

Securities Finance H2 2021 review



H2 2021



Welcome to the H2 2021 securities lending market review. A very happy New Year to all our customers and friends and our best wishes for a healthy, prosperous, and successful 2022.

H2 generated \$5.45 billion in securities finance revenue, an increase of 19%

YoY and the largest yearly revenue

since 2008. There were a variety of drivers behind the strong performance, most notably increased fees and balances in APAC Equities and strong growth in demand for ETPs and ADRs. Equities specials balances declined in EMEA and Americas, while corporate and government bond lending saw a significant increase in balances and revenues.

Over the second half of the year, the securities finance team have shown commitment to delivering innovative, relevant, and timely initiatives for our customers:

AWS migration

- We migrated our products and services to the cloud in December 2021 through our partnership with Amazon Web Services (AWS) to transform our technology capabilities. With the rapid increase in the velocity and volume of data delivery requirements, this is a significant step in our technology transformation. Utilizing cloud-based technology brings improved resiliency and scalability of our infrastructure, reduces business and operational risk, and implements state-of-the-art security policies and controls.

Data depth and breadth

- Our dataset continues to broaden and deepen. Lendable value reached an all-time high of \$37 trillion in H2, while loan balances topped \$3.1 trillion. Over \$2.6 trillion of the lendable inventory and \$122 billion in loan balances came from new data contributors. Intraday coverage increased by 60% as compared to this period in 2020, and now represents over 65% of all settled transactions. We improved our public disclosure offering by extending the history and depth of the HKEX and US exchange short interest.

Third party alliances

- We entered into several key alliances to broaden the accessibility of our data through third party platforms. Our partnership with Hazeltree expanded to make our data available within their Treasury and Portfolio Finance platform. Our alliance with SIG Tech facilitates quantitative and multi-asset research for mutual clients, while our agreement with TS Imagine integrates our web portal and raw data into their OMS/EMS platform.

The team has also worked hard to maintain frequent and open communications with our customers. Although most of us are still in a hybrid/remote work model, we remain ready and willing to meet with you in all virtual and in-person formats to ensure you maximize the value from our data, analytics, and insight.

Finally, I am pleased to announce that we are hosting two thought leadership forums this year, one each in London and New York. Details are forthcoming and we look forward to once again gathering with our clients to present relevant and timely industry topics. I hope to see you there!

As we look ahead to 2022 and beyond, I would like to offer a sincere thank you to our customers for your continued trust in us. We remain very grateful for the opportunity to be your securities finance data and analytics partner.

Kind regards,

Paul R. Wilson

Managing director and global head of
Securities Finance, IHS Markit

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Securities Finance H2 2021 Snapshot

Securities finance revenue \$5.45bn in H2 2021, most yearly revenue since 2008

- H2 revenues increase 19% YoY
- ETP balances hit all-time high
- USD Corporate bond revenues lead the ascension
- Americas and EMEA equities specials balances in decline

Global securities finance revenue reached \$5.45bn in the second half of 2021, an increase of 19% YoY. While the utilization of lendable assets remained flat compared to H2 2020, the average loan balance increased by more than 30% YoY, the highest observed since the start of the pandemic. Fee spreads continued to decrease globally, with an 8% YoY drop, although Asian equities gained a substantial 49% increase in average fees, partly led by the surge of specials balances in the Taiwan and South Korean equities markets. Americas equities specials balances fell by 21% compared to H1 2021 and even with dividend reinstatement, EMEA equities specials balances dropped by 32% YoY. ETPs, ADRs and Corporate bond markets delivered the best YoY performances, driven by an increase in loan balances.

GLOBAL SECURITIES FINANCE REVENUE - H2 2021

Asset Class	H2 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	\$5,450	19%	\$2,781	30%	0.39%	-8%	\$36,824	32%	6.2%	0%
All Equity	\$4,290	17%	\$1,244	28%	0.68%	-8%	\$27,187	41%	3.4%	-7%
Americas Equity	\$1,804	-5%	\$665	40%	0.54%	-32%	\$19,220	46%	2.7%	-5%
Asia Equity	\$1,158	64%	\$224	10%	1.03%	49%	\$2,852	24%	4.3%	1%
EMEA Equity	\$699	-1%	\$205	7%	0.67%	-7%	\$4,111	43%	4.0%	-18%
ADR	\$175	55%	\$42	28%	0.84%	25%	\$362	-4%	8.7%	17%
ETP	\$330	65%	\$100	57%	0.66%	5%	\$507	36%	11.9%	8%
Government Bond	\$823	18%	\$1,253	30%	0.13%	-9%	\$4,385	16%	25.3%	9%
Corporate Bond	\$310	55%	\$260	46%	0.24%	6%	\$4,873	6%	5.0%	39%

Note: Includes only transactions with positive fees

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Americas equity finance revenues came in at \$1.8bn for H2 2021, a 5% YoY decline. Americas specials balances also fell short compared to H2 2020, partly due to a decrease of fee-spread for Canadian equities, down 33% YoY. Whilst the highlighted interest around US IPOs was less pronounced in comparison to the past two years, Robinhood Markets Inc. (HOOD) was a key performer in H2 2021, with \$121m of revenues and ranking among the largest IPO revenue generators in the past two years.

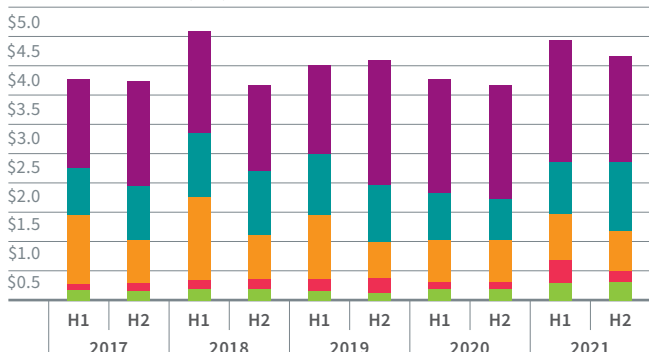
Equity finance revenues in Europe dropped in the second half of 2021, failing to cross the \$700bn mark, driven by low equities specials balances in the region. Lendable assets were on the rise, with an increase of 43% YoY. However, the utilization of these assets failed to match the pace and declined by more than 18%. Two key markets in the region, the UK and Germany, declined in revenues, recording -22% and -45% YoY changes respectively. On the other hand, France's equity finance revenues doubled compared to H2 2020, topping \$229m in revenues. A significant contributor to France's sharp increase was driven by the Vivendi Se spin-off. In the second half 2021, the event generated \$130m in revenues, accounting for 57% of the returns generated in France, and 19% of the European region.

Across equities globally, the APAC region delivered the strongest revenue performance in H2 2021. With a 64% increase YoY with \$1.1bn in revenues, Asian equities displayed an outstanding performance, almost doubling EMEA equity revenues. This is attributed to a series of factors, the most notable being the increase in specials balances, which led to a 49% YoY average fee-spread increase. The lift of short sale bans led to a stellar performance in both Taiwan and South Korea equities, while the rest of the region benefitted from new opportunities through IPOs and high demand on the technology sector. Names like Kraftron Inc, Lg Display Co Ltd, and Au Optonics Corp were among the top 10 revenue generating names, while the real estate company China Evergrande Group was the top earner in the region, contributing \$25.86m in revenue.

EQUITY FINANCE REVENUE BY REGION

AMERICAS APAC EMEA ADR ETF

Semi-annual Balances (\$bn)



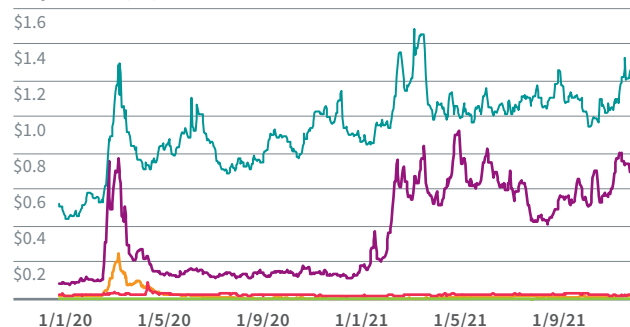
Source: IHS Markit Securities Finance

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DAILY ETP FINANCE REVENUES BY ASSET CLASS

EQUITY FIXED INCOME ALTERNATIVE COMMODITY CURRENCY

Daily Revenue (\$M)



Source: IHS Markit Securities Finance

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Global ETP lending revenues were \$330m for H2, an all-time high record, representing a 65% YoY increase. Revenues performed consistently each month throughout the period, with December being the top revenue generating month, crossing the \$60m mark. Return drivers varied, the most significant of which was linked to the increase in loan balances, reaching \$100bn for the first time and accounting for a 57% YoY increase. Fixed income ETP lending generated \$107m in H2, representing 34% of global ETP returns. Lending of both equity and fixed income ETPs saw surging revenues compared to previous periods, with 9 of the 10 top revenue generating assets being US ETPs. iShares iBoxx \$ HY Corporate Bond Fund continued to lead as the top earner, with \$48m generated in H2 2021, 15% of ETP total returns.

