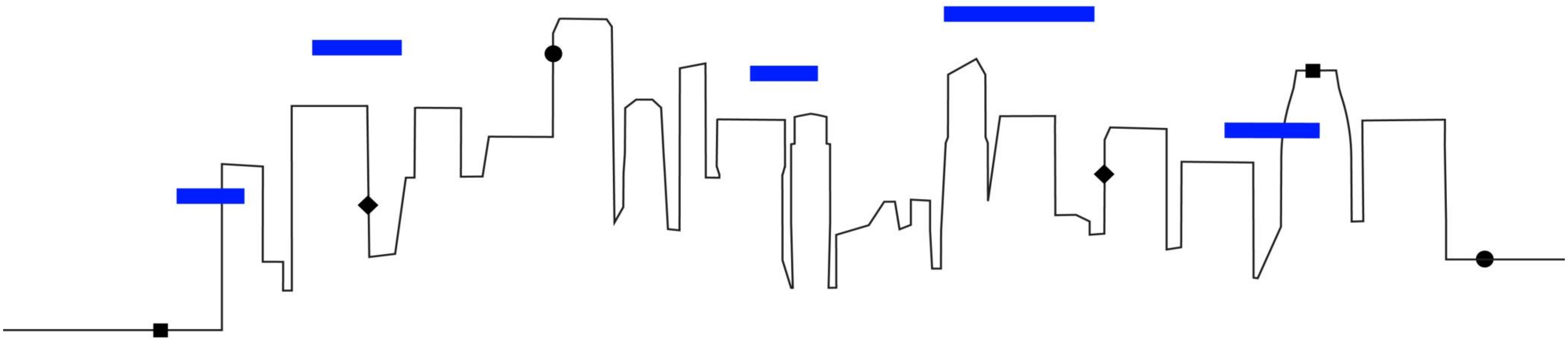
Global Debt Capital Markets Review

FIRST HALF 2021 | MANAGING UNDERWRITERS



REFINITIV

An LSEG Business

Global Debt Capital Markets Review

First Half 2021 | Managing Underwriters

Global Deals Intelligence

GLOBAL DEBT CAPITAL MARKETS ACTIVITY DOWN 8% TO US$5.3 TRILLION

Overall global debt capital markets activity totaled US$5.3 trillion during the first half of 2021, down 8% compared to the first half of 2020 and the second consecutive first half to surpass US$5.0 trillion in issuance. The number of new offerings brought to market during the first half of 2021 totaled 13,588, a 2% decline compared the first half of 2020. DCM issuance during the second quarter of 2021 has decreased 1% compared to the first quarter of this year but increased 4%, by number of issues.

INVESTMENT GRADE CORPORATE DEBT ISSUANCE FALLS 18%

Global Investment Grade corporate debt offerings totaled US$2.4 trillion during the first half of 2021, an 18% decrease compared to 2020 levels and the second largest first half for global high-grade corporate debt on record. The US dollar marketplace, which saw a record levels of issuance during 2020, totaled US$825.7 during the first half of 2021, a 34% decline compared to a year ago and two-year low.

GLOBAL HIGH YIELD DEBT PUSHES PAST US$400 BILLION FOR FIRST HALF RECORD

Global High Yield debt activity during the first half of 2021 reached US$400.9 billion, an increase of 52% compared to first half 2020 levels and the strongest opening six-month period for global high yield issuance on record and the first half to surpass US$400 billion. High yield offerings from issuers in the United States, United Kingdom and China accounted for 75% of first half 2021 issuance, down slightly from the first half of 2020.

GREEN BONDS DOUBLE, HIT FIRST HALF RECORD; AGENCY & SOVEREIGN DEBT DOWN 2%

According to figures compiled by Refinitiv and The Climate Bonds Initiative, green bond issuance totaled US$254.7 billion during the first half of 2021, a 188% increase compared to year ago levels and an all-time first half record. Despite the emergence of sustainability and social bonds, annual debt issuance from agency, sovereign and supranational issuers totaled US$1.6 trillion, down 2% from a year ago.

FINANCIALS, GOVERNMENT & AGENCIES AND INDUSTRIALS LEAD 2021 ISSUANCE

DCM activity from Financials, Government & Agencies, and Industrials issuers accounted for 78% of first half 2021 issuance, up from 74% during the first half of 2020. Global debt issuance, excluding financials and governments & agencies, totaled US$1.5 trillion during the first half of 2021, down 22% compared to 2020 levels and accounted for 27% of overall issuance, down from 32% a year ago.

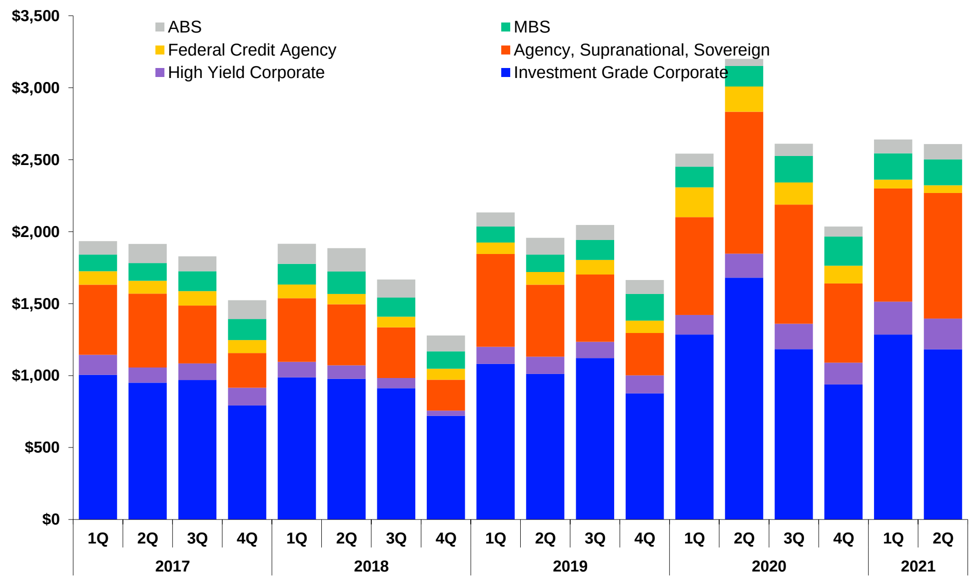
INTERNATIONAL BOND OFFERINGS DOWN 9%; EMERGING MARKETS UP 4%

International bond offerings totaled US$2.9 trillion during the first half of 2021, a 9% decrease compared to a year ago and a two-year low. Debt from emerging market corporate issuers totaled US$208.7 billion during the first half of 2021, up 4% compared to a year ago. Corporate debt issuers from India, Malaysia, Brazil, and Qatar accounted for 42% of emerging markets activity.

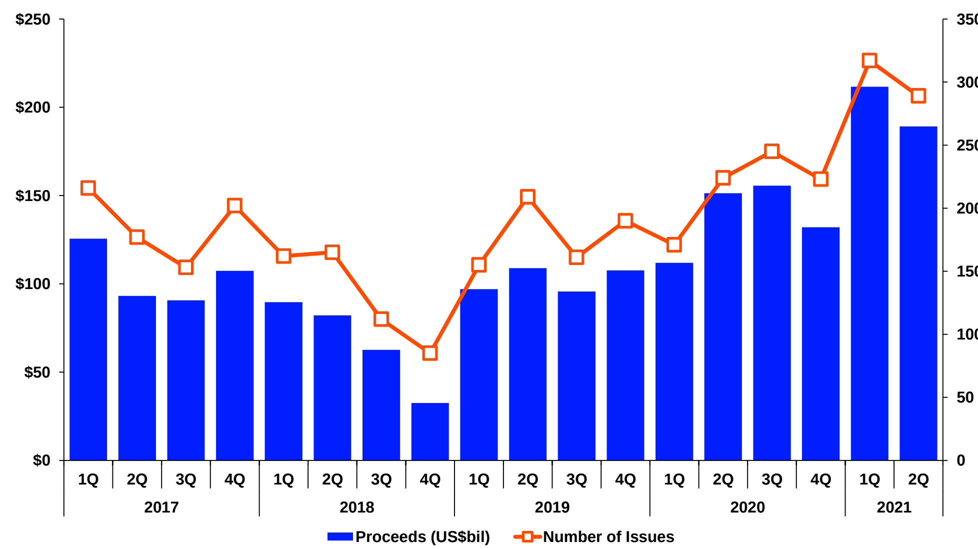
RECORD ASIA LOCAL CURRENCY DEBT; JAPANESE YEN OFFERINGS HIT 14-YEAR HIGH

Asia local currency bond offerings totaled US$1.4 trillion during the first half of 2021, a 4% increase compared to a year ago and the strongest first half for issuance since records began in 1980. China Yuan offerings have increased 2% compared to a year ago. Japanese Yen offerings have increased 6% compared to first half 2020, totaling JPY12.6 trillion and a 14-year high.

