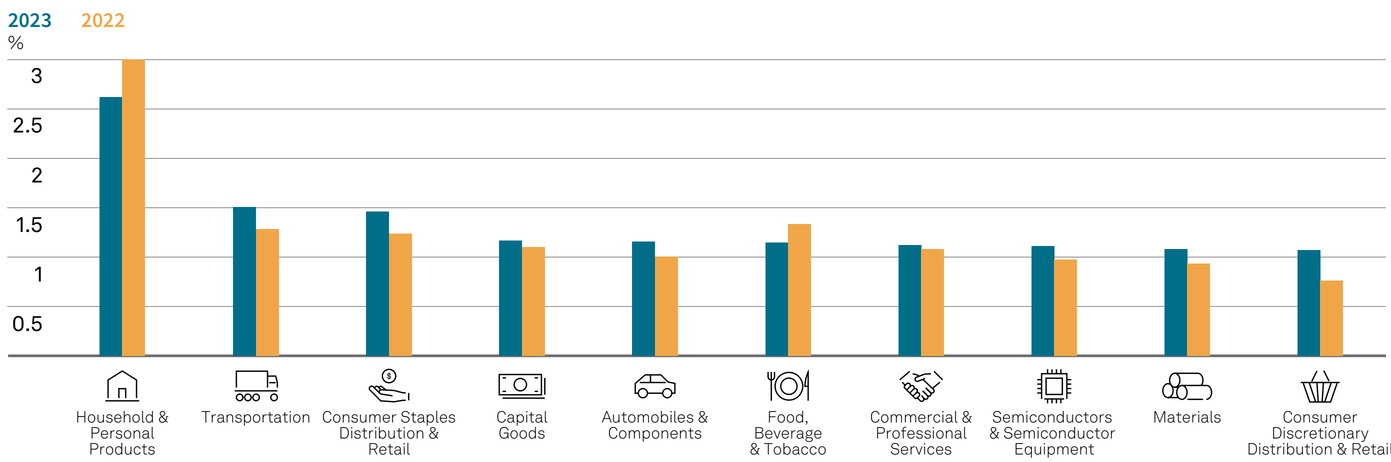
Note: Includes only transactions with positive fees
Source: SPGMI Securities Finance

Top 10 Revenue Generating Stocks

Top Earning Assets	Ticker	Sector	Country	Revenue Generated ($M)
Ecopro Co Ltd	086520	Asia Materials	KR	13.2
Ecopro Bm Co Ltd	247540	Asia Capital Goods	KR	9.9
Abalance Corp	3856	Japan Capital Goods	JP	5.9
Sensetime Group Inc	20	Asia Software & Services	HK	5.1
Snow Peak Inc	7816	Japan Consumer Durables & Apparel	JP	5.1
China Airlines Ltd	2610	Asia Transportation	TW	4.6
Country Garden Holdings Co Ltd	2007	Asia Real Estate Management & Development	HK	1.5
Global Unichip Corp	3443	Asia Semiconductors & Semiconductor Equipment	TW	4.0
Smoore International Holdings Ltd	6969	Asia Food, Beverage & Tobacco	HK	3.9
Evergreen Marine Corp Taiwan Ltd	2603	Asia Transportation	TW	2.8

Source: SPGMI Securities Finance

$ Short Loan Value as a % of Market Cap



Source: SPGMI Securities Finance

EMEA Equities

Average fees and revenues increase across the Nordics

Inflation and interest rates were the leading news stories across Europe during Q2. Inflation remained high throughout the Eurozone and the UK during the quarter and interest rates continued their steady climb higher as a result. In the UK, core inflation data hit its highest level since 1992, after continually coming in above consensus during every month of the quarter. This pushed the Bank of England to respond with further steep interest rate increases. Both central banks ended the quarter with clear statements that bringing inflation back to the 2% target was a priority.

Over the period, equity markets across the region continued to perform well, rising by an average of 10% over H1. Looking towards the second half of the year, the increases in interest rates, a deterioration in economic data and the challenges of tighter monetary policy and recessionary risk may start to have a negative impact upon their performance.

EMEA equities generated $590M in securities lending revenues over the quarter. This represents an increase of 3% YoY and 57% QoQ. Lendable supply increased over the quarter as expected but balances remained significantly lower when compared with Q2 2022 (-16%). The increase in revenues was derived by a stronger average fee (93bps +22% YoY) as lendable supply grew and utilization therefore declined (-19% YoY).

France was the highest revenue generating market over the quarter, representing 24% of all regional revenues. For the first time ever, Sweden matched Germany as the second highest revenue generating market, with $81M of revenues. Interest in Swedish stocks remained strong over the quarter especially across the property sector which pushed revenues higher. This was a common theme across the Nordic region with both average fees and revenues increasing YoY. Switzerland was the other standout market over the quarter, continuing a trend of strong average fees, particularly during April (153bps) and May (61bps) and higher utilization during April.

Specials activity peaked during the month of April ($47M) across EMEA and contributed $131M in revenues over the quarter. The percentage of revenue derived from specials activity increased during Q2, ending the quarter with 22% of all revenues being generated by the lending of EMEA equity specials (average fee greater than 500bps) (circa 1.6% of balances).