Depository receipts returns saw a surge in H2 2021, reaching \$223m in revenue, a 68% YoY increase. ADRs represented 78% of the total Depository Receipts revenues with \$175m generated, a 55% YoY increase. The surge in revenues for this period is due to the increase in specials balances, up by 17% YoY. Average fee spreads increased by 25% YoY due primarily to the growing lending revenues in Asian ADRs, up by 88% YoY.

Corporate bond lending revenues continued their upward trend in the second half of 2021, reaching \$310m in H2. With a 55% YoY increase, H2 2021 marks the highest lending revenue for corporate bonds since the start of the pandemic. Q4 delivered an exceptional performance, with December revenues reaching \$62m, the highest monthly revenue since August 2018. Average lending fees were down by 6% YoY in Q3 and increased by 18% in Q4, while loan balances reached \$260bn, the highest since the 2008 financial crisis. USD Corporate bonds drove this ascension, growing by more than 85% YoY, while HY Corporate bonds generated \$140m during the second half of 2021.

Fee-based revenue for government bond lending came in at \$823m for H2, the largest since H1 2018, and up 18% YoY. Government bond borrow demand remained robust, with \$1.25tn in positive-fee global balances for H2, reflecting a 30% YoY increase. Securities finance returns from lending US Treasury securities in H2 2021 represented 55% of the positive fee-spread income in H2 2021. Revenues from lending European sovereigns were \$275m, up by 17% YoY and were driven by the highest average balances since 2019. The most revenue generating bond was the UST 10Y due Feb 2031, which led the rankings as the top earning government bond in H2 2021, albeit delivering the same amount of revenue as in March 2021.

Conclusion:

H2 2021 global revenues mark a new post-pandemic record for many asset classes which in previous years had displayed a downward trend. Emerging markets were a key driver for APAC revenues, while European and US markets benefitted from trade deals, spin-offs, and a surge of SPACs, leading to a higher performance globally. Global specials balances fell short YoY, due to a lower demand in the US and Europe, but the surge of ADRs and APAC specials reduced the overall downtrend. The stellar performance of exchange traded products and corporate bonds delivered considerable returns, with more diversification in top earning assets compared to previous years. The year ended on a high note for corporate bonds, with December generating the most revenue for any month in 2021.

APAC Equity

Taiwan on Top

The second half of 2021 continued a buoyant run for Asian equity finance revenue. H2 delivered \$1.15bn for the region, up 64% YoY, driven by increasing borrow demand for emerging market Asian equity specials. An increase from 2020 was not unexpected given the end of a short selling ban in South Korea in May 2021. However, total revenue exceeding \$1bn in the second half of the year was only the third time APAC equity has reached this milestone in the past 10 years and the largest half year revenue total in that time.

The surge in H2 revenue was driven by a 10% YoY increase in loan balances and a 49% YoY increase in fees. The weighted average fee for Asian equities between July and December was 1.03%, and the only asset class in this H2 review that demanded an average borrow cost >1%.

Taiwan soared above Japan and Hong Kong as the most revenue generating market for the first time in our records, with supercharged revenues of \$310m, a 239% YoY increase. Four of the top 10 revenue generating stocks in the APAC region were listed in Taiwan, reflecting the demand for EM specials. The average fee for Taiwan equities was 2.59%, with Au Optronics, Novatek and Innolux each generating more than \$20m of equity finance revenue over the H2 period.

South Korea was not far behind Taiwan with revenues totalling \$225m, a 235% YoY increase. The removal of any remaining short selling bans in May pushed the average loan balance to \$18bn across H2, a 119% YoY increase, while fees increased by 55% YoY to reach 2.48%. Tech stocks looking to list have provided an opportunity to boost revenues and game developer Krafton generated \$16.95m in H2.

China Evergrande topped the list of APAC's highest revenue generators with \$25.86m. One of the region's largest property developers, it saw short demand across equity and corporate debt as new regulations to cool the market impacted their highly leveraged business model. Wh Group Ltd was one

Overview



H2 Revenues

\$1.15B ▲ **64%**



Average Balances

\$224B ▲ **10%**



Weighted Average Fee

1.03% ▲ **49%**



Average Lendable

\$2.8T ▲ **24%**



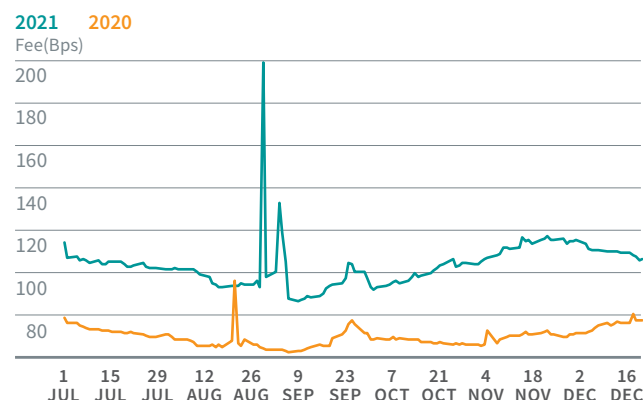
Utilization

4.3% ▲ **1%**

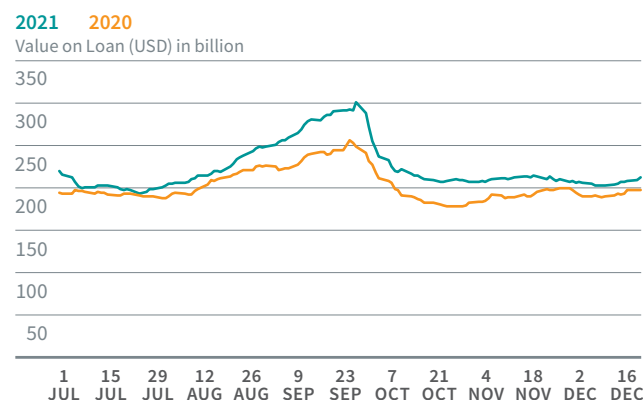
of many equities to offer a share repurchase program and presented an opportunity for H2 equity finance revenue that delivered \$19.69m, causing a notable spike in borrow demand and fees in September.

Demand has not kept pace with supply in APAC's largest equity market, which saw Japan produce revenues of \$260m and slip to second place below Taiwan in the H2 2021 revenue table. The revenue shortfall was driven by a 9% decline in loan balances and a 14% drop in utilisation compared to the same period in 2020. Singapore equity was the only other market to see equity finance revenues fall in the APAC region.

H2 FEE TREND



H2 BALANCE TREND



OVERVIEW

Asian equities delivered a record H2 revenue total

Taiwan became the top revenue generating market in APAC for the first time

Loan balances in South Korea rebounded with the removal of short selling bans

China Evergrande Group was the most revenue generating equity in the region

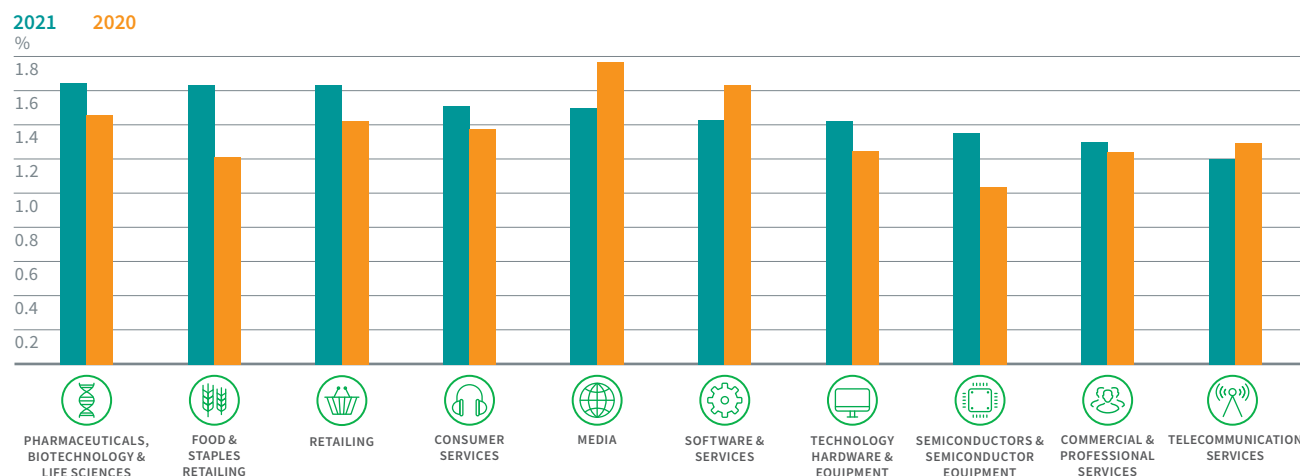
COUNTRY DETAILS

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
Taiwan Equity	310	239%	24	96%	2.59%	71%	115	63%	10.3%	92%
Japan Equity	260	-15%	116	-9%	0.43%	-9%	1,265	23%	3.9%	-14%
Hong Kong Equity	252	53%	41	17%	1.21%	32%	683	13%	4.4%	-4%
South Korea Equity	225	235%	18	119%	2.48%	55%	192	20%	5.2%	104%
Australia Equity	62	24%	21	26%	0.59%	-3%	466	38%	4.1%	3%
Malaysia Equity	19	197%	1	0%	6.39%	221%	13	11%	3.9%	27%
Singapore Equity	13	-12%	2	-19%	1.50%	20%	60	25%	2.1%	-50%
Thailand Equity	12	105%	1	57%	3.07%	30%	18	16%	4.0%	58%
New Zealand Equity	3	89%	1	22%	0.72%	54%	12	5%	6.2%	10%