Global Debt Capital Markets - Issue Type Composition (US$bil)



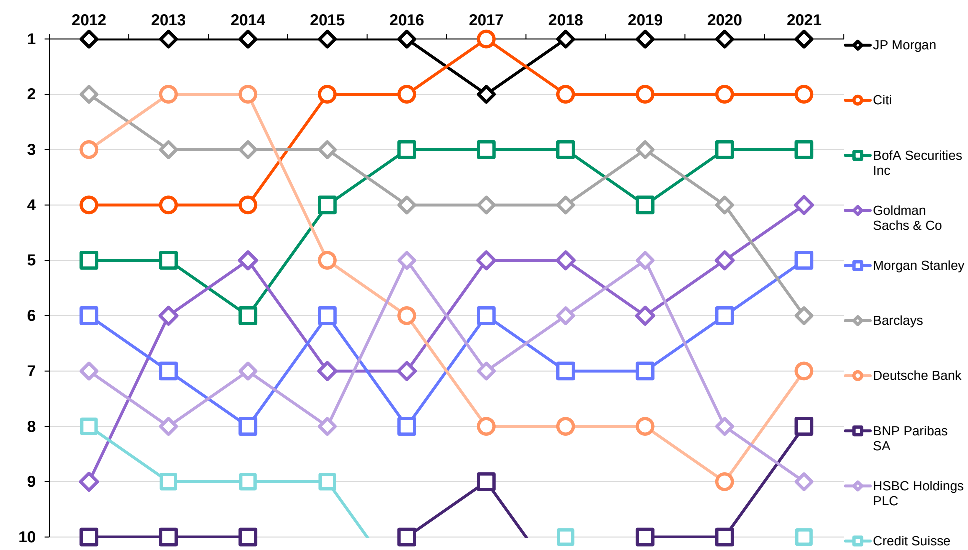
Global High Yield Corporate Debt - Quarterly Issuance



Global Insights

First Half 2021 | Debt Capital Markets | Managing Underwriters

Global Debt Rankings by Proceeds

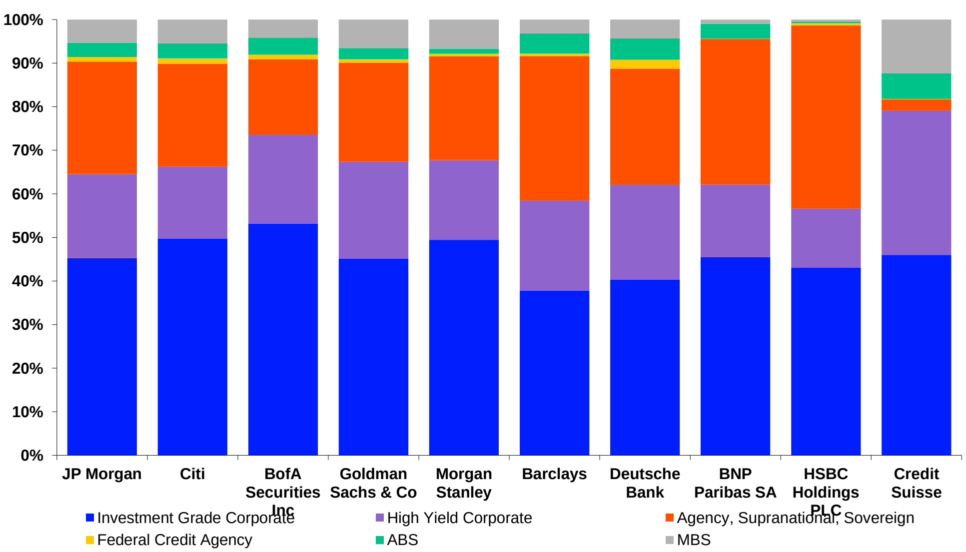


*League Table positions reflect consolidation within the banking sector. Rankings are as of the current quarter end in each calendar year.

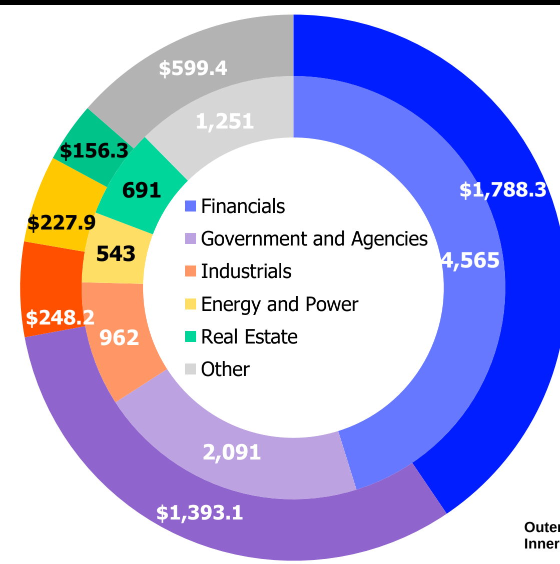
Global Scorecard

	1/1/2021 - 6/30/2021 Proceeds ($mil)	# of Deals	1/1/2020 - 6/30/2020 Proceeds ($mil)	# of Deals	YoY % Chg. ($)
All Global Debt (B1)	**5,298,885**	**13,588**	**5,776,783**	**13,826**	**-8%** ▼
Global Long-term Debt (B2)	5,097,122	11,964	5,508,629	12,142	-7% ▼
Global Long-term Debt ex MBS, ABS & Munis (B3	4,532,065	10,976	5,083,175	11,311	-11% ▼
Global High Yield Corporate Debt (B4)	400,923	606	263,273	395	52% ▲
Global Investment Grade Corporate Debt (B7)	2,350,731	7,331	2,871,869	7,236	-18% ▼
US Federal Credit Agency Debt (B8)	63,982	321	223,200	517	-71% ▼
Global Agency, Sovereign & Supranational (B9)	1,624,645	2,565	1,651,167	3,053	-2% ▼
Global Mortgage-backed Securities (B10)	363,335	586	286,040	497	27% ▲
Global Asset-backed Securities (B11)	201,552	400	139,414	335	45% ▲
Global Short-term Debt (B14)	227,128	1,767	291,625	1,803	-22% ▼
Global Emerging Markets Corporate Debt (B15)	208,741	654	200,067	687	4% ▲
All US Debt (F1)	**1,939,365**	**2,837**	**2,331,640**	**3,038**	**-17%** ▼
US Long-term Debt (F2)	1,839,000	2,015	2,150,229	2,150	-14% ▼
US Long-term Straight ex MBS, ABS & Munis (F3)	1,462,391	2,121	1,968,749	2,431	-26% ▼
US Federal Credit Agency Debt (F7)	55,427	304	212,414	495	-74% ▼
US High Yield Corporate Debt (F8)	286,282	387	194,711	266	47% ▲
US Investment Grade (F9)	825,668	637	1,247,119	914	-34% ▼
Agency, Sovereign & Supranational Debt (F10)	236,678	694	265,482	694	-11% ▼
US Mortgage-backed Securities (F11)	321,591	469	251,817	399	28% ▲
US Asset-backed Securities (F14)	155,213	245	111,074	209	40% ▲
US Taxable Municipal Debt (F15)	23,818	585	34,571	562	-31% ▼
US Short-term Debt - including MBS, ABS (F16)	100,366	822	181,411	888	-45% ▼