Overview

Q2 Revenues
$590M ▲ 3%

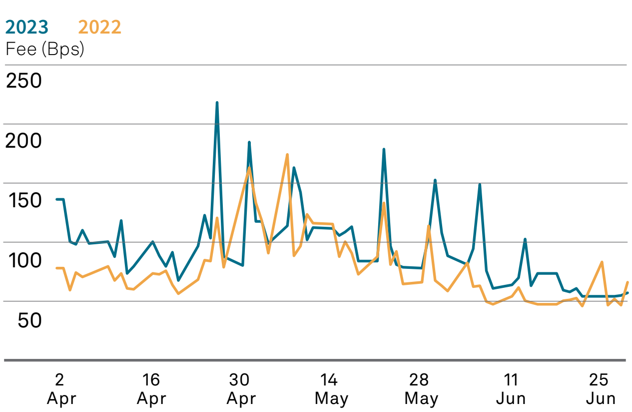
Average on Loan
$250B ▼ -16%

Weighted Average Fee
0.93% ▲ 22%

Average Lendable
$3.4T ▲ 2%

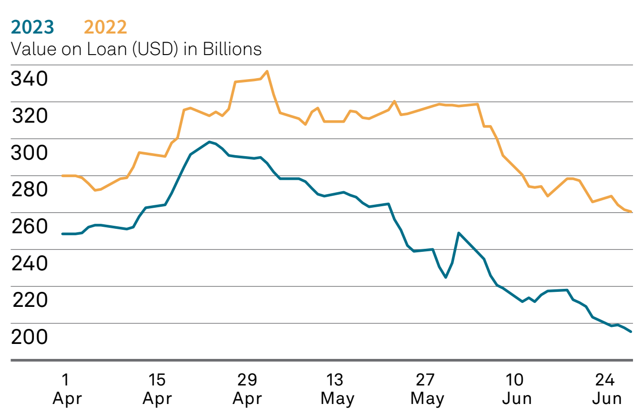
Average Utilization
5.6% ▼ 19%

Q2 Fee Trend



Source: SPGMI Securities Finance

Q2 Balance Trend



Source: SPGMI Securities Finance

Revenues in Switzerland increased 53% YoY	EMEA Volume Weighted Average Fees (VWAF) increased to 93bps	EMEA balances declined by 16% YoY	EMEA utilization declined by 19% YoY

Country Details

Country	Q2 Revenue ($M)	Rev YoY %Chg	Avg Balances ($B)	Bal YoY %Chg	Avg Fee	Fee YoY %Chg	Avg Lendable ($B)	Lendable YoY Chg	Avg Utilization	Util YoY %Chg
France Equity	144	-1%	61.22	-24%	0.89%	30%	629	16%	7.7%	-36%
Sweden Equity	81	6%	22.16	-7%	1.38%	11%	174	-5%	9.8%	1%
Germany Equity	81	-17%	40.00	-22%	0.80%	9%	380	1%	8.5%	-25%
Switzerland Equity	77	53%	33.50	-3%	0.85%	59%	509	-2%	5.0%	-5%
Norway Equity	53	7%	6.37	-14%	3.03%	30%	44	-17%	11.4%	2%
UK Equity	36	0%	29.45	-22%	0.48%	28%	926	-4%	2.4%	-16%
Italy Equity	24	-28%	12.74	-16%	0.74%	-15%	128	4%	7.8%	-19%
Netherlands Equity	23	-18%	16.85	-12%	0.57%	5%	268	6%	4.8%	-19%
Belgium Equity	14	-22%	4.06	-20%	1.30%	0%	46	-3%	7.1%	-19%
Spain Equity	12	12%	8.72	-9%	0.52%	19%	123	7%	5.8%	-11%
Finland Equity	11	34%	4.15	-3%	1.04%	41%	53	-1%	5.8%	0%
Denmark Equity	6	35%	5.45	14%	0.43%	20%	120	2%	3.7%	17%

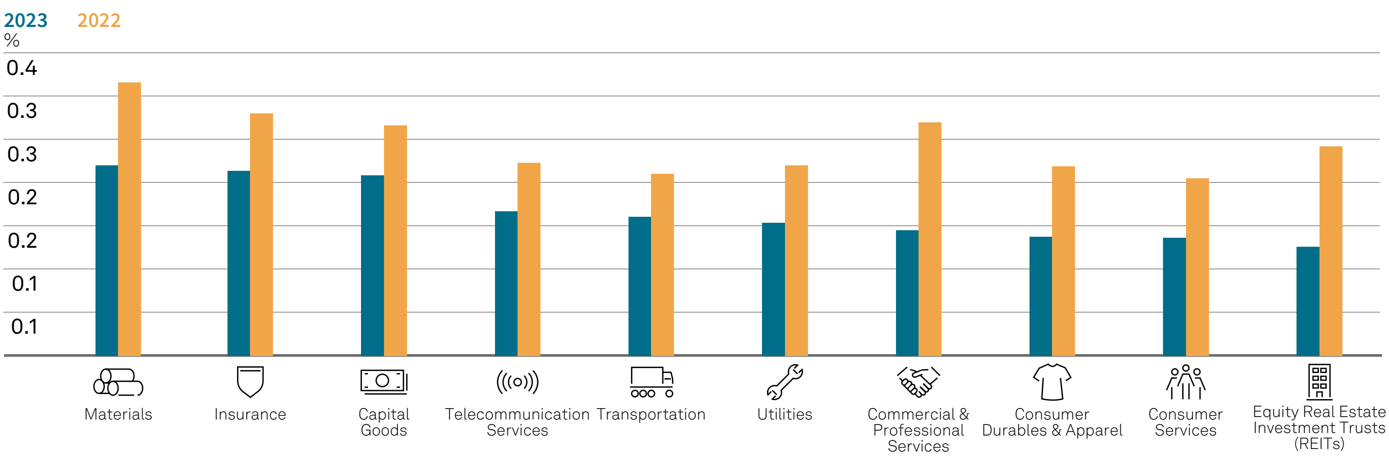
Note: Includes only transactions with positive fees
Source: SPGMI Securities Finance