TOP 10 REVENUE GENERATING STOCKS

Instrument Name	Ticker	Sector	Country	Revenue Generated (\$)
China Evergrande Group	3333	Real Estate	HK Equity	25.86
Au Optronics Corp	2409	Technology Hardware & Equipment	TW Equity	23.89
Lg Display Co Ltd	034220	Technology Hardware & Equipment	KR Equity	23.47
Hmm Co Ltd	011200	Transportation	KR Equity	22.24
Novatek Microelectronics Corp	3034	Semiconductors & Semiconductor Equipment	TW Equity	22.22
Innolux Corp	3481	Technology Hardware & Equipment	TW Equity	20.43
Wh Group Ltd	288	Food, Beverage & Tobacco	HK Equity	19.69
Krafton Inc	259960	Media and Entertainment	KR Equity	16.95
Acer Inc	2353	Technology Hardware & Equipment	TW Equity	12.20
China Evergrande New Energy Vehicle Group Ltd	708	Health Care Equipment & Services	HK Equity	11.86

AVERAGE % OF SHARES ON LOAN



EMEA Equities

Scarcity of Specials

European equity lending revenues were flat in the second half of 2021, achieving \$699m, down 1% YoY. Revenues are typically lower in H2 in Europe, as we saw the reinstatement of dividends boost revenue opportunities in H1. However, between July and December the utilization of available assets was 4%, a decline of 18% YoY. This was impacted by the lack of specials demand across Europe, relying on a familiar group of stocks throughout the year. Average fees for European equities were 0.67%, a 7% drop from H2 2020. Lendable assets grew even further in H2, hitting a new peak of \$4.1tn.

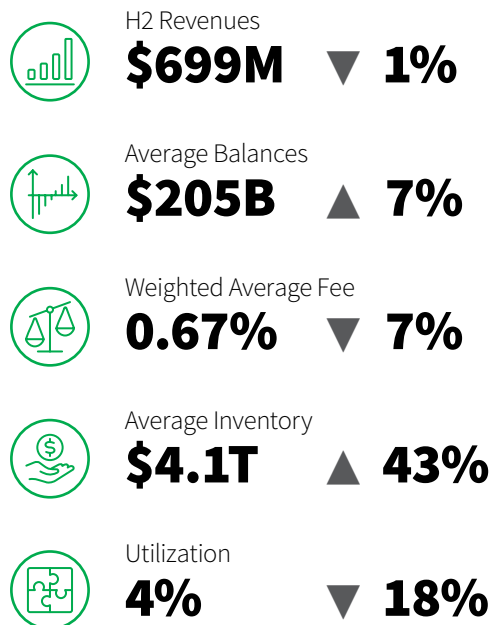
French equity finance revenues dominated the region by generating \$229m, up 106% YoY. However, this result was driven by the Vivendi Se (VIV) and Universal Music Group Nv (UMG) spin-off trade in September. Vivendi revenue of \$130m contributed 57% of the total for France and almost 20% of the total across Europe. Outside of traditional borrow demand for short selling, this highlights how corporate events such as spin-off transactions, where security lenders take a portion of the arbitrage profits, can be highly lucrative in boosting equity finance revenues.

Revenue in Germany declined 45% YoY to \$104m with average fees down to 0.64%, a 52% drop from H2 2020. Sustained borrow demand for Deutsche Lufthansa and Varta Ag maintained financing revenue and kept these stocks in the top 10.

UK revenue also had a quiet H2 generating \$65m, a 22% YoY decrease. A third of the UK total was driven by Tui Ag and partly related to the firm's outstanding convertible debt. Elsewhere in the UK, average fees were down 20% YoY to 0.42% and the 2.1% utilization of lendable assets was the lowest in EMEA equity markets.

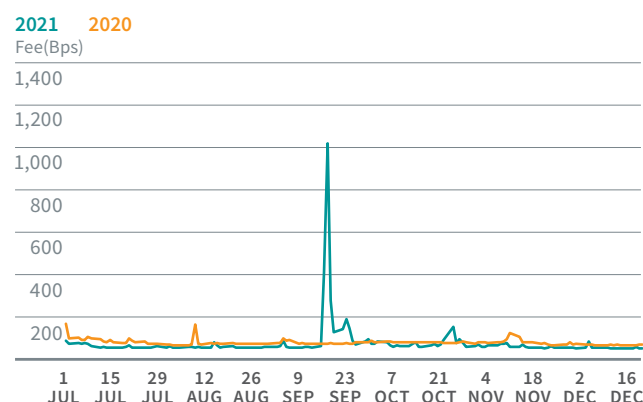
Borrow demand in Italy increased to \$11bn in average loan balances across H2, a 42% YoY increase. Total equity finance

Overview

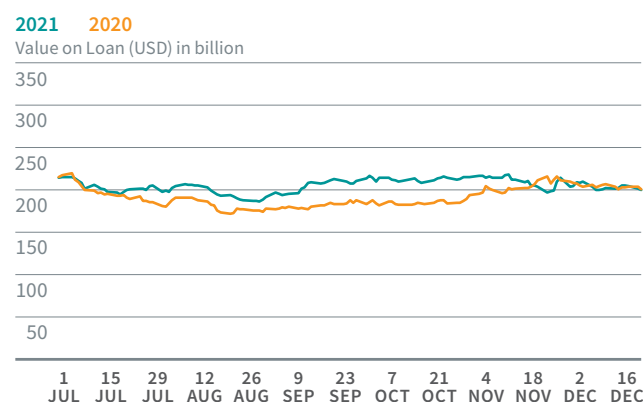


revenue was \$49m, with a third of this generated by demand for BMPS. The Italian bank was the fifth most revenue generating European security in H2 with \$16.17m. Outside of Europe, South Africa equity offered a bright spot for lenders of Naspers. Continuing the theme of capital restructure events, Naspers' exchange offer generated \$50m and almost 70% of total revenue in South Africa in H2.