Top 10 Global Debt Bookrunners by Proceeds - Issue Type Composition



Global Debt Capital Markets - Macro Industry Composition



Outer Ring: Proceeds (US$bil)
Inner Ring: # Deals

REFINITIV

An LSEG Business

Global Rankings

First Half 2021 | Debt Capital Markets | Managing Underwriters

Global Debt (B1) — YoY Change ($) -8% — QoQ Change ($) -1%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	344,041	6.5	-0.6	1,306
Citi	2	2	256,150	4.8	-0.8	983
BofA Securities Inc	3	3	251,601	4.8	-0.6	990
Goldman Sachs & Co	4	5	214,360	4.1	0.3	731
Morgan Stanley	5	6	209,038	3.9	0.1	810
Barclays	6	4	179,338	3.4	-1.6	801
Deutsche Bank	7	9	172,057	3.3	0.4	755
BNP Paribas SA	8	10	149,223	2.8	0.0	660
HSBC Holdings PLC	9	8	144,143	2.7	-0.4	718
Credit Suisse	10	11	123,565	2.3	0.1	574
Wells Fargo & Co	11	7	123,442	2.3	-1.1	613
RBC Capital Markets	12	12	102,908	1.9	-0.2	657
Bank of China Ltd	13	16	98,680	1.9	0.2	1,005
CITIC	14	19	97,613	1.8	0.3	1,200
Credit Agricole CIB	15	15	92,866	1.8	0.0	501
Industrial & Comm Bank China	16	17	92,674	1.8	0.1	938
Mizuho Financial Group	17	18	89,596	1.7	0.1	613
Nomura	18	13	83,648	1.6	-0.2	352
China Construction Bank	19	21	82,951	1.6	0.2	971
Societe Generale	20	20	76,899	1.5	0.1	280
Agricultural Bank of China	21	23	74,968	1.4	0.3	771
TD Securities Inc	22	14	73,744	1.4	-0.4	398
Bank of Communications Co Ltd	23	22	70,439	1.3	0.1	822
China Securities Co Ltd	24	26	66,211	1.3	0.4	780
UniCredit	25	24	62,650	1.2	0.2	224
Industry Total			**5,298,885**	**100.0**		**13,588**

Global Investment Grade Corporate Debt (B7) — YoY Change ($) -18% — QoQ Change ($) -8%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	139,179	5.9	-1.0	493
BofA Securities Inc	2	2	122,944	5.2	-0.7	428
Citi	3	3	101,630	4.3	-0.9	416
Goldman Sachs & Co	4	5	86,954	3.7	-0.2	252
Morgan Stanley	5	4	85,345	3.6	-0.9	345
CITIC	6	15	61,320	2.6	0.8	666
HSBC Holdings PLC	7	8	59,729	2.5	-0.6	356
Barclays	8	6	59,467	2.5	-0.9	275
BNP Paribas SA	9	9	59,345	2.5	-0.5	339
Mizuho Financial Group	10	11	52,550	2.2	-0.1	312
Deutsche Bank	11	10	52,497	2.2	-0.6	243
Wells Fargo & Co	12	7	47,188	2.0	-1.3	215
China Securities Co Ltd	13	18	42,638	1.8	0.4	456
Credit Suisse	14	12	39,564	1.7	-0.3	186
RBC Capital Markets	15	13	38,079	1.6	-0.4	224
Credit Agricole CIB	16	14	37,391	1.6	-0.3	246
Societe Generale	17	16	36,459	1.6	0.0	167
Bank of China Ltd	18	19	36,219	1.5	0.1	342
Mitsubishi UFJ Financial Group	19	17	32,504	1.4	-0.1	189
Sumitomo Mitsui Finl Grp Inc	20	20	31,935	1.4	0.1	193
Industrial & Comm Bank China	21	22	29,606	1.3	0.1	256
China International Capital Co	22	37	27,808	1.2	0.5	279
Guotai Junan Securities	23	35	27,447	1.2	0.4	297
TD Securities Inc	24	21	25,928	1.1	-0.1	143
Santander Corp & Invest Bkg	25	23	24,137	1.0	0.0	133
Industry Total			**2,350,731**	**100.0**		**7,331**

Global Agency, Sovereign Corporate Debt (B9) — YoY Change ($) -2% — QoQ Change ($) 12%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	79,331	4.9	-0.3	228
Citi	2	2	64,755	4.0	-0.7	126
Deutsche Bank	3	12	63,557	3.9	0.9	154
HSBC Holdings PLC	4	3	60,795	3.7	-0.6	143
Industrial & Comm Bank China	5	4	59,908	3.7	0.1	645
China Construction Bank	6	6	59,863	3.7	0.2	648
Bank of China Ltd	7	7	59,806	3.7	0.2	608
BNP Paribas SA	8	9	58,783	3.6	0.3	102
Agricultural Bank of China	9	13	53,965	3.3	0.6	547
Barclays	10	5	52,135	3.2	-0.3	122
Bank of Communications Co Ltd	11	10	51,550	3.2	-0.1	558
Goldman Sachs & Co	12	11	49,743	3.1	-0.1	89
Morgan Stanley	13	15	48,740	3.0	0.7	104
BofA Securities Inc	14	8	45,692	2.8	-0.6	102
Credit Agricole CIB	15	16	38,048	2.3	0.1	85
UniCredit	16	18	36,193	2.2	0.1	57
Nomura	17	20	35,308	2.2	0.4	126
RBC Capital Markets	18	14	35,219	2.2	-0.4	169
TD Securities Inc	19	17	34,257	2.1	0.0	152
CITIC	20	21	29,925	1.8	0.1	408
Societe Generale	21	19	29,333	1.8	0.0	39
Industrial Bank Co Ltd	22	25	24,933	1.5	0.3	278
NatWest Markets	23	24	21,295	1.3	-0.1	37
China Securities Co Ltd	24	32	20,642	1.3	0.6	287
National Bank of Canada Fin'l	25	23	20,067	1.2	-0.2	121
Industry Total			**1,624,645**	**100.0**		**2,565**

Global MBS (B10) — YoY Change ($) 27% — QoQ Change ($) -1%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	51,880	14.3	-1.3	72
Credit Suisse	2	2	43,651	12.0	-1.3	96
Morgan Stanley	3	4	42,178	11.6	2.4	77
Citi	4	5	35,965	9.9	0.9	75
Wells Fargo & Co	5	3	33,372	9.2	-2.7	69
Goldman Sachs & Co	6	7	32,320	8.9	1.9	97
BofA Securities Inc	7	6	26,555	7.3	-0.4	70
Nomura	8	8	16,564	4.6	-1.0	55
Barclays	9	9	14,926	4.1	1.2	61
Deutsche Bank	10	10	8,371	2.3	0.2	30
Mizuho Financial Group	11	14	7,772	2.1	1.0	38
Cantor Fitzgerald LP	12	11	5,397	1.5	0.0	11
Amherst Securities	13	12	4,395	1.2	-0.3	18
National Australia Bank	14	21	3,641	1.0	0.5	18
BNP Paribas SA	15	13	3,526	1.0	-0.2	15
BMO Capital Markets	16	18	3,398	0.9	0.2	10
Sumitomo Mitsui Finl Grp Inc	17	15	2,742	0.8	-0.3	14
Jefferies LLC	18	22	2,515	0.7	0.2	10
Standard Chartered PLC	19	31	1,510	0.4	0.2	9
Westpac Banking	20	17	1,409	0.4	-0.5	8
Natixis	21	32	1,320	0.4	0.2	9
Societe Generale	22	29	1,296	0.4	0.1	5
Mitsubishi UFJ Financial Group	23	27	1,230	0.3	0.0	8
HSBC Holdings PLC	24	39	1,106	0.3	0.2	8
Commonwealth Bank of Australia	25	24	1,097	0.3	0.0	7
Industry Total			**363,335**	**100.0**		**586**

Global ABS (B11) — YoY Change ($) 45% — QoQ Change ($) 11%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Barclays	1	3	15,467	7.7	0.6	59
JP Morgan	2	1	14,141	7.0	-3.6	52
Deutsche Bank	3	9	13,487	6.7	1.9	65
Credit Suisse	4	8	13,435	6.7	1.7	55
Wells Fargo & Co	5	7	12,686	6.3	1.0	54
BofA Securities Inc	6	5	12,638	6.3	-0.7	53
Citi	7	2	12,511	6.2	-2.8	51
Mizuho Financial Group	8	4	11,015	5.5	-1.5	73
RBC Capital Markets	9	11	10,101	5.0	0.7	44
BNP Paribas SA	10	12	9,712	4.8	0.7	35
Goldman Sachs & Co	11	6	8,655	4.3	-1.1	41
Mitsubishi UFJ Financial Group	12	10	7,319	3.6	-1.1	29
Jefferies LLC	13	23	4,845	2.4	1.6	17
BMO Capital Markets	14	15	4,703	2.3	0.5	18
Societe Generale	15	17	4,483	2.2	0.6	18
TD Securities Inc	16	13	4,140	2.1	-1.0	15
Morgan Stanley	17	14	4,119	2.0	-0.8	20
Guggenheim Securities LLC	18	24	3,946	2.0	1.3	14
Credit Agricole CIB	19	19	3,566	1.8	0.5	14
Santander Corp & Invest Bkg	20	21	3,044	1.5	0.4	8
Sumitomo Mitsui Finl Grp Inc	21	16	2,624	1.3	-0.5	9
Natixis	22	18	2,095	1.0	-0.5	13
Daiwa Securities Group Inc	23	34	1,840	0.9	0.6	1
Truist Financial Corp	24	22	1,735	0.9	0.1	12
ING	25	25*	1,597	0.8	0.1	6
Industry Total			**201,552**	**100.0**		**400**