Top 10 Revenue Generating Stocks

Top Earning Assets	Ticker	Sector	Country	Revenue Generated ($M)
Axa Sa	CS	EMEA Insurance	FR	17.8
Roche Holding Par	ROG	EMEA Pharmaceuticals, Biotechnology & Life Sciences	CH	15.5
Bnp Paribas Sa	BNP	EMEA Banks	FR	14.1
Dnb Bank Asa	DNB	EMEA Banks	NO	13.6
Engie Sa	ENGI	EMEA Utilities	FR	13.4
Sanofi Sa	SAN	EMEA Pharmaceuticals, Biotechnology & Life Sciences	FR	10.7
Volvo Ab	VOLV B	EMEA Capital Goods	SE	10.6
Hapag Lloyd Ag	HLAG	EMEA Transportation	DE	10.2
Yara International Asa	YAR	EMEA Materials	NO	9.9
Idorsia Ltd	IDIA	EMEA Pharmaceuticals, Biotechnology & Life Sciences	CH	9.8

Source: SPGMI Securities Finance

$ Short Loan Value as a % of Market Cap



Source: SPGMI Securities Finance

Americas Equities

US equity specials lead to very special revenue numbers

The emergence of the new AI era blew away any concerns regarding the health of the US banking sector. Stronger big bank results and few signs of market contagion provided investors with a renewed level of confidence. Cost cutting by mega cap tech companies and the expected benefits from the emergence of artificial intelligence sent stock markets increasingly higher over the period.

Despite further interest rate increases and uncertainty regarding the US debt ceiling, the Fed did appear to make inroads into reducing inflationary pressures. Even though expectations for any potential pivot in rate setting policy were being pushed into 2024 by the end of the quarter, the US emerged as the potential winner in the race to curb inflation and complete its hiking cycle. This was demonstrated by the first pause in interest rate rises at the June meeting, after ten consecutive increases.

Across the Americas, US equities were a strong driver of both regional and global revenues over the quarter. Revenues peaked during April at $481M as a result of borrowing interest in AMC. This stock produced an impressive $132.3M during the month as market participants looked to benefit from the merger between the preference and ordinary share lines. The increase in fees driven by this transaction pushed US equity average fees to 98bps over the month which was a 49% increase YoY.

In Canada, revenues also peaked during April, hitting $39.4M. Canada was one of only a handful of markets that experienced an increase in balances over the quarter, peaking in April and declining again out to June. Utilization remained strong, peaking at 8.21% during April and finishing the quarter, during June, at 7.01%.

Specials activity remained key to revenue generation throughout the period with US equities seeing one of the highest quarterly revenues on record. $1.034B of revenues were generated by US specials over the period equating to approximately 79% of all US revenues. Across Canada quarterly specials revenues totaled $27.8M which represents approximately 26% of all revenues.

American Depositary Receipts continued to see an improvement in revenues when compared with 2022. Average fees increased by 27% as a number of consistent specials made a strong contribution to revenues. Xpeng (XPEV), the electric vehicle manufacturer, and United Microelectronics (UMC) were the highest revenue generating ADRs over the quarter, contributing to 24% of all ADR revenues.

Overview

Q2 Revenues
$1.4B ▲ 13%

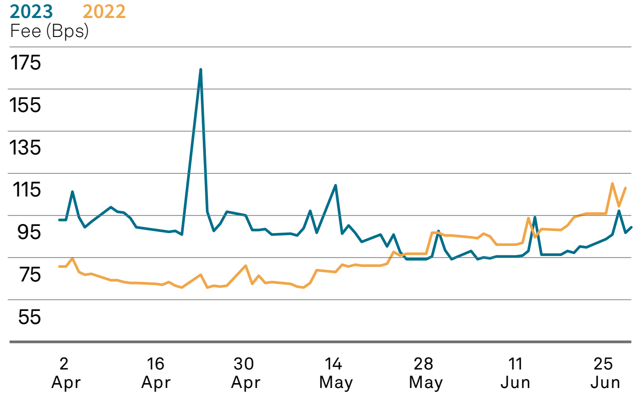
Average Value on Loan
$654B ▼ 2%

Weighted Average Fee
0.86% ▲ 16%

Average Lendable
$17T ▲ 0%

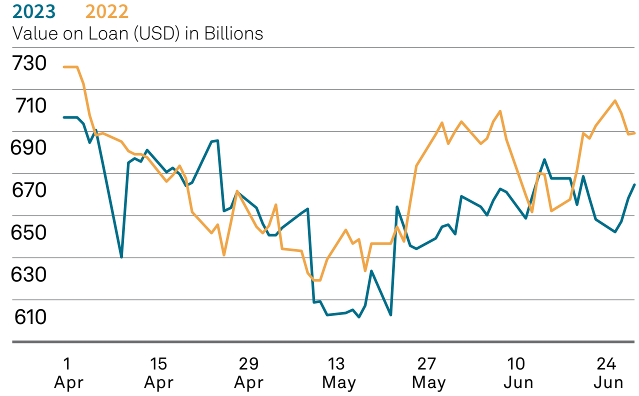
Average Utilization
2.9% ▼ 3%

Q2 Fee Trend



Source: SPGMI Securities Finance

Q2 Balance Trend



Source: SPGMI Securities Finance

US equity special revenues hit $481M

Balances increase across Canada by 13% YoY

AMC generated $229.7M during Q2

Americas equities experienced one of their highest revenue generating quarters on record