H2 FEE TREND



H2 BALANCE TREND



OVERVIEW

Average fees decreased amid a lack of specials demand

UK equity utilisation was the lowest across EMEA

Vivendi dominated the top earners and boosted revenues

EMEA Lendable assets hit another peak

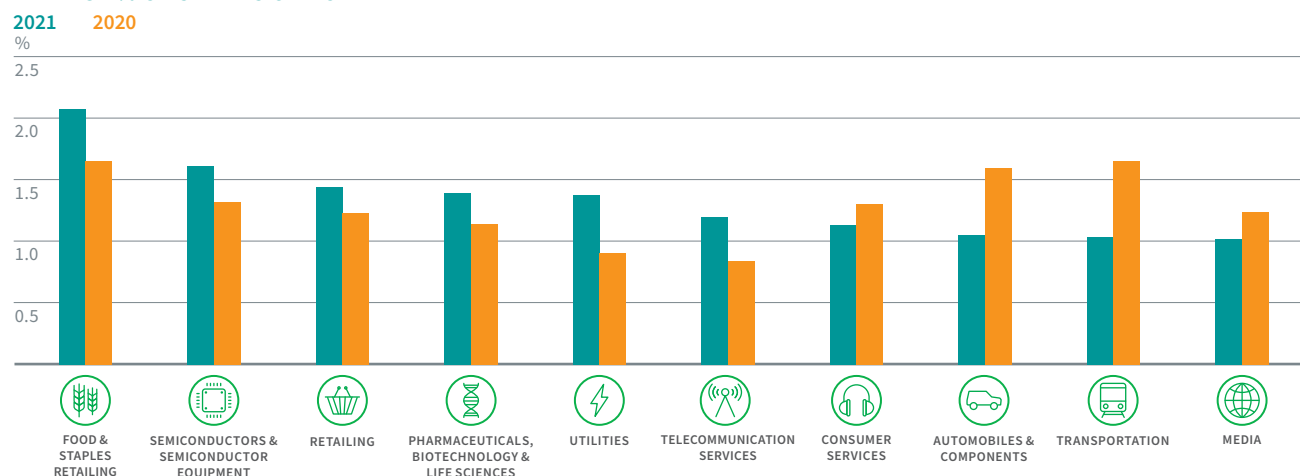
COUNTRY DETAILS

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
France Equity	229	106%	40	-4%	1.03%	105%	651	47%	4.7%	-27%
Germany Equity	104	-45%	32	13%	0.64%	-52%	496	47%	5.2%	-5%
Sweden Equity	80	38%	18	14%	0.83%	16%	247	52%	6.9%	-10%
South Africa Equity	73	465%	5	34%	1.83%	157%	51	1%	3.9%	4%
UK Equity	65	-22%	31	-1%	0.42%	-20%	1,054	38%	2.1%	-37%
Italy Equity	49	17%	11	42%	0.86%	-17%	155	51%	6.5%	35%
Switzerland Equity	39	0%	27	13%	0.28%	-13%	601	33%	3.7%	-11%
Norway Equity	36	37%	4	12%	1.65%	19%	56	53%	8.2%	-16%
Spain Equity	21	27%	9	29%	0.44%	-1%	130	35%	6.3%	2%
Netherlands Equity	21	-71%	13	-5%	0.30%	-71%	364	70%	2.5%	-48%
Belgium Equity	14	62%	4	10%	0.71%	45%	55	9%	6.3%	34%
Turkey Equity	9	-47%	1	2%	3.20%	-47%	5	19%	9.1%	6%
Denmark Equity	9	-1%	6	-3%	0.30%	2%	142	27%	3.4%	-5%
Finland Equity	7	-42%	4	-8%	0.33%	-36%	65	36%	5.2%	-35%
Greece Equity	4	53%	0	72%	10.92%	-11%	3	86%	2.4%	-17%
Poland Equity	4	46%	1	57%	0.91%	-11%	12	42%	6.7%	1%
Austria Equity	3	-68%	2	18%	0.43%	-72%	20	88%	6.2%	-34%
Portugal Equity	2	48%	1	62%	0.35%	-5%	13	44%	6.5%	72%

TOP 10 REVENUE GENERATING STOCKS

Instrument Name	Ticker	Sector	Country	Revenue Generated (\$)
Vivendi Se	VIV	Media and Entertainment	FR Equity	130.12
Deutsche Lufthansa Ag	LHA	Transportation	DE Equity	21.05
Tui Ag	TUI	Consumer Services	UK Equity	20.31
Air France Klm Sa	AF	Transportation	FR Equity	16.72
Banca Monte Dei Paschi Di Siena Spa	BMPS	Banks	IT Equity	16.17
Varta Ag	VAR1	Capital Goods	DE Equity	15.40
Solutions 30 Se	S30	Software & Services	FR Equity	11.85
Stadler Rail Ag	SRAIL	Capital Goods	CH Equity	9.70
Dnb Bank Asa	DNB	Banks	NO Equity	8.83
Totalenergies Se	TTE	Energy	FR Equity	8.42

AVERAGE % OF SHARES ON LOAN



Americas Equities

IPOs lead the way

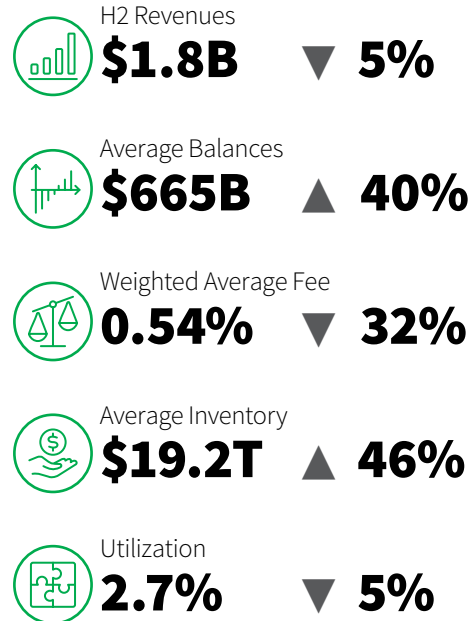
Americas equities generated \$1.8bn in H2 revenues, a 5% decrease compared with H2 2020. Loan balances remained steady over H2 but were still 40% higher than 2020. November saw the highest average loan balances for all of 2021 with \$681bn. Average fees declined 32% YoY, continuing the H1 trend of every month underperforming the previous year's fees.

The top 10 earners of H2 accounted for 29% of the total revenue. VMware (VMW) made the top three via the Dell spin-off deal that was completed in Q4. SPAC business combinations continued to drive revenue with five companies making it to the top 10 across the EV space, Biotech and Financial services. Conventional IPOs took the top two spots on the charts with Robinhood Markets (HOOD) leading the way with \$121.4m generated and the ADR Didi Global (DIDI) pulling in \$50.4m.

US equity revenues totaled \$1.6bn in H2, a 5% YoY decrease. Balances steadily climbed in H2, with average US equity loan balances reaching \$613bn, a 40% YoY increase. November saw the largest average loan balances for the year at \$628.1bn which coincides with market highs and the highest all-time lendable value of \$18.4tn. Each month in H2 saw a YoY increase in revenue except for July and December as falling fees and year end profit taking led to the decrease.

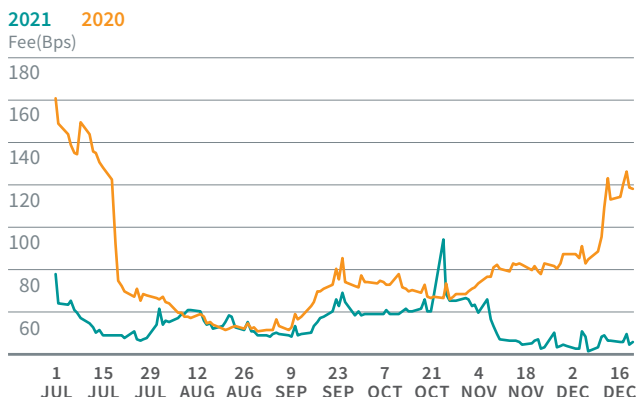
Canadian equities delivered \$143m in H2 revenues, a YoY decline of 12%. Similar to H1, a lack of specials balances continued to push the YoY comparisons into negative territories. Once dominated by short demand in cannabis companies, revenue is now more dispersed as we saw overall demand increase 34% YoY for an average loan balance of \$49bn.

Overview

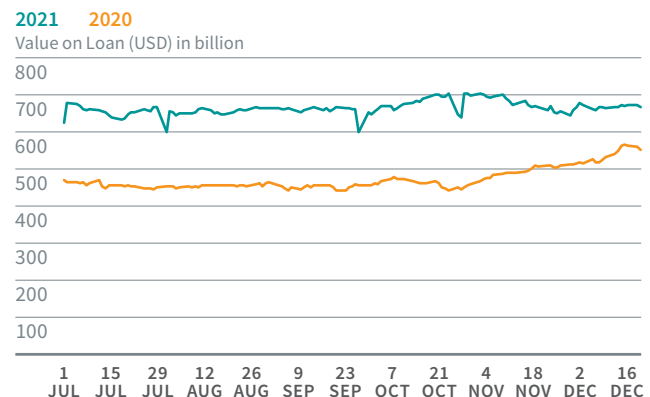


ADRs finished an impressive year earning \$175m in revenue in H2, a YoY increase of 55% and a record total revenue of \$555m for the year, led by Didi Global which delivered \$50.4m. The ride hailing company's price climbed shortly after their IPO in June and then steadily decreased. The lockup expiry in December coupled with a future delisting from the US moved them to number two on the top ten revenue generators for the half year.