Global Debt and Loans Islamic Finance — YoY Change ($) 43% — QoQ Change ($) 62%

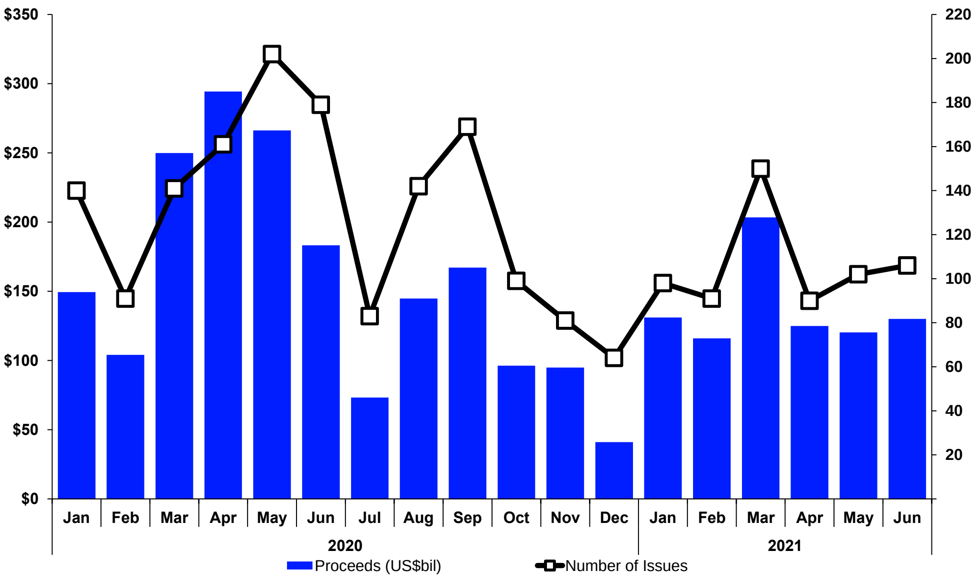
Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
HSBC Holdings PLC	1	2	3,645	9.5	1.9	17
CIMB Group Holdings Bhd	2	4	3,330	8.7	2.5	27
Standard Chartered PLC	3	1	2,965	7.7	-8.9	14
Malayan Banking Bhd	4	3	2,455	6.4	-0.5	20
Dubai Islamic Bank PJSC	5	6	1,959	5.1	0.0	8
Citi	6	9	1,813	4.7	0.9	8
RHB	7	7	1,760	4.6	0.0	25
Emirates NBD PJSC	8	14	1,696	4.4	2.0	12
JP Morgan	9	13	1,428	3.7	1.2	7
Intl Islamic Trade Finance	10	5	1,354	3.5	-2.6	8
First Abu Dhabi Bank PJSC	11	8	1,147	3.0	-1.1	7
Oversea-Chinese Banking	12	37	904	2.4	2.0	7
Goldman Sachs & Co	13	-	836	2.2	-	4
Gulf International Bank	14	18	649	1.7	0.2	3
Kuwait Finance House	15	19	638	1.7	0.3	6
Mitsubishi UFJ Financial Group	16	-	586	1.5	-	3
AMMB Holdings Bhd	17	10	580	1.5	-1.7	10
Societe Generale	18	28	564	1.5	0.7	2
Warba Bank	19	30	481	1.3	0.7	3
Saudi National Bank SJSC	20	43	457	1.2	1.0	3
Bank Islam Malaysia	21	31	450	1.2	0.6	6
Hong Leong Financial Group Bhd	22	20	439	1.1	-0.2	2
United Overseas Bank Ltd	23	-	390	1.0	-	1
Alinma Bank	24*	-	374	1.0	-	2
Al Jazira Capital	24*	-	374	1.0	-	2
Industry Total			**38,489**	**100.0**		**93**

*Indicates a Tie

United States Insights

First Half 2021 | Debt Capital Markets | Managing Underwriters

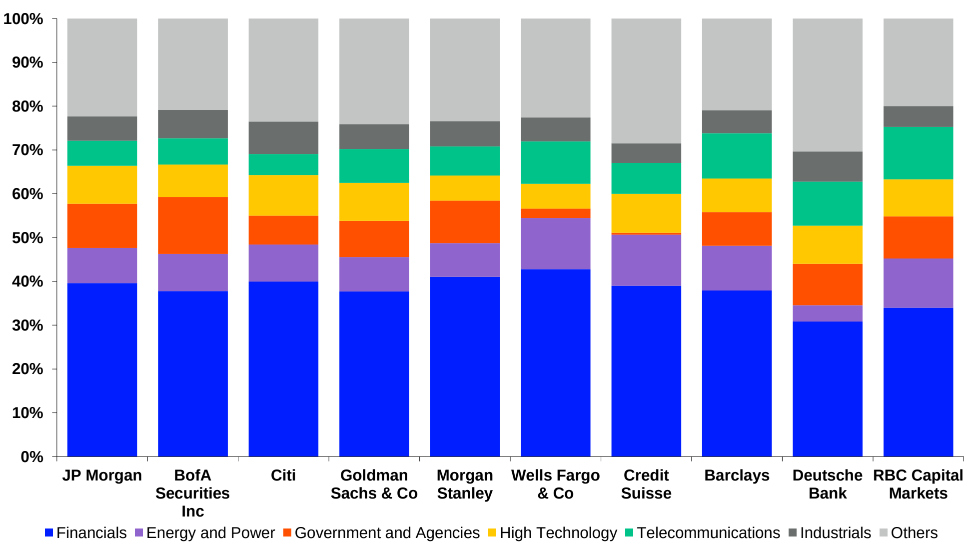
United States Marketed Monthly High Yield Volume



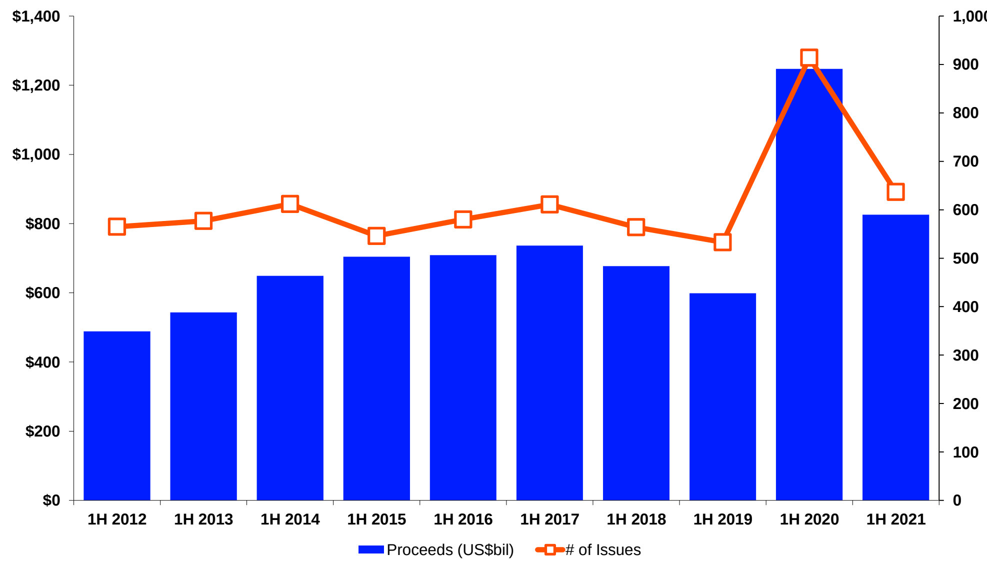
Top United States Investment Grade Corporate Deals

Issue Date	Issuer	Domicile Nation	Deal Size (US$mil)	Issue Type	Macro Sector
3/11/21	Verizon Communications Inc	United States	24,898	Investment Grade Corporate	Telecommunications
5/10/21	Amazon.com Inc	United States	18,437	Investment Grade Corporate	Retail
4/16/21	Bank of America Corp	United States	15,000	Investment Grade Corporate	Financials
3/22/21	Oracle Corp	United States	14,965	Investment Grade Corporate	High Technology
2/1/21	Apple Inc	United States	13,960	Investment Grade Corporate	High Technology
4/15/21	JPMorgan Chase & Co	United States	13,000	Investment Grade Corporate	Financials
1/27/21	7-Eleven Inc	Japan	10,935	Investment Grade Corporate	Retail
3/2/21	Siemens NV	Germany	9,989	Investment Grade Corporate	High Technology
1/4/21	Broadcom Inc	United States	9,971	Investment Grade Corporate	High Technology
2/2/21	Boeing Co	United States	9,825	Investment Grade Corporate	Industrials
6/30/21	Qatar Petroleum Corp	Qatar	8,500	Investment Grade Corporate	Energy and Power
2/24/21	NTT Finance Corp	Japan	8,000	Investment Grade Corporate	Financials
6/29/21	Salesforce.com Inc	United States	7,973	Investment Grade Corporate	High Technology