Country Details

Country	Q2 Revenue ($M)	Rev YoY %Chg	Avg Balances ($B)	Bal YoY %Chg	Avg Fee	Fee YoY %Chg	Avg Lendable ($B)	Lendable YoY Chg	Avg Utilization	Util YoY %Chg
USA Equity	1,294	13%	587.44	-4%	0.88%	17%	15,983	1%	2.8%	-4%
Canada Equity	104	16%	62.35	13%	0.66%	2%	675	-10%	7.3%	24%
Brazil Equity	8	58%	3.25	68%	1.00%	-6%	2	-6%	13.5%	-30%
Mexico Equity	2	97%	0.9	-6%	1.04%	111%	45	22%	1.8%	-19%
ADR	87	27%	28	0%	1.25%	27%	237	-4%	8.5%	0%

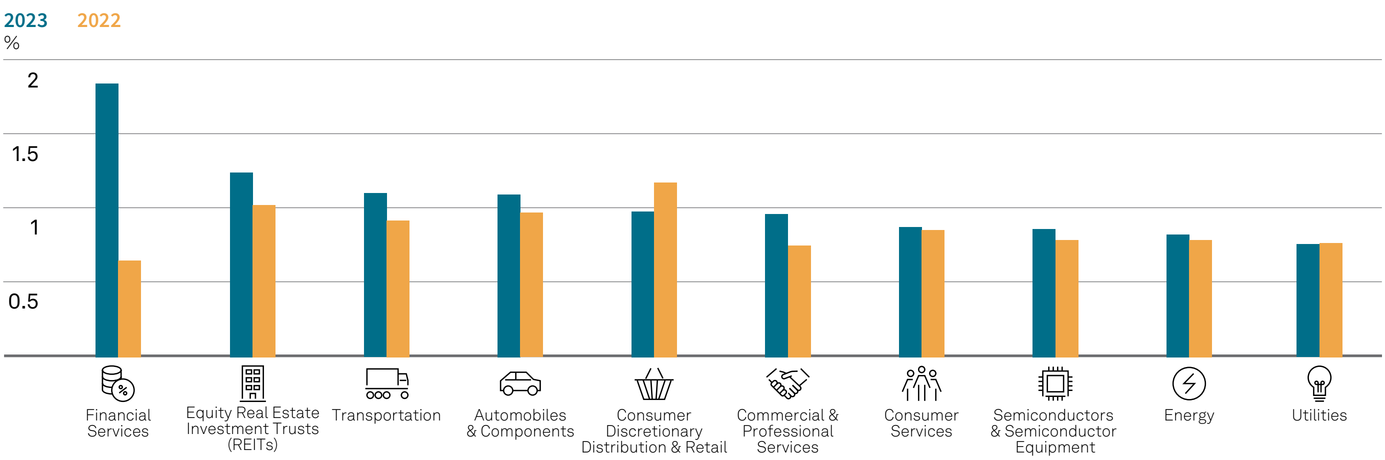
Note: Includes only transactions with positive fees
Source: SPGMI Securities Finance

Top 10 Revenue Generating Stocks

Top Earning Assets	Ticker	Sector	Country	Revenue Generated ($M)
Amc Entertainment Holdings Inc	AMC	North America Media and Entertainment	US	229.7
Upstart Holdings Inc	UPST	North America Financial Services	US	50.7
Lucid Group Inc	LCID	North America Automobiles & Components	US	47.8
C3.Ai Inc	AI	North America Software & Services	US	40.1
Beyond Meat Inc	BYND	North America Food, Beverage & Tobacco	US	38.8
Nikola Corp	NKLA	North America Capital Goods	US	34.3
Fisker Inc	FSR	North America Automobiles & Components	US	33.8
Sirius Xm Holdings Inc	SIRI	North America Media and Entertainment	US	32.1
Gamestop Corp	GME	North America Consumer Discretionary Distribution & Retail	US	28.6
Marathon Digital Holdings Inc	MARA	North America Software & Services	US	22.8

Source: SPGMI Securities Finance

$ Short Loan Value as a % of Market Cap



Source: SPGMI Securities Finance

Exchange Traded Products

Biotech and QQQ trackers dominate the borrowing activity

To the end of the second quarter of 2023, after a slow start to the year, approximately $102B had moved into equity ETFs and approximately $93B into fixed income ETFs. These moves were reflective of an investment environment dominated by a new market optimism. Belief that the Fed may be reaching the end of its recent tightening cycle and a growing obsession surrounding AI, pushed equity markets higher. When compared with the same period during 2022, ETFs flows were markedly weaker. Inflows of nearly $400B had been reported across the asset class by the end of the first half of 2022. Towards the end of the quarter, the race to offer a spot Bitcoin ETF grasped a lot of headlines. This pushed Bitcoin up over the quarter to circa $30,000.

Securities finance revenues declined 35% YoY for exchange traded products. The decline in revenues was due to a fall in average fees (YoY -22%) and a decline in average balances (-17% YoY). Utilization remained above 10% over the quarter but still experienced a drop of 17% as a result of the fall in balances.

Americas ETFs continued to be the dominant force across the asset class, generating 85% of all revenues. Returns continued to decline across all regions over the quarter. Whilst average fees experienced a modest 1% gain in European ETFs, large declines were seen in the American (-23%) and Asian (-52%) equivalents. Many of the drivers that pushed ETF revenues to one of their best performances ever last year continued to weaken. During Q2, there was a strong focus upon the Biotech sector and QQQ ETF products.