H2 FEE TREND



H2 BALANCE TREND



OVERVIEW

Traditional IPOs take 3 out of the top 10 revenue spots

ADR H2 revenues most since 2019

Didi Global leads all ADRs on strong December to take 2nd overall spot

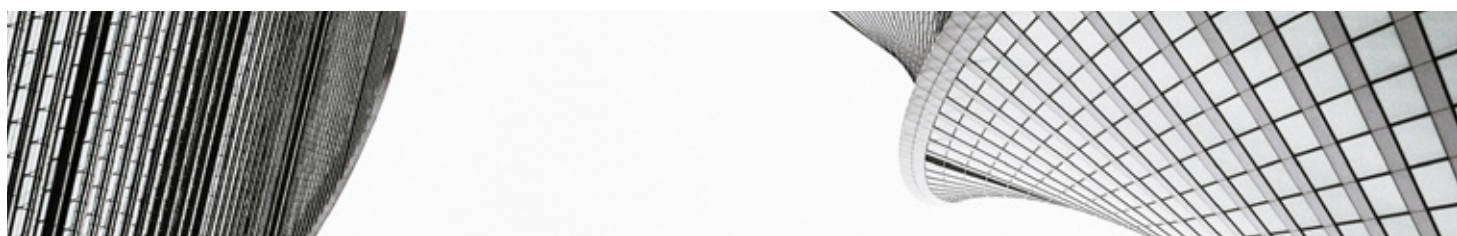
2021 SPAC IPOs continue to drive revenue

COUNTRY DETAILS

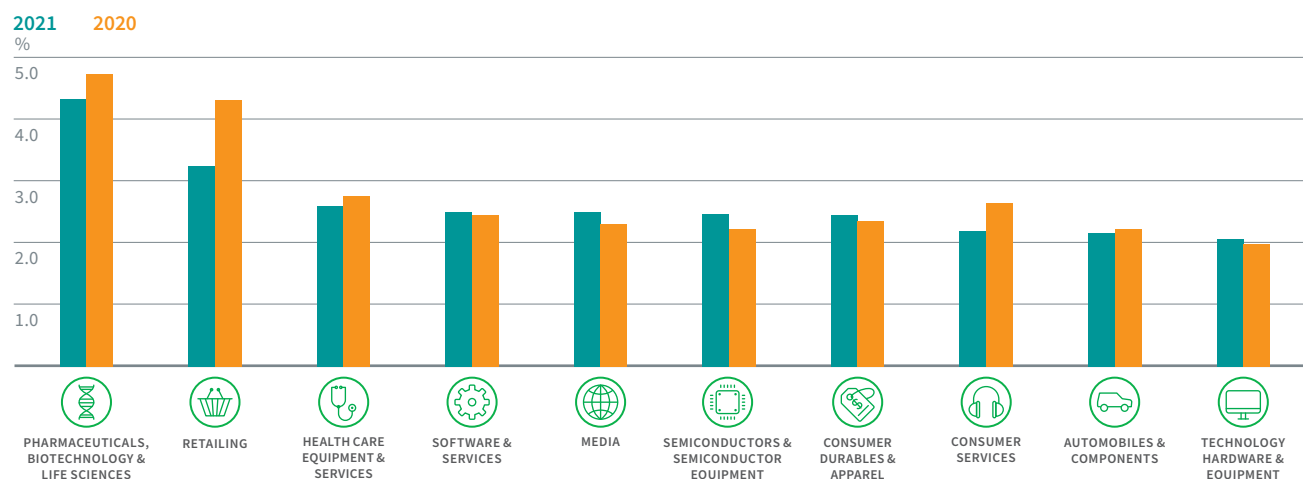
Country	H2 Revenue (USD M)	YoY Change	Average Value on Loan (USD Bn)	YoY Change	Weighted Fees	YoY Change	Average Lendable (USD Bn)	YoY Change	Average Utilization	YoY Change
USA Equity	1,653	-5%	613	40%	0.53%	-31%	18,414	46%	2.6%	-5%
Canada Equity	143	-12%	49	34%	0.57%	-34%	769	40%	5.4%	-1%
Brazil Equity	5.9	356%	2	518%	0.60%	-29%	3	82%	7.6%	512%
Mexico Equity	1.4	10%	1	17%	0.38%	-8%	35	34%	1.7%	-40%
ADR	75	55%	42	28%	0.84%	25%	362	-4%	8.7%	17%

TOP 10 REVENUE GENERATING STOCKS

Instrument Name	Ticker	Sector	Country	Revenue Generated (\$)
Robinhood Markets Inc	HOOD	Diversified Financials	US Equity	121.40
Didi Global 4 ADR Cl A Ord	DIDI	Transportation	ADR	50.40
Vmware Inc	VMW	Software & Services	US Equity	49.26
Lucid Group Inc	LCID	Automobiles & Components	US Equity	47.40
Faraday Future Intelligent Electric Inc	FFIE	Automobiles & Components	US Equity	46.37
Coupang Inc	CPNG	Retailing	US Equity	46.08
Bakkt Holdings Inc	BKKT	Diversified Financials	US Equity	43.01
Visa Inc	V	Software & Services	US Equity	40.43
Ginkgo Bioworks Holdings Inc	DNA	Pharmaceuticals, Biotechnology & Life Sciences	US Equity	40.26
Microvast Holdings Inc	MVST	Capital Goods	US Equity	36.34



AVERAGE % OF SHARES ON LOAN



Exchange Traded Products

All-time high performance

Exchange traded products (ETP) continued to deliver robust earnings, reaching \$330m for H2 2021, a 65% YoY increase. This all-time-high record was primarily driven by a sharp increase in average loan balances, topping \$100bn and increasing by 57% YoY. The revenues were consistent across all months, with December being the top performance month, by revenue, borrow demand and fee-spread. Q4 generated over \$168m in revenue, driven by a sharper increase in borrow demand in contrast to Q2.

SPDR and iShares funds dominated the list of the top earning funds for H2, along with Ark innovation ETF and Xtrackers Hvst Csi 300 China A-Shs Etf. iShares iBoxx \$ High Yield Corporate Bond Fund (HYG) led the top earning funds for H2, with \$48.8m of revenue, up by 39% compared to H1 and delivering 14% of all H2 ETP revenues. Revenue for fixed income ETPs increased dramatically by 321% YoY, crossing the \$100m mark for the first time.

US-listed exchange traded products delivered \$256m of revenue in H2, a substantial increase of 95% YoY. On the other hand, revenues for ETPs listed in Asia, led by Hong Kong ETPs declined by 23% YoY. European ETPs continued to deliver positive earnings, accounting for 13% of global H2 ETP revenues. iShares MSCI China A Ucits Etf Usd (Acc) led the performance for ETPs listed in Europe, with \$7.7m in revenue, up 203% YoY.

Lendable assets averaged \$507bn in H2 2021, the highest level on record, and up by 36% YoY. Utilization averaged 12%, up by 8% YoY, rounding out a stellar H2 performance for the asset class.

Overview



H2 Revenues

\$330M ▲ **65%**



Average Balances

\$100B ▲ **57%**



Weighted Average Fee

0.66% ▲ **5%**



Average Inventory

\$507B ▲ **36%**



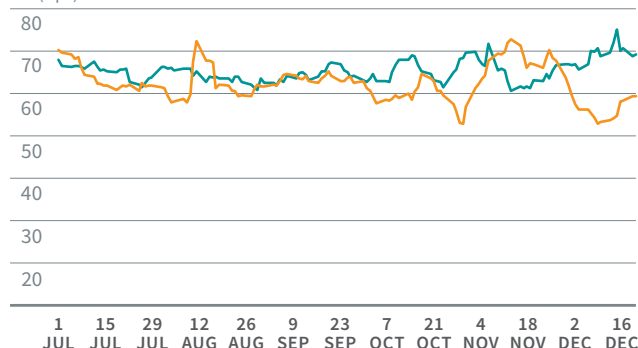
Utilization

11.9% ▲ **8%**

H2 FEE TREND

2021 2020

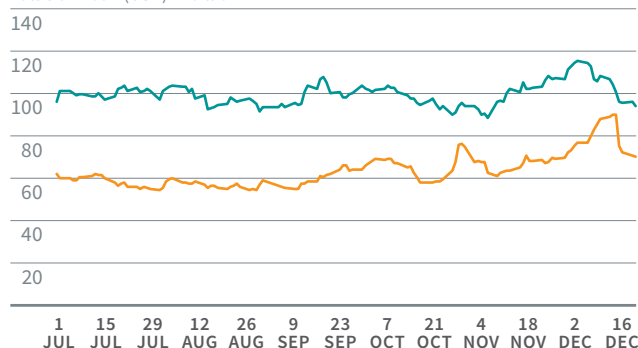
Fee(Bps)