Top 10 United States DCM Bookrunners by Proceeds - Macro Industry Composition



United States Investment Grade - Proceeds



REFINITIV

An LSEG Business

United States Rankings

First Half 2021 | Debt Capital Markets | Managing Underwriters

U.S. Debt (F1)
YoY Change ($) -17% QoQ Change ($) -13%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	237,854	12.3	-0.1	817
BofA Securities Inc	2	2	185,486	9.6	0.0	722
Citi	3	3	177,591	9.2	-0.3	652
Goldman Sachs & Co	4	6	142,254	7.3	0.6	507
Morgan Stanley	5	7	131,736	6.8	0.2	451
Wells Fargo & Co	6	4	114,335	5.9	-1.6	547
Credit Suisse	7	8	97,353	5.0	1.1	355
Barclays	8	5	92,997	4.8	-2.5	451
Deutsche Bank	9	9	74,892	3.9	0.6	314
RBC Capital Markets	10	10	55,609	2.9	0.1	348
Mizuho Financial Group	11	15	47,762	2.5	0.4	252
HSBC Holdings PLC	12	11	42,952	2.2	-0.5	175
TD Securities Inc	13	12	42,291	2.2	-0.2	183
BNP Paribas SA	14	13	36,793	1.9	-0.2	198
Mitsubishi UFJ Financial Group	15	16	35,392	1.8	0.1	184
Nomura	16	14	28,454	1.5	-0.6	104
BMO Capital Markets	17	19	27,335	1.4	0.4	122
Credit Agricole CIB	18	21	23,707	1.2	0.3	107
Societe Generale	19	23	20,343	1.1	0.3	91
Sumitomo Mitsui Finl Grp Inc	20	18	20,300	1.1	-0.1	118
Industry Total			**1,939,365**	**100.0**		**2,837**

U.S. High Yield Corporate Debt (F8)
YoY Change ($) 47% QoQ Change ($) -11%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	31,599	11.0	-1.3	238
BofA Securities Inc	2	2	26,216	9.2	-1.0	217
Wells Fargo & Co	3	6	17,219	6.0	0.0	154
Citi	4	3	17,058	6.0	-2.4	147
Goldman Sachs & Co	5	4	16,816	5.9	-1.9	138
Barclays	6	5	16,333	5.7	-2.0	139
Credit Suisse	7	9	15,131	5.3	1.4	124
Morgan Stanley	8	7	14,144	4.9	-0.8	99
Deutsche Bank	9	8	13,937	4.9	0.0	111
RBC Capital Markets	10	10	12,393	4.3	0.8	109
Truist Financial Corp	11	11	7,685	2.7	0.4	84
Jefferies LLC	12	16	7,407	2.6	1.0	34
Mizuho Financial Group	13	18	6,949	2.4	0.9	66
BNP Paribas SA	14	13	6,829	2.4	0.7	57
Mitsubishi UFJ Financial Group	15	12	6,100	2.1	0.2	53
TD Securities Inc	16	14	4,570	1.6	-0.1	45
HSBC Holdings PLC	17	20	4,220	1.5	0.2	34
BMO Capital Markets	18	15	3,963	1.4	-0.2	45
Credit Agricole CIB	19	21	3,513	1.2	-0.1	31
Fifth Third Bancorp	20	23	3,367	1.2	0.2	44
Industry Total			**286,282**	**100.0**		**387**

U.S. Investment Grade Debt (F9)
YoY Change ($) -34% QoQ Change ($) -17%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	108,049	13.1	-0.1	322
BofA Securities Inc	2	2	102,138	12.4	0.9	307
Citi	3	3	77,195	9.4	-0.2	261
Goldman Sachs & Co	4	5	66,502	8.1	0.6	172
Morgan Stanley	5	4	59,912	7.3	-0.5	181
Wells Fargo & Co	6	6	44,427	5.4	-2.0	198
Barclays	7	7	32,773	4.0	-0.6	129
Deutsche Bank	8	8	28,809	3.5	0.3	83
Mizuho Financial Group	9	9	25,278	3.1	0.1	112
Credit Suisse	10	13	23,028	2.8	0.2	70
Mitsubishi UFJ Financial Group	11	14	21,719	2.6	0.2	99
HSBC Holdings PLC	12	11	21,503	2.6	-0.2	84
RBC Capital Markets	13	10	21,068	2.6	-0.3	112
BNP Paribas SA	14	12	16,686	2.0	-0.7	88
TD Securities Inc	15	17	16,574	2.0	0.3	71
Sumitomo Mitsui Finl Grp Inc	16	16	14,391	1.7	-0.1	76
Societe Generale	17	20	11,783	1.4	0.5	44
Credit Agricole CIB	18	21	10,108	1.2	0.3	48
US Bancorp	19	15	9,838	1.2	-0.9	63
Truist Financial Corp	20	19	9,786	1.2	0.1	63
Industry Total			**825,668**	**100.0**		**637**

U.S. MBS (F11)
YoY Change ($) 28% QoQ Change ($) -1%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	51,637	16.1	-1.2	71
Credit Suisse	2	2	43,334	13.5	-1.6	93
Morgan Stanley	3	4	36,879	11.5	1.4	70
Wells Fargo & Co	4	3	33,214	10.3	-3.1	68
Citi	5	5	33,141	10.3	0.6	64
Goldman Sachs & Co	6	7	31,961	9.9	2.8	96
BofA Securities Inc	7	6	24,510	7.6	-0.2	62
Nomura	8	8	15,394	4.8	-0.8	54
Barclays	9	9	12,499	3.9	1.0	53
Deutsche Bank	10	10	7,614	2.4	0.1	26
Industry Total			**321,591**	**100.0**		**469**

U.S. ABS (F14)
YoY Change ($) 40% QoQ Change ($) 10%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	13,474	8.7	-4.0	50
Wells Fargo & Co	2	5	12,686	8.2	1.5	54
Barclays	3	3	12,369	8.0	-0.3	47
Credit Suisse	4	8	12,043	7.8	2.8	50
BofA Securities Inc	5	4	11,698	7.5	0.6	50
Citi	6	2	10,362	6.7	-3.0	45
Deutsche Bank	7	9	10,261	6.6	1.7	56
RBC Capital Markets	8	7	8,965	5.8	0.5	37
Goldman Sachs & Co	9	6	6,985	4.5	-0.9	36
Mizuho Financial Group	10	10	6,305	4.1	-0.4	22
Industry Total			**155,213**	**100.0**		**245**

U.S. ABS ex Self & CDOs (F14b)
YoY Change ($) 59% QoQ Change ($) 9%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Barclays	1	3	11,638	8.3	0.7	45
JP Morgan	2	1	11,443	8.2	-1.9	44
BofA Securities Inc	3	5	11,203	8.0	1.0	49
Credit Suisse	4	11	10,981	7.8	3.2	48
Citi	5	4	9,474	6.8	-0.2	43
Deutsche Bank	6	7	9,256	6.6	0.7	53
RBC Capital Markets	7	6	8,965	6.4	0.2	37
Wells Fargo & Co	8	2	8,652	6.2	-1.7	43
Mizuho Financial Group	9	9	6,305	4.5	-0.7	22
Goldman Sachs & Co	10	8	6,187	4.4	-1.5	33
Industry Total			**140,079**	**100.0**		**213**

U.S. Securitizations (ex CMBS, Agency, CMO, Self-Funded & CDOs (F20a)
YoY Change ($) 57% QoQ Change ($) 8%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Credit Suisse	1	2	18,847	10.1	1.6	100
BofA Securities Inc	2	5	17,167	9.2	2.1	73
Barclays	3	6	15,694	8.4	1.3	69
JP Morgan	4	1	13,959	7.5	-1.8	58
Goldman Sachs & Co	5	4	12,669	6.8	-0.4	68
Wells Fargo & Co	6	3	12,172	6.5	-1.0	56
Citi	7	7	11,410	6.1	0.0	55
Deutsche Bank	8	8	10,142	5.4	0.0	61
RBC Capital Markets	9	9	9,039	4.8	0.1	38
Mizuho Financial Group	10	11	6,423	3.4	-0.4	23
Industry Total			**186,957**	**100.0**		**331**