Overview

Q2 Revenues
$155M ▼ -35%

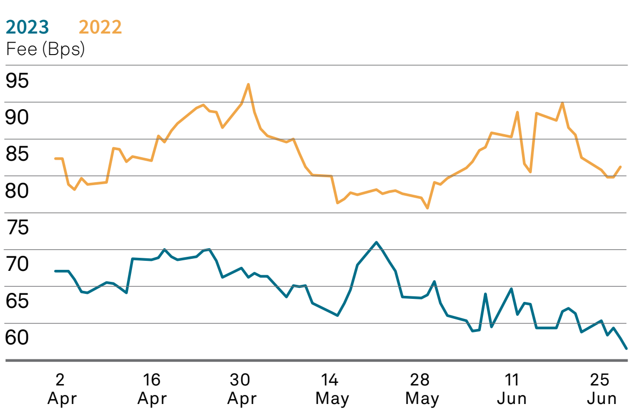
Average Balances
$96B ▼ -17%

Weighted Average Fee
0.64% ▼ -22%

Average Lendable
$461B ▲ 1%

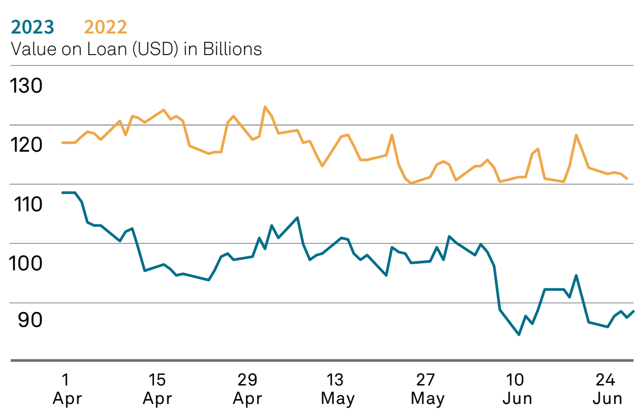
Utilization
10.3% ▼ -17%

Q2 Fee Trend



Source: SPGMI Securities Finance

Q2 Balance Trend



Source: SPGMI Securities Finance

SPDR S&P Biotech (XBI) generated highest revenues over the quarter	Revenues declined by 35% YoY	American ETFs continued to dominate demand	European ETFs lendable supply increased by 6% YoY

Regional Details

Regional	Q2 Revenue ($M)	Rev YoY %Chg	Avg Balances ($B)	Bal YoY %Chg	Avg Fee	Fee YoY %Chg	Avg Lendable ($B)	Lendable YoY Chg	Avg Utilization	Util YoY %Chg
Americas ETFs	133	-35%	89.85	-16%	0.59%	-23%	313	-2%	14.1%	-14%
European ETFs	16	-34%	4.48	-34%	1.47%	1%	85	6%	3.2%	-39%
Asia ETFs	3	-55%	1.15	-8%	0.93%	-52%	4	-22%	9.0%	-16%

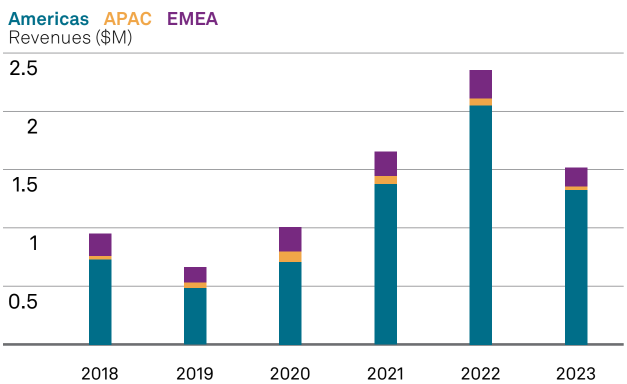
Note: Includes only transactions with positive fees
Source: SPGMI Securities Finance

Top 10 Revenue Generating Stocks

Top Earning Assets	Ticker	Country	Sector	Revenue Generated ($M)
Spdr S&P Biotech Etf	XBI	Equity	US	11.8
Ishares Iboxx High Yield Bond Etf	HYG	Fixed Income	US	7.9
Invsc Senior Loan Etf	BKLN	Fixed Income	US	7.7
Ishares Russell 2000 Etf	IWM	Equity	US	6.5
Proshares Ultrapro Qqq Etf	TQQQ	Equity	US	4.7
Ark Innovation Etf	ARKK	Equity	US	4.1
Invsc Solar Etf	TAN	Equity	US	3.9
Spdr S&P 500 Etf	SPY	Equity	US	3.6
Invsc Qqq Trust Srs 1 Etf	QQQ	Equity	US	2.7
Ishares National Muni Bond Etf	MUB	Fixed Income	US	2.1

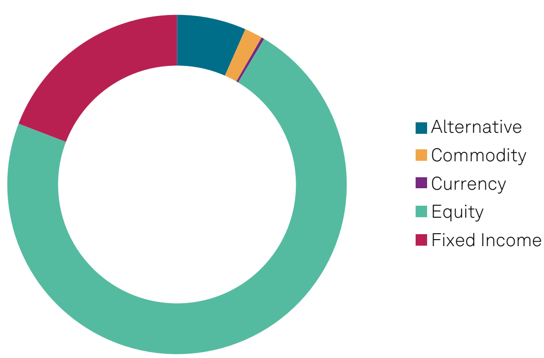
Source: SPGMI Securities Finance

Q2 Lending Revenues by Region



Source: SPGMI Securities Finance

Q2 Lending Revenues by Asset Class



Source: SPGMI Securities Finance

Corporate Bonds

Investment Grade Corporate Bonds see highest revenues

Against the backdrop of increasing interest rates and a weakening economic environment, investment grade corporate bond yields reached a near 20-year high over the quarter. Despite this move in yields, short term investment grade corporate bonds started to offer little yield advantage over Treasuries as the central banks continued to hike.

Yields offered by high yield corporate bonds either declined slightly or remained flat over the quarter. This was despite the issues experienced in the banking sector, the debt ceiling discussions, and an increase in interest rates. Throughout the majority of Q2, economic data, whilst slowly starting to soften in some parts of the world, remained healthy, especially in the US, with no clear deterioration in corporate earnings, and positive GDP growth.