H2 BALANCE TREND

2021 2020

Value on Loan (USD) in billion



OVERVIEW

Americas ETFs delivered a strong performance YoY

High Yield funds continue to deliver higher revenues

ETP loan balances reach all-time high in H2

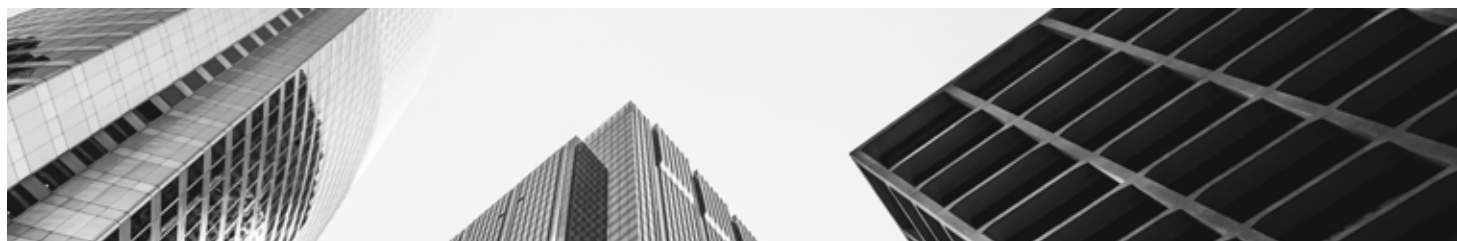
Asia ETFs in downtrend

COUNTRY DETAILS

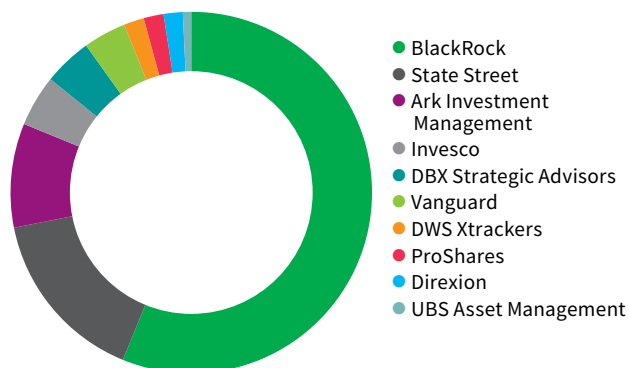
Country	H2 Revenue (USD M)	YoY Change	Average Value on Loan (USD Bn)	YoY Change	Weighted Fees	YoY Change	Average Lendable (USD Bn)	YoY Change	Average Utilization	YoY Change
Americas ETFs	266	93%	90	63%	0.58%	18%	342	37%	16.0%	11%
European ETFs	43	22%	7	26%	1.31%	-3%	91	49%	4.7%	-19%
Asia ETFs	13	-23%	1	-5%	1.96%	-20%	5	74%	11.6%	-39%

TOP 10 REVENUE GENERATING FUNDS

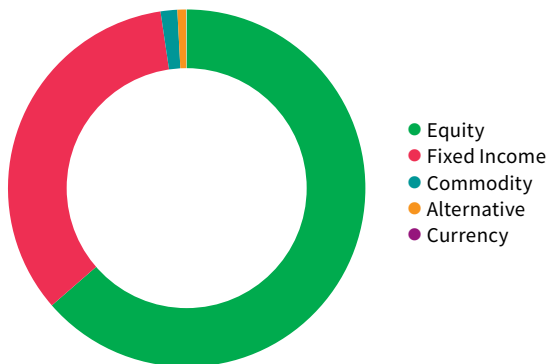
Instrument Name	Ticker	Listing Country	Asset Class	Revenue Generated (\$M)
Ishares Iboxx \$ High Yield Corporate Bond Fund	HYG	US ETF	Fixed Income	48.87
Ark Innovation Etf	ARKK	US ETF	Equity	20.90
Ishares Russell 2000 Etf	IWM	US ETF	Equity	17.01
Ishares Iboxx \$ Investment Grade Corporate Bond Etf	LQD	US ETF	Fixed Income	15.80
Spdr Bloomberg High Yield Bond Etf	JNK	US ETF	Fixed Income	13.62
Xtrackers Hvst Csi 300 China A-Shs Etf	ASHR	US ETF	Equity	9.81
Ishares Msci China A Ucits Etf Usd (Acc)	CNYA	IE ETF	Equity	7.72
Spdr S&P 500 Etf Trust	SPY	US ETF	Equity	6.69
Spdr S&P Retail Etf	XRT	US ETF	Equity	5.42
Spdr S&P Biotech Etf	XBI	US ETF	Equity	4.32



LENDING REVENUES BY ISSUER



LENDING REVENUES BY ASSET CLASS



Corporate Bonds

Demand on the rise

Revenues for lending corporate bonds finally saw an upswing after a steady decline from the post-GFC peak in 2018.

Fee-based revenue from corporate bond lending for H2 2021 totaled \$310m reflecting a massive surge of 55% YoY, with Q4 garnering a YoY rise in revenues greater than 70%. Global corporate loan balances started 2021 on a marginally positive note after the steady decline observed towards the end of 2020. From that low starting point, loan balances steadily increased over the course of the next three quarters with Q4 culminating in a 48% YoY growth. Other demand related metrics, including average fees and utilization, both experienced a YoY spurt in growth offsetting the effect of the continued hike in average lendable supply accumulating over \$4.9tn in H2, the most on record.

USD denominated corporates continue to be the most revenue generating, with \$190m in H2 revenues, reflecting a YoY surge of over 85%. USD corporate revenues received a boost in H2 from Illumina Inc. and Teva Pharmaceutical bonds which delivered \$3.4m and \$2.7m in revenue, respectively. Additionally, USD issues accounted for 60% of H2 2021 revenue. Euro denominated corporates, the second most revenue generating, delivered around \$90m in H2 revenue, a rise of 23% YoY. Despite a surge in Euro corporates only two of the top 10 revenue generating corporates for H2 were Euro denominated.

H2 investment grade (IG) bond lending revenues saw an upswing of over 38% YoY compared with a 62% surge for non-Investment grade credit (NIG).

Convertible bonds revenues saw a significant uptick of over 300% from 2020 primarily driven by increased borrow demand and increased fee spreads led again by Illumina Inc. Conventional bond lending revenues contributed to over 90% of the total corporate bond revenue in H2, up from 45% during the second half of 2020.

Overview



H2 Revenues

\$310M ▲ **55%**



Average Balances

\$260B ▲ **46%**



Weighted Average Fee

0.24% ▲ **6%**



Average Inventory

\$4.9T ▲ **6%**



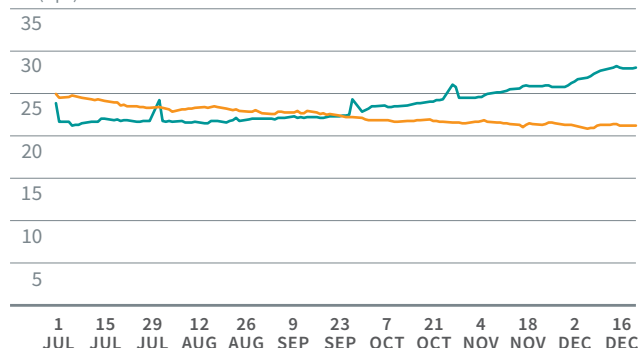
Utilization

5.0% ▲ **39%**

H2 FEE TREND

2021 2020

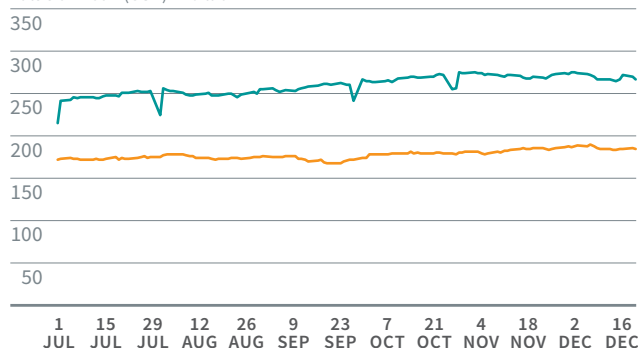
Fee(Bps)



H2 BALANCE TREND

2021 2020

Value on Loan (USD) in billion



OVERVIEW

YoY surge in revenues driven by enhanced fee spreads

Convertible bond revenues shot up over 300% amid volatile inflationary pressure

Highest corporate bond revenue for H2 since 2018

Utilization rose YoY despite lendable assets reaching an all-time high

ISSUE TYPE DETAILS

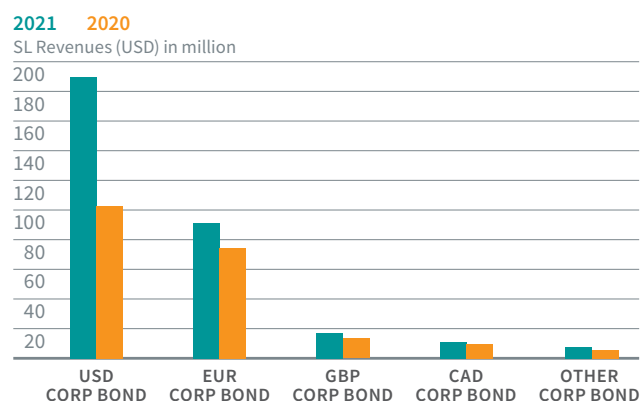
Issue Type	H2 Revenue (USD M)	YoY Change	Average Value on Loan (USD Bn)	YoY Change	Weighted Fees	YoY Change	Average Lendable (USD Bn)	YoY Change	Average Utilization	YoY Change
Conventional Bonds	280	45%	253	45%	0.22%	0%	4,377	7%	5.4%	38%
Convertible Bonds	25	341%	6.18	101%	0.80%	117%	66	10%	6.4%	36%
Asset Backed Securities	0.25	-9%	0.27	20%	0.19%	-23%	422	-1%	0.1%	48%