*Indicates a Tie

US Residential MBS (F13b)
YoY Change ($) 42% QoQ Change ($) 6%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Goldman Sachs & Co	1	4	9,176	17.7	5.5	41
Credit Suisse	2	1	8,001	15.5	-1.4	53
BofA Securities Inc	3	6	5,964	11.5	5.2	24
Nomura	4	3	5,482	10.6	-1.6	33
Morgan Stanley	5	7	5,404	10.5	4.2	20
Wells Fargo & Co	6	5	4,190	8.1	-0.3	15
Barclays	7	8	4,055	7.8	2.9	24
JP Morgan	8	2	2,515	4.9	-9.5	14
Citi	9	10	1,936	3.7	0.5	12
Amherst Securities	10	17	1,315	2.5	1.8	10
Industry Total			**51,739**	**100.0**		**131**

All Federal Credit Agency Debt (H1)
YoY Change ($) -75% QoQ Change ($) -13%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Barclays	1	1	6,028	11.4	-20.2	37
Wells Fargo & Co	2	2	4,849	9.2	-3.1	49
Citi	3	5	4,555	8.6	2.2	30
Nomura	4	3	3,968	7.5	-4.6	23
TD Securities Inc	5	6	2,976	5.6	0.2	24
Daiwa Securities Group Inc	6	10	2,954	5.6	4.0	43
StoneX Group Inc	7	11	2,335	4.4	3.3	27
BofA Securities Inc	8	7	2,208	4.2	-0.3	16
JP Morgan	9	4	1,913	3.6	-4.4	28
Academy Securities Inc	10	21	1,487	2.8	2.3	17
Industry Total			**52,807**	**100.0**		**300**

International Debt & ESG Bonds Rankings

First Half 2021 | Debt Capital Markets | Managing Underwriters

All International Bonds (J01)

YoY Change ($) -9% QoQ Change ($) -13%

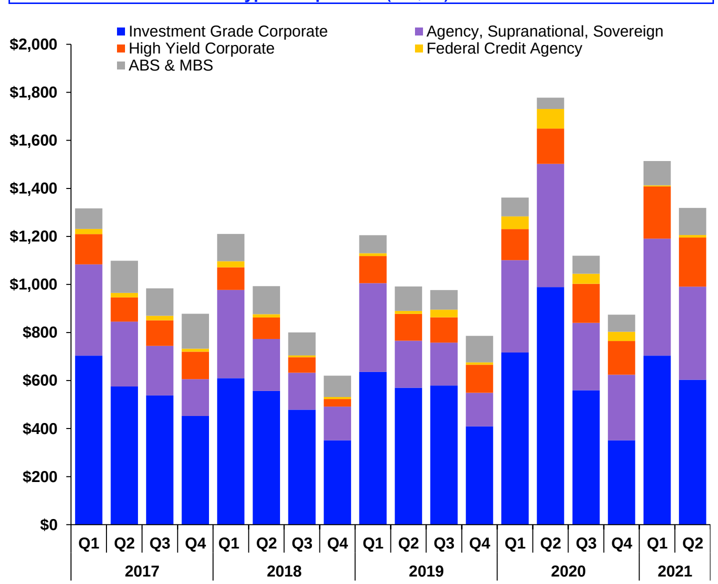
Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
JP Morgan	1	1	247,583	8.6	-0.2	1,036
BofA Securities Inc	2	3	195,891	6.8	-0.4	786
Citi	3	2	190,080	6.6	-0.7	768
Goldman Sachs & Co	4	5	157,146	5.5	0.1	591
Barclays	5	4	152,240	5.3	-1.4	650
Morgan Stanley	6	9	141,456	4.9	0.5	487
BNP Paribas SA	7	7	140,662	4.9	0.1	604
Deutsche Bank	8	8	140,454	4.9	0.3	587
HSBC Holdings PLC	9	6	132,834	4.6	-0.4	609
Credit Agricole CIB	10	10	83,400	2.9	-0.2	401
Credit Suisse	11	14	77,878	2.7	0.5	453
Societe Generale	12	12	73,054	2.5	0.1	262
Wells Fargo & Co	13	11	66,864	2.3	-0.5	375
RBC Capital Markets	14	13	64,880	2.3	-0.1	366
UniCredit	15	15	57,818	2.0	0.1	204
TD Securities Inc	16	16	53,046	1.8	0.0	249
Mizuho Financial Group	17	18	48,751	1.7	0.1	302
Nomura	18	17	44,945	1.6	-0.2	167
NatWest Markets	19	19	42,621	1.5	-0.1	157
Santander Corp & Invest Bkg	20	20	41,195	1.4	0.0	197
Mitsubishi UFJ Financial Group	21	21	38,601	1.3	-0.1	230
Natixis	22	22	35,376	1.2	0.0	164
Standard Chartered PLC	23	24	34,808	1.2	0.1	248
Commerzbank AG	24	23	31,231	1.1	-0.1	123
BMO Capital Markets	25	28	29,020	1.0	0.2	138
Industry Total			**2,883,745**	**100.0**		**3,572**

All Bonds In Euros (N01)

YoY Change ($) -14% QoQ Change ($) -13%

Bookrunner	Rank 2021	Rank 2020	Proceeds €mil	Market Share	Mkt. Sh Chg	# of Deals
BNP Paribas SA	1	1	76,643	8.5	0.0	310
JP Morgan	2	2	60,345	6.7	-0.4	247
Deutsche Bank	3	6	53,619	6.0	0.2	219
Barclays	4	5	50,218	5.6	-0.5	186
HSBC Holdings PLC	5	3	47,376	5.3	-0.9	196
UniCredit	6	8	46,649	5.2	0.2	191
Credit Agricole CIB	7	4	45,442	5.1	-1.1	202
Societe Generale	8	7	44,868	5.0	-0.2	169
Goldman Sachs & Co	9	11	42,457	4.7	1.2	168
Citi	10	9	40,488	4.5	-0.3	160
BofA Securities Inc	11	10	36,181	4.0	-0.6	143
Morgan Stanley	12	15	36,141	4.0	1.6	119
Natixis	13	12	24,172	2.7	-0.3	115
Commerzbank AG	14	13	21,950	2.4	-0.3	96
NatWest Markets	15	14	19,888	2.2	-0.3	77
DZ Bank	16	22	18,839	2.1	1.0	71
Santander Corp & Invest Bkg	17	16	18,395	2.1	-0.3	99
IMI - Intesa Sanpaolo	18	18	16,614	1.9	0.3	63
ING	19	17	15,709	1.8	-0.3	116
Nomura	20	19	14,805	1.7	0.2	38
BBVA	21	20	12,398	1.4	0.0	63
Landesbank Baden-Wurttemberg	22	29	11,255	1.3	0.6	50
Credit Suisse	23	21	9,579	1.1	-0.2	74
Danske Bank	24	24	9,289	1.0	0.1	54
UBS	25	27	6,674	0.7	-0.1	44
Industry Total			**898,194**	**100.0**		**1,039**

International Bonds - Issue Type Composition (US$bil)



All Global ESG Bonds (GESG1)

YoY Change ($) 147% QoQ Change ($) -17%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
BNP Paribas SA	1	7	28,627	5.9	1.0	117
JP Morgan	2	3	27,663	5.7	0.0	135
HSBC Holdings PLC	3	1	25,304	5.2	-1.8	122
Citi	4	2	25,269	5.2	-0.6	128
Deutsche Bank	5	11	23,590	4.9	2.1	107
Credit Agricole CIB	6	5	22,812	4.7	-0.8	94
BofA Securities Inc	7	6	22,351	4.6	-0.5	96
Barclays	8	4	21,205	4.4	-1.2	87
Goldman Sachs & Co	9	19	17,183	3.5	1.6	67
Societe Generale	10	8	17,117	3.5	0.0	63
NatWest Markets	11	13	16,969	3.5	1.0	43
Morgan Stanley	12	9	16,072	3.3	-0.2	65
Natixis	13	15	13,622	2.8	0.6	37
DZ Bank	14	25	9,998	2.1	1.0	16
UniCredit	15	21	8,965	1.8	0.2	46
Nomura	16	12	8,911	1.8	-0.9	43
Commerzbank AG	17	40	7,722	1.6	1.1	24
TD Securities Inc	18	10	7,581	1.6	-1.6	38
Danske Bank	19	23	7,217	1.5	0.1	58
Santander Corp & Invest Bkg	20	20	7,049	1.5	-0.3	45
ING	21	14	6,813	1.4	-1.0	47
Landesbank Baden-Wurttemberg	22	47	5,916	1.2	0.9	12
Mizuho Financial Group	23	22	5,672	1.2	-0.4	57
RBC Capital Markets	24	16	5,378	1.1	-1.1	38
Credit Suisse	25	24	5,192	1.1	-0.2	54
Industry Total			**486,036**	**100.0**		**878**