Towards the end of the quarter a change in investor sentiment did start to take hold. A shift in economic sentiment started to creep into the asset class with an expectation of a fall in earnings, a potential economic slowdown and higher default rates. This in turn led investors to question both credit quality and price.

Corporate bond revenues continued their strong performance throughout Q2, matching the revenues generated during Q1 2023. Average fees remained steady throughout the quarter as did balances. Stronger fees and weaker balances YoY suggest the development of a more specials orientated market within the corporate bond sector which is not surprising in the current economic environment. Given that the pace of interest rate increases is now slowing, investor focus is shifting onto specific sectors / companies within the asset class as interest rate hikes begin to take their toll on company finances and conditions for refinancing become more restrictive.

Overview

Q2 Revenues
$296M ▲ 28%

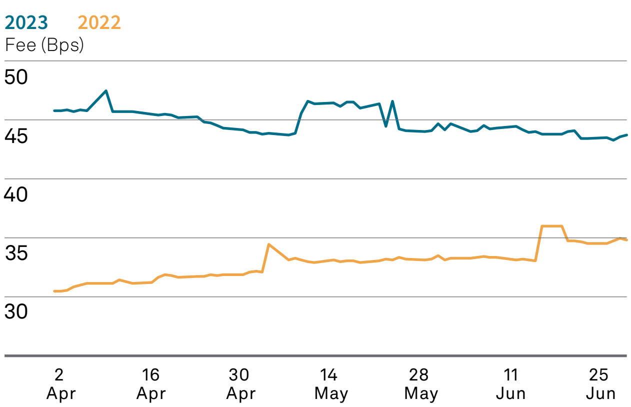
Average Balances
$265B ▼ -6%

Weighted Average Fee
0.45% ▲ 37%

Average Lendable
$3.9T ▼ -6%

Average Utilization
5.8% ▲ 0%

Q2 Fee Trend



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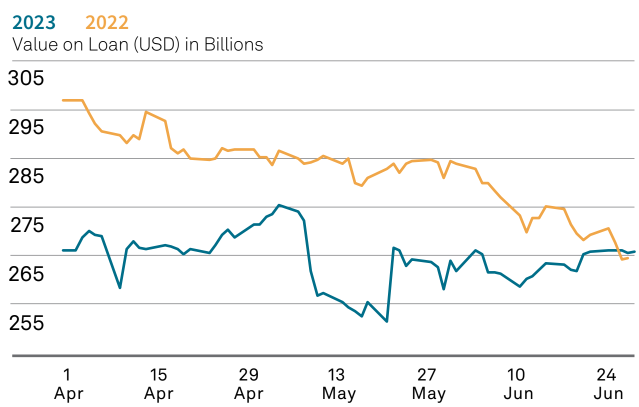
Q2 Balance Trend



Source: SPGMI Securities Finance © 2023 S&P Global Market Intelligence

Revenues increased by 28% YoY to $296M	Investment grade bonds generated the strongest returns over the quarter	USD denominated corporate bonds continued to dominate demand	Volume Weighted Average Fee (VWAF) of 45bps

Asset Class Details

Asset Class	Q2 Revenue ($M)	Rev YoY %Chg	Avg Balances ($B)	Bal YoY %Chg	Avg Fee	Fee YoY %Chg	Avg Lendable ($B)	Lendable YoY Chg	Avg Utilization	Util YoY %Chg
Conventional Bonds	281	31%	261.67	-5%	0.43%	39%	3,602	-4%	6.3%	-1%
Convertible Bonds	15	-12%	2.99	-51%	2.07%	78%	41	-26%	5.1%	-26%
Asset Backed Securities	0.1	-3%	0.24	-16%	0.21%	16%	295	-22%	0.1%	15%

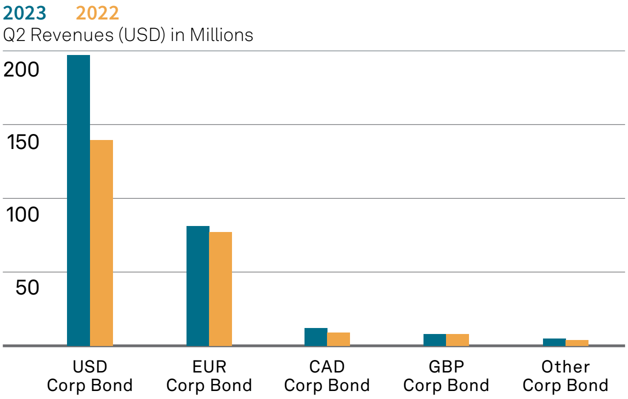
Note: Includes only transactions with positive fees
Source: SPGMI Securities Finance

Top 10 Revenue Generating Bonds

Top Earning Assets	CUSIP	Denomination	Asset Class	Revenue Generated ($M)
3M Co (4% 14-Sep-2048)	88579YBD2	USD	I.G. Corp Bond (Fixed Rate)	3.5
Microchip Technology Inc (0.125% 15-Nov-2024)	595017AU8	USD	N.I.G. Conv Bond (Fixed Rate)	2.8
Mph Acquisition Holdings Llc (5.75% 01-Nov-2028)	553283AC6	USD	Priv. Placemt Corp Bond (Fixed Rate)	2.1
Canada Housing Trust No 1 (2.9% 15-Jun-2024)	13509PEF6	CAD	I.G. Corp Bond (Fixed Rate)	1.7
Brand Industrial Services Inc (8.5% 15-Jul-2025)	10524PAB6	USD	Priv. Placemt Corp Bond (Fixed Rate)	1.6
Dexcom Inc (0.25% 15-Nov-2025)	252131AK3	USD	N.I.G. Conv Bond (Fixed Rate)	1.4
Avis Budget Car Rental Llc (5.375% 01-Mar-2029)	053773BF3	USD	Priv. Placemt Corp Bond (Fixed Rate)	1.4
Biomarin Pharmaceutical Inc (1.25% 15-May-2027)	09061GAK7	USD	N.I.G. Conv Bond (Fixed Rate)	1.4
Ford Motor Co (4.346% 08-Dec-2026)	345370CR9	USD	N.I.G. Corp Bond (Fixed Rate)	1.3
Fluor Corp (4.25% 15-Sep-2028)	343412AF9	USD	N.I.G. Corp Bond (Fixed Rate)	1.3