TOP 10 REVENUE GENERATING BONDS

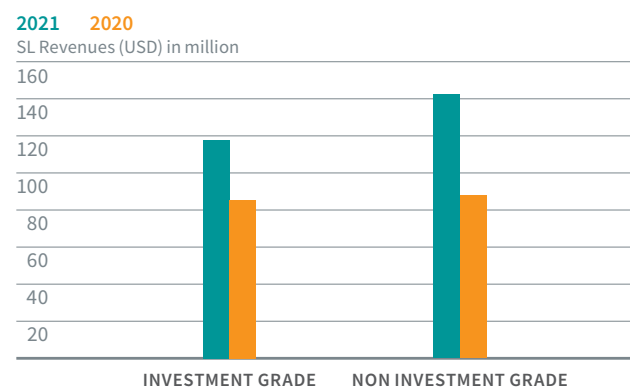
Top Earning Assets	Cusip	Denomination	Aseet Class	Revenue Generated (\$)
Illumina Inc (0% 15-Aug-2023)	452327AK5	USD	N.I.G. Conv	3.44
Teva Pharmaceutical Finance Netherlands Iii Bv (6.75% 01-Mar-2028)	88167AAK7	USD	N.I.G. Corp	2.72
American Axle & Manufacturing Inc (6.875% 01-Jul-2028)	02406PBA7	USD	N.I.G. Corp	2.23
American Axle & Manufacturing Inc (6.5% 01-Apr-2027)	02406PAU4	USD	N.I.G. Corp	2.06
Endo Dac (9.5% 31-Jul-2027)	29273DAB6	USD	Priv. Plc.	1.75
Unibail-Rodamco-Westfield Se (2.875% Undated)	F95094UC4	EUR	N.I.G. Corp	1.71
American Airlines Group Inc (3.75% 01-Mar-2025)	02376RAE2	USD	Priv. Plc.	1.67
Valero Energy Corp (4.9% 15-Mar-2045)	91913YAT7	USD	I.G. CORP	1.63
Rackspace Technology Global Inc (5.375% 01-Dec-2028)	750098AA3	USD	Priv. Plc.	1.58
Adidas Ag (0.05% 12-Sep-2023)	D0066BSB9	EUR	N.I.G. Conv	1.50



H2 REVENUES BY DENOMINATION



H2 REVENUES BY RATINGS CATEGORY



Government bonds

Increasing demand for Asia bonds

Government bond lending delivered \$823m in H2 revenues, a 18% YoY increase. Full year 2021 spread returns totaled \$1.6bn, a step-up of 9% YoY, although still trailing the post-GFC crisis peak in 2018. This made H2 2021 the most revenue generating half-year for government bond lending since the first half of 2018. Loan balances increased steadily dispersed with marginal dips towards the end of Q3 and middle of Q4, ending December with \$1.27tn on loan at positive spreads.

Steadily growing loan balances supported the increasing fee income even though fee spreads reduced over H2 2021. Utilization saw an upswing of 9% YoY despite lendable assets increasing by 16% YoY, to reach \$4.4tn. Returns for lending US government bonds came in at \$448m in H2, a step-up of 13% YoY. Continuing the trend, US Treasuries were the primary driver of government bond lending revenues. Emerging markets debt saw YoY growth of 25%, benefiting from the volatility of interest rates acting as a cushion against rising yields in developed markets.

European government bond lending revenues came in at \$274m for H2, a 17% YoY climb driven primarily by rising loan balances and utilization. The increase was driven by a 23% rise in loan balances, with fees falling by 5%. European government bond revenue was led by French government bonds delivering \$80m in H2 revenue, an increase of around 2% YoY. German government bonds delivered \$60m in H2 revenue, a fall of 20% YoY.

Overview



H2 Revenues

\$823M ▲ **18%**



Average Balances

\$1.2B ▲ **30%**



Weighted Average Fee

0.13% ▼ **9%**



Average Inventory

\$4.4T ▲ **16%**



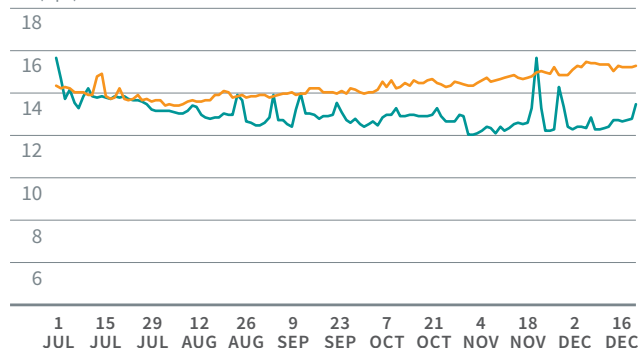
Utilization

25.3% ▲ **9%**

H2 FEE TREND

2021 2020

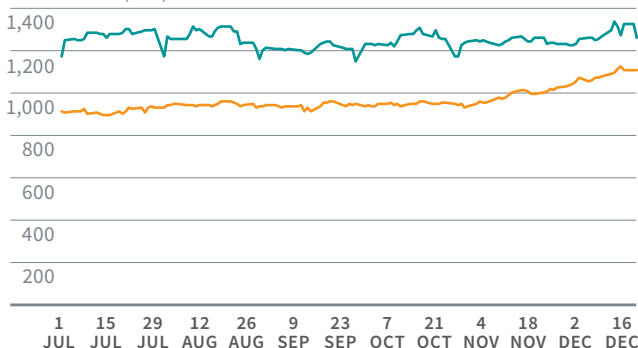
Fee(Bps)



H2 BALANCE TREND

2021 2020

Value on Loan (USD) in billion



OVERVIEW

European government bond finance revenue growth driven by France and Germany

US Treasury 10Y, Feb 2031 leads top revenue generator table

Emerging market bonds benefitted from the dip in interest rates.

Asian bonds saw a significant growth in revenue led by Japan

REGIONAL DETAILS

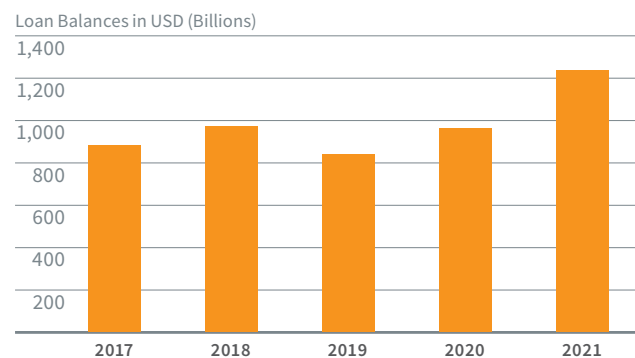
Country	H2 Revenue (USD M)	YoY Change	Average Value on Loan (USD Bn)	YoY Change	Weighted Fees	YoY Change	Average Lendable (USD Bn)	YoY Change	Average Utilization	YoY Change
Americas	511	14%	804	31%	0.13%	-13%	2,978	20%	24.9%	9%
Europe	274	17%	409	23%	0.13%	-5%	1,279	8%	27.2%	10%
Asia	37.2	143%	40	103%	0.19%	20%	128	43%	13.9%	51%
Emerging Market Bonds	26.8	25%	24	49%	0.22%	-16%	364	15%	6.9%	45%

TOP 10 REVENUE GENERATING BONDS

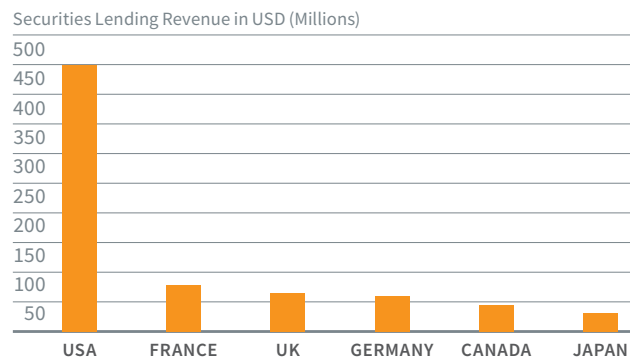
Instrument Name	ISIN	Currency	Issuer	Revenue Generated (\$)
United States Treasury (1.125% 15-Feb-2031)	US91282CBL46	USD	USA	6.34
United States Treasury (0.875% 15-Nov-2030)	US91282CAV37	USD	USA	5.26
United States Treasury (0.625% 15-Aug-2030)	US91282CAE12	USD	USA	4.54
United States Treasury (0.25% 30-Sep-2023)	US91282CDA62	USD	USA	4.02
United States Treasury (1.25% 15-Aug-2031)	US91282CCS89	USD	USA	3.91
United States Treasury (1.5% 15-Aug-2026)	US9128282A70	USD	USA	3.89
Japan (Government) (0.8% 20-Jun-2023)	JP1103291D68	USD	Japan	3.57
France, Republic Of (Government) (0.5% 25-May-2025)	FR0012517027	USD	France	3.54
United States Treasury (1.5% 15-Feb-2030)	US912828Z948	USD	USA	3.42
France, Republic Of (Government) (0% 25-Mar-2023)	FR0013283686	USD	France	3.34