*Indicates a Tie

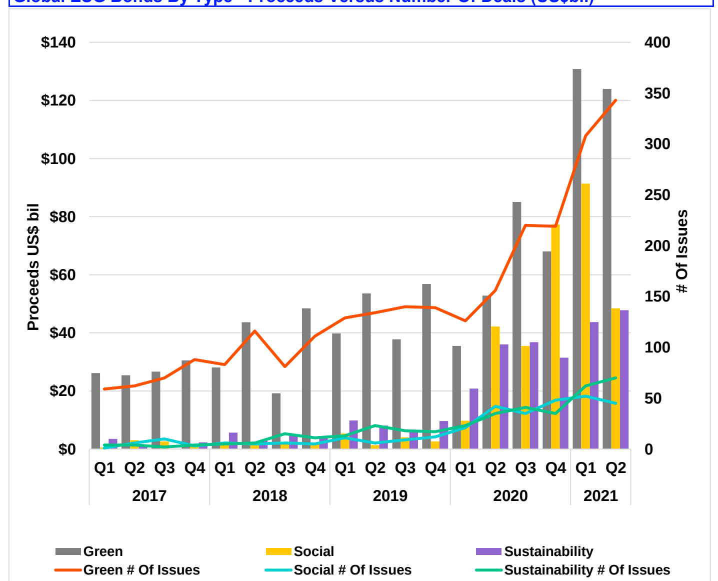
All Global Green Bonds (GR01)**

YoY Change ($) 188% QoQ Change ($) -5%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
JP Morgan	1	2	14,801	5.8	0.8	90
Citi	2	3	14,681	5.8	1.5	79
BNP Paribas SA	3	1	13,852	5.4	-0.2	71
Credit Agricole CIB	4	4	11,572	4.5	0.3	58
Deutsche Bank	5	11	11,246	4.4	1.5	75
HSBC Holdings PLC	6	8	10,226	4.0	0.3	67
BofA Securities Inc	7	7	9,785	3.8	-0.1	67
Barclays	8	9	8,017	3.2	-0.3	54
NatWest Markets	9	14	7,033	2.8	0.4	23
Danske Bank	10	18	6,650	2.6	0.5	53
Goldman Sachs & Co	11	16	6,320	2.5	0.3	39
UniCredit	12	17	5,185	2.0	-0.1	32
Societe Generale	13	5	5,121	2.0	-2.0	36
Morgan Stanley	14	10	4,587	1.8	-1.4	42
TD Securities Inc	15	34	4,454	1.8	1.0	28
Credit Suisse	16	15	4,290	1.7	-0.6	43
Santander Corp & Invest Bkg	17	12	4,137	1.6	-1.1	31
ING	18	6	4,042	1.6	-2.3	30
DZ Bank	19	43	3,760	1.5	1.0	10
Natixis	20	31	3,602	1.4	0.4	23
UBS	21	38	3,228	1.3	0.7	35
BMO Capital Markets	22	41	3,097	1.2	0.7	15
Bank of China Ltd	23	35	3,083	1.2	0.5	40
SEB	24	13	3,061	1.2	-1.3	43
Commerzbank AG	25	33	2,975	1.2	0.3	16
Industry Total			**254,731**	**100.0**		**651**

**Totals are compiled in partnership with Climate Bonds Initiative; www.climatebonds.net

Global ESG Bonds By Type - Proceeds Versus Number Of Deals (US$bil)



High Yield Corporate Debt Rankings

First Half 2021 | Debt Capital Markets | Managing Underwriters

Global High Yield Debt (B4)

YoY Change ($) 52% QoQ Change ($) -11%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
JP Morgan	1	1	38,954	9.7	-0.7	303
BofA Securities Inc	2	2	30,912	7.7	-1.2	257
Goldman Sachs & Co	3	5	23,765	5.9	-1.1	198
Barclays	4	4	23,656	5.9	-1.1	193
Deutsche Bank	5	6	21,612	5.4	0.3	200
Citi	6	3	20,323	5.1	-2.3	186
Credit Suisse	7	7	19,823	4.9	-0.1	199
Morgan Stanley	8	8	18,599	4.6	-0.4	137
Wells Fargo & Co	9	9	17,647	4.4	-0.2	158
RBC Capital Markets	10	10	13,371	3.3	0.2	119
BNP Paribas SA	11	11	13,188	3.3	0.8	126
HSBC Holdings PLC	12	12	10,807	2.7	0.6	115
Truist Financial Corp	13	14	7,869	2.0	0.3	86
Jefferies LLC	14	20	7,713	1.9	0.7	37
Mizuho Financial Group	15	17	7,674	1.9	0.6	73
Mitsubishi UFJ Financial Group	16	16	7,231	1.8	0.3	63
Credit Agricole CIB	17	15	6,666	1.7	0.1	67
ING	18	25	4,589	1.1	0.3	45
TD Securities Inc	19	18	4,570	1.1	-0.2	45
UBS	20	13	4,544	1.1	-0.7	77
UniCredit	21	28	4,248	1.1	0.5	41
Societe Generale	22	24	4,153	1.0	0.0	42
BMO Capital Markets	23	19	4,140	1.0	-0.2	46
Standard Chartered PLC	24	33	3,695	0.9	0.4	45
Sumitomo Mitsui Finl Grp Inc	25	27	3,663	0.9	0.1	36
Industry Total			**400,923**	**100.0**		**606**

Global High Yield Debt USD Denominated (B5)

YoY Change ($) 40% QoQ Change ($) -13%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
JP Morgan	1	1	32,474	10.4	-0.6	254
BofA Securities Inc	2	2	26,599	8.5	-1.2	229
Citi	3	3	17,672	5.7	-1.8	161
Wells Fargo & Co	4	7	17,219	5.5	0.3	154
Goldman Sachs & Co	5	4	17,216	5.5	-1.8	147
Barclays	6	5	16,873	5.4	-1.7	155
Credit Suisse	7	9	16,607	5.3	0.6	165
Deutsche Bank	8	8	15,353	4.9	0.2	154
Morgan Stanley	9	6	14,864	4.8	-0.6	113
RBC Capital Markets	10	10	12,393	4.0	1.0	109
Truist Financial Corp	11	11	7,685	2.5	0.5	84
Jefferies LLC	12	19	7,407	2.4	1.0	34
BNP Paribas SA	13	12	7,285	2.3	0.4	73
Mizuho Financial Group	14	18	6,949	2.2	0.8	66
Mitsubishi UFJ Financial Group	15	13	6,100	2.0	0.3	53
HSBC Holdings PLC	16	15	5,909	1.9	0.3	73
TD Securities Inc	17	16	4,570	1.5	0.0	45
BMO Capital Markets	18	17	3,963	1.3	-0.1	45
UBS	19	14	3,694	1.2	-0.5	71
Credit Agricole CIB	20	23	3,664	1.2	0.1	34
Fifth Third Bancorp	21	24	3,367	1.1	0.2	44
US Bancorp	22	20	3,362	1.1	-0.3	37
Standard Chartered PLC	23	29	3,255	1.0	0.4	39
Sumitomo Mitsui Finl Grp Inc	24	25	3,120	1.0	0.2	29
PNC Financial Services Group	25	21	3,080	1.0	-0.2	38
Industry Total			**312,807**	**100.0**		**486**

Top High Yield Corporate Deals

Issue Date	Issuer	Domicile Nation	Proceeds US$mil	Coupon %	Macro Sector
3/10/21	American Airlines Inc	United States	6,500.0	5.500	Industrials
4/8/21	Organon & Co	United States	5,589.0	4.125	Healthcare
4/14/21	United Airlines Inc	United States	4,000.0	4.625	Industrials
3/16/21	T-Mobile US Inc	United States	3,800.0	3.500	Telecommunications
2/10/21	Carnival Corp	United States	3,500.0	5.750	Consumer Products and Services
2/10/21	Bellis Acquisition Co PLC	United Kingdom	3,111.3	3.250	Financials
5/10/21	T-Mobile US Inc	United States	3,024.0	3.500	Telecommunications
1/11/21	T-Mobile US Inc	United States	3,000.0	2.875	Telecommunications
2/9/21	Cellnex Finance Co SAU	Spain	2,982.7	2.000	Telecommunications
4/13/21	Altice France SA	France	2,977.8	5.125	Media and Entertainment
5/5/21	Allied Universal Holdco LLC	United States	2,960.0	4.625	Consumer Products and Services
2/26/21	Ardagh Metal Packaging SA	Luxembourg	2,797.0	4.000	Materials
4/15/21	Nexi SpA	Italy	2,512.7	1.625	Financials