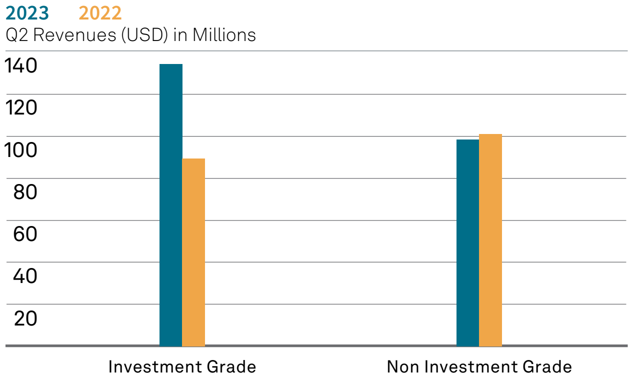
Source: SPGMI Securities Finance

Q2 Revenues by Denomination



Source: SPGMI Securities Finance

Q2 Revenues by Ratings Category



Source: SPGMI Securities Finance

Government Bonds

Short-dated bonds remain popular borrows

Government bond investors braced themselves for continued volatility heading into the second quarter of the year. The rapid and relentless pace of interest rate hiking continued throughout the quarter, leading to choppy trading and ongoing market volatility.

Q2 started with clear signs of easing inflation across the US and Europe with markets looking for signals of a slow down or pause in central bank hiking cycles. Economic data was scrutinized for signs of labor market weakness and a fall in wage growth as investors looked for guidance as to the likelihood of a soft landing or pending recession. As the quarter progressed, divergence between global economies and central bank landing zones started to widen. With the exception of the Bank of Japan, most central banks continued to increase interest rates over the quarter and government bond yields continued to rise as a result. Inflation in the UK continued to surprise investors and during the second quarter, yield on the 2-year Gilt hit its highest level for 15 years. US Treasuries experienced volatility towards the end of the quarter as the debt ceiling discussions went down to the wire. In the Eurozone, the European Central Bank continued to hike interest rates and announced in May that it expected to end reinvestments under their Asset Purchase Program from July 2023. Eurozone benchmark government bond yields moved higher as a result.

Government bond lending experienced another strong quarter generating $484M in revenues. May saw the highest revenues ($167M) as the impact of the US debt ceiling standoff was played out in the securities finance markets. During May, average fees reached a multiyear high of 19bps (+40% YoY). Over the quarter balances declined YoY and QoQ as did utilization. Lendable assets across all Government bonds increased 4% however as the lendable supply in US Government bonds increased (+8%). Average fees for UK Gilts increased over the quarter (+12% YoY) but revenues declined (-22% YoY). Gilt revenues declined over the period and failed to continue the strong outperformance experienced throughout Q1.

Overview

Q2 Revenues
$484M ▲ 9%

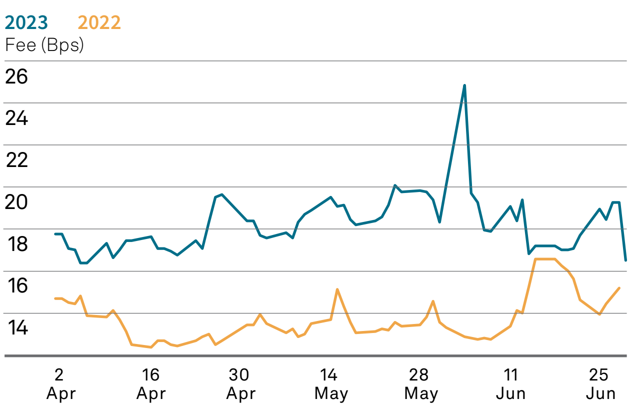
Average Balances
$1065B ▼ -18%

Weighted Average Fee
0.18% ▲ 33%

Average Lendable
$4.2T ▲ 4%

Utilization
20% ▼ -25%

Q2 Fee Trend



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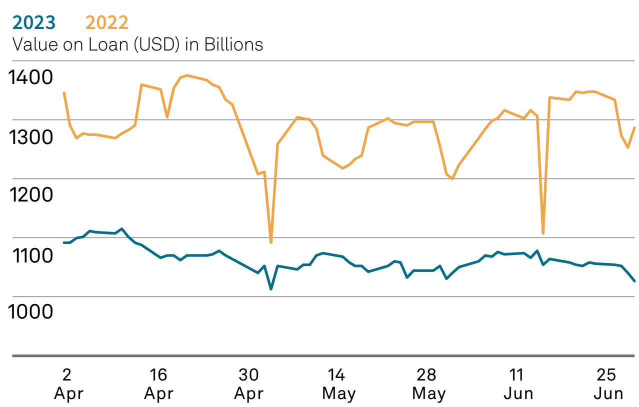
Q2 Balance Trend