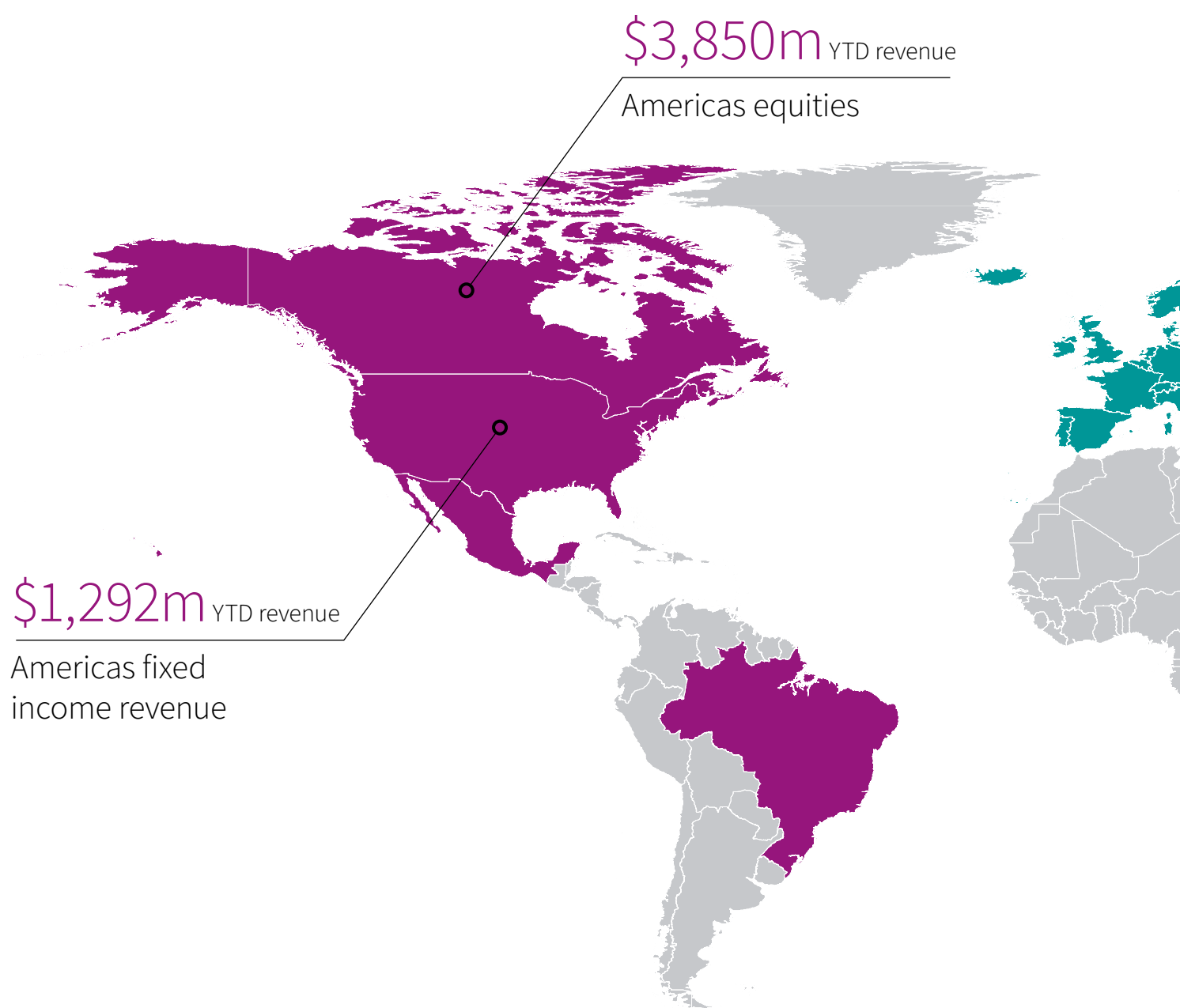
GOVERNMENT BOND BALANCE TREND



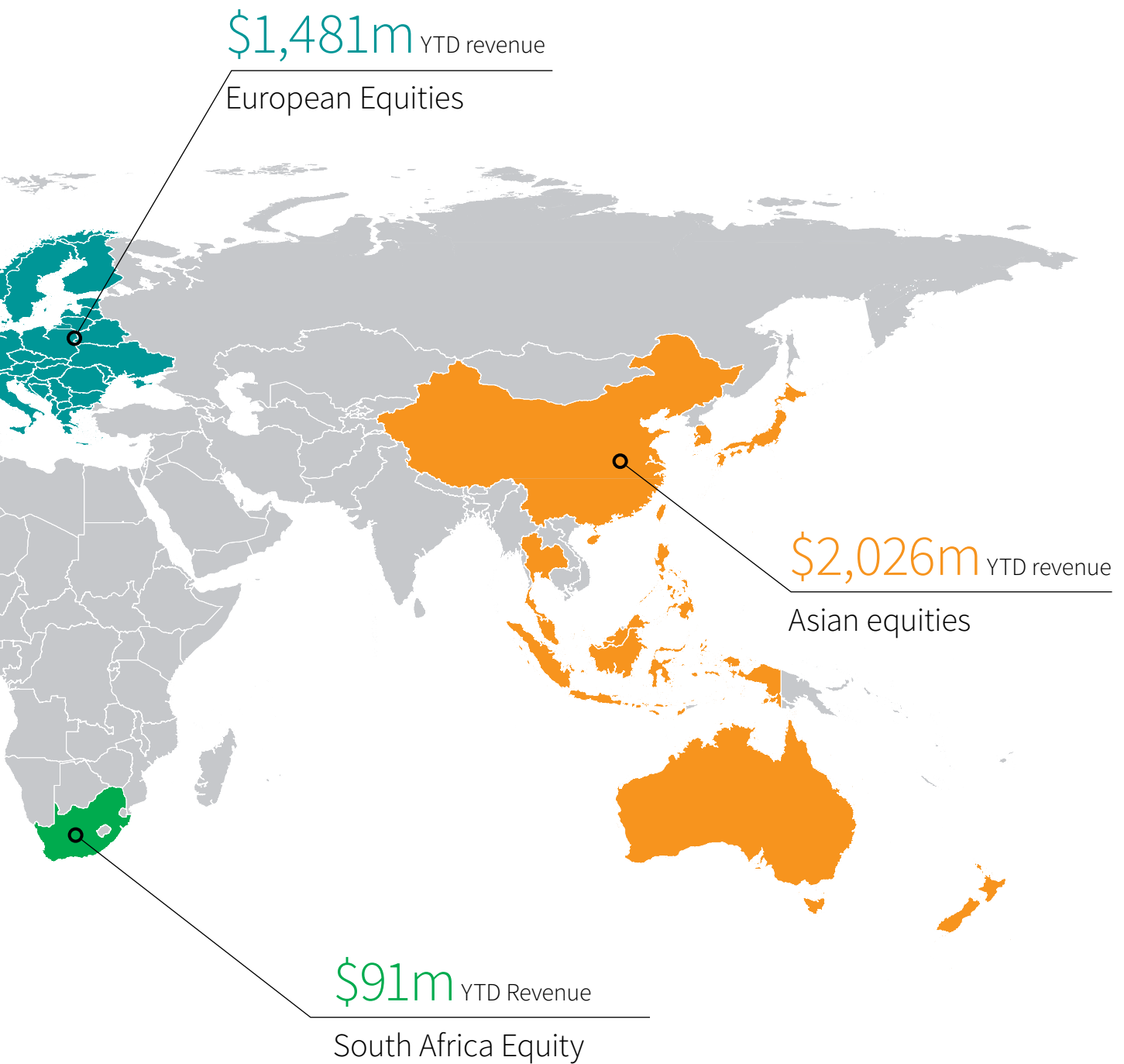
H2 REVENUES BY ISSUER



Global snapshot



Asset Class	Lendable Assets (\$T)	Loan Balance (\$T)	% Non-Cash	Utilisation (%)	SL Fee (Bps)
All Securities	\$35.5	\$2.8	71%	6.4	39
Government Bonds	\$4.3	\$1.2	84%	25.7	13
Corporate Bonds	\$4.8	\$0.2	46%	4.8	24
Equities	\$25.8	\$1.2	62%	3.4	68
Depository Receipts	\$0.4	\$0.1	64%	8.5	98
Exchange Traded Funds	\$0.5	\$0.1	30%	12.5	66



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