Source: SPGMI Securities Finance © 2023 S&P Global Market Intelligence

US treasury average fees benefitted from debt ceiling discussions	Revenues increased by 9% YoY	Short-dated government bonds remained in demand throughout the quarter	Volume Weighted Average Fee (VWAF) increased by 33% YoY to 18bps

Issuer Region Details

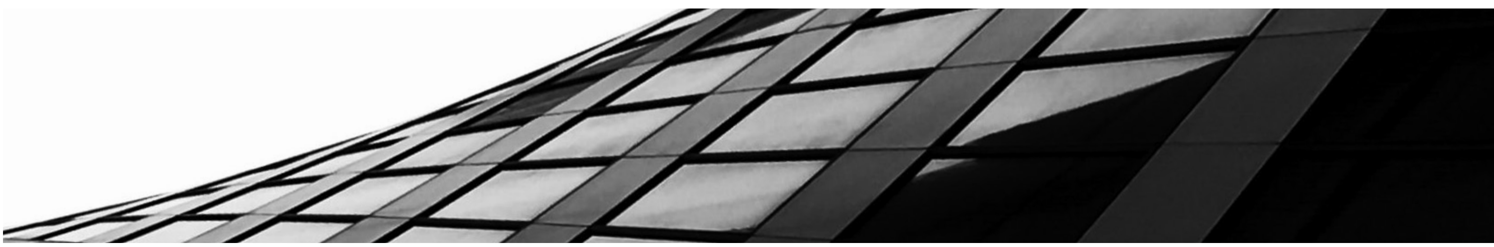
Region	Q2 Revenue ($M)	Rev YoY %Chg	Avg Balances ($B)	Bal YoY %Chg	Avg Fee	Fee YoY %Chg	Avg Lendable ($B)	Lendable YoY Chg	Avg Utilization	Util YoY %Chg
Americas	293	12%	654.19	-22%	0.18%	43%	2,969	6%	18.9%	-29%
Europe	165	4%	358.55	-12%	0.18%	17%	1,061	0%	23.6%	-16%
Asia	26	21%	52.30	7%	0.20%	13%	141	13%	16.2%	3%

Note: Includes only transactions with positive fees
Source: SPGMI Securities Finance

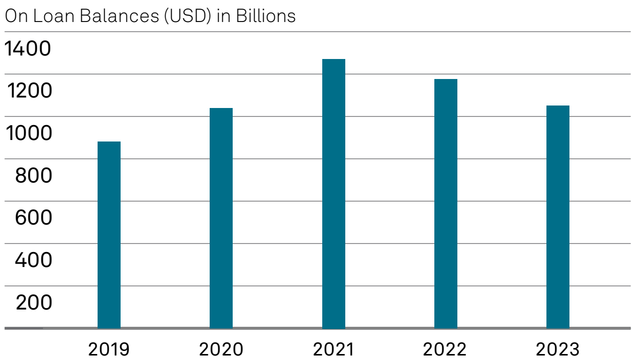
Top 10 Revenue Generating Bonds

Top Earning Assets	CUSIP	Denomination	Country	Revenue Generated ($M)
United States Treasury (0% 28-Dec-2023)	912796ZN2	USD	US	10.3
United States Treasury (3.375% 15-May-2033)	91282CHC8	USD	US	6.9
United States Treasury (0% 30-Nov-2023)	912796ZD4	USD	US	9.1
United States Treasury (0% 30-May-2023)	912797FG7	USD	US	3.6
United States Treasury (3.875% 15-May-2043)	912810TS7	USD	US	2.9
Canada (Government) (2% 01-Dec-2041)	135087YK4	CAD	CA	2.5
United States Treasury (3.625% 31-Mar-2028)	91282CGT2	USD	US	2.5
United States Treasury (1.375% 15-Nov-2031)	91282CDJ7	USD	US	2.4
United States Treasury (0% 02-Nov-2023)	912796YT0	USD	US	2.3
United Kingdom Of Great Britain And Northern Ireland (Government) (4.25% 07-Jun-2032)	G4527HJJ1	GBP	UK	2.8

Source: SPGMI Securities Finance

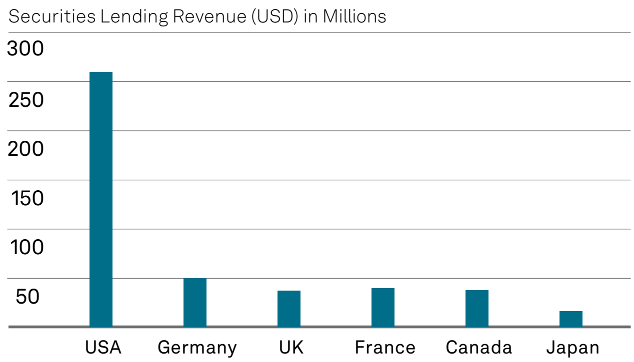


Q2 Government Bond Balances



Source: SPGMI Securities Finance

Q2 Revenues by Issuers



Source: SPGMI Securities Finance

Author Biography

Director securities finance

Matt Chessum
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Matt Chessum is a director within the securities finance team at S&P Global Market Intelligence. Previously, for over ten years, Matt was an Investment Director at abrdn where his main responsibilities included overseeing the securities lending activity and the management of GBP denominated Money Market mandates.

Matt also worked at BNP Paribas Securities Services as a securities lending trader as well as Barclays Global investors and BNP Paribas Securities Services in Paris, as a member of the securities lending back and middle office teams. His main responsibilities included settlements, collateral management and reconciliations.

Matt is a former member of the Bank of England's securities lending committee and a former board member of the International Securities Lending Association (ISLA).

Matt has a BA (Hons) in European Business from the University of Portsmouth and a Maitrise from the École Supérieure de commerce in Bordeaux.

For more information on how to access this data set, please contact the sales team at:

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