Global High Yield Debt Non-USD Denominated (B6)

YoY Change ($) 103% QoQ Change ($) -3%

Bookrunner	Rank 2021	Rank 2020	Proceeds €mil	Market Share	Mkt. Sh Chg	# of Deals
Barclays	1	3	5,617	7.7	0.8	42
Goldman Sachs & Co	2	7	5,456	7.5	2.2	58
JP Morgan	3	2	5,373	7.3	0.3	55
Deutsche Bank	4	1	5,195	7.1	-0.2	52
BNP Paribas SA	5	6	4,904	6.7	0.8	58
HSBC Holdings PLC	6	9	4,062	5.6	1.0	44
BofA Securities Inc	7	8	3,580	4.9	0.3	32
UniCredit	8	11	3,197	4.4	0.5	37
Morgan Stanley	9	15	3,105	4.2	1.7	30
Credit Suisse	10	5	2,672	3.7	-2.5	39
Credit Agricole CIB	11	10	2,498	3.4	-1.0	37
Citi	12	4	2,202	3.0	-3.9	29
ING	13	13	1,900	2.6	-0.8	28
Societe Generale	14	12	1,580	2.2	-1.3	20
Santander Corp & Invest Bkg	15	23	1,537	2.1	1.1	19
NatWest Markets	16	16	1,272	1.7	-0.7	13
IMI - Intesa Sanpaolo	17	19	1,231	1.7	0.0	16
Natixis	18	21	1,173	1.6	0.2	18
BBVA	19	32	1,062	1.5	1.0	12
Mitsubishi UFJ Financial Group	20	48	939	1.3	1.2	11
Cooperatieve Rabobank UA	21	28	885	1.2	0.5	7
Lloyds Bank	22	30	885	1.2	0.7	8
RBC Capital Markets	23	14	815	1.1	-2.1	13
Commerzbank AG	24	20	775	1.1	-0.6	9
Mediobanca	25	24	762	1.0	0.0	9
Industry Total			**73,199**	**100.0**		**129**

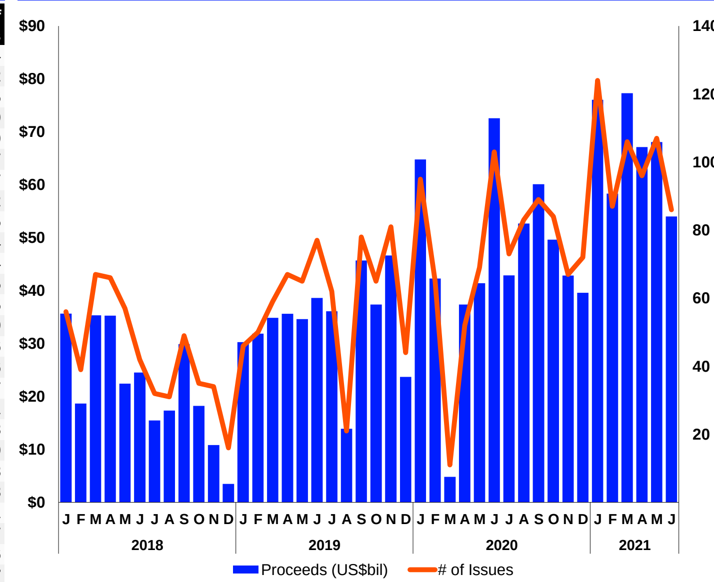
*Indicates a Tie

Global High Yield Debt EURO Denominated (B06b)

YoY Change ($) 89% QoQ Change ($) 5%

Bookrunner	Rank 2021	Rank 2020	Proceeds €mil	Market Share	Mkt. Sh Chg	# of Deals
Goldman Sachs & Co	1	7	5,138	8.3	2.8	54
JP Morgan	2	2	5,131	8.3	1.0	52
BNP Paribas SA	3	5	4,684	7.6	1.2	55
Deutsche Bank	4	1	4,616	7.5	0.0	49
Barclays	5	4	3,179	5.2	-1.4	29
UniCredit	6	10	3,179	5.2	0.9	37
BofA Securities Inc	7	8	2,920	4.7	-0.2	27
HSBC Holdings PLC	8	11	2,651	4.3	0.2	32
Credit Agricole CIB	9	9	2,370	3.8	-0.9	35
Credit Suisse	10	6	2,339	3.8	-2.3	34
Morgan Stanley	11	15	2,304	3.7	1.0	24
Citi	12	3	1,939	3.1	-3.9	25
ING	13	13	1,764	2.9	-0.4	25
Societe Generale	14	12	1,508	2.4	-1.3	19
Santander Corp & Invest Bkg	15	23	1,374	2.2	1.1	16
IMI - Intesa Sanpaolo	16	21	1,175	1.9	0.4	16
Natixis	17	20	1,144	1.9	0.4	17
BBVA	18	30	1,015	1.6	1.0	11
Mitsubishi UFJ Financial Group	19	44	821	1.3	1.2	8
Commerzbank AG	20	19	775	1.3	-0.5	9
NatWest Markets	21	18	730	1.2	-0.7	8
Mediobanca	22	26	715	1.2	0.3	8
RBC Capital Markets	23	14	687	1.1	-2.0	11
Banca Akros SpA	24	46*	654	1.1	1.0	7
UBS	25	16	628	1.0	-1.4	6
Industry Total			**61,714**	**100.0**		**107**

Global High Yield Corporate Debt Issuance



Emerging Markets Rankings

First Half 2021 | Debt Capital Markets | Managing Underwriters

All International Emerging Market Bonds (L1)

YoY Change ($) 6% QoQ Change ($) -13%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
HSBC Holdings PLC	1	2	36,942	8.4	0.2	257
JP Morgan	2	3	34,652	7.9	0.4	189
Citi	3	1	34,386	7.8	-1.2	186
Standard Chartered PLC	4	4	22,987	5.2	-1.0	187
BofA Securities Inc	5	8	21,788	5.0	0.8	116
BNP Paribas SA	6	7	18,811	4.3	-0.3	139
Goldman Sachs & Co	7	6	17,072	3.9	-1.1	70
Morgan Stanley	8	12	14,833	3.4	1.0	73
Credit Suisse	9	11	11,622	2.6	-0.1	95
Deutsche Bank	10	5	11,609	2.6	-2.6	96
Credit Agricole CIB	11	10	11,207	2.6	-0.1	102
Barclays	12	9	9,303	2.1	-0.7	70
Mizuho Financial Group	13	16	8,009	1.8	0.4	84
Mitsubishi UFJ Financial Group	14	19	7,852	1.8	0.5	48
UBS	15	14	7,716	1.8	-0.5	99
Societe Generale	16	13	7,671	1.8	-0.6	45
Santander Corp & Invest Bkg	17	27	7,452	1.7	0.9	35
Bank of China Ltd	18	15	7,430	1.7	-0.1	124
DBS Group Holdings	19	18	6,596	1.5	0.2	81
Sumitomo Mitsui Finl Grp Inc	20	24	5,513	1.3	0.4	48
Industry Total			**439,524**	**100.0**		**765**

EMEA Emerging Market Bonds (L2)

YoY Change ($) 0% QoQ Change ($) -16%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	9,035	12.4	-3.0	38
Citi	2	2	6,716	9.2	-3.3	28
BNP Paribas SA	3	3	5,129	7.1	-2.0	23
VTB Capital	4	21	4,882	6.7	5.7	13
HSBC Holdings PLC	5	8	3,959	5.4	0.8	15
Standard Chartered PLC	6	13	3,545	4.9	2.3	16
Societe Generale	7	5	3,255	4.5	-1.7	15
Goldman Sachs & Co	8	15	3,227	4.4	2.5	11
Barclays	9	6	2,887	4.0	-1.0	12
UniCredit	10	7	2,688	3.7	-0.9	13
BofA Securities Inc	11	19	2,252	3.1	1.8	13
Deutsche Bank	12	4	1,592	2.2	-4.0	7
Raiffeisen Schweiz Genossensch	13	20	1,490	2.1	1.0	4
Gazprombank	14	10	1,441	2.0	-1.0	5
Sumitomo Mitsui Finl Grp Inc	15	37	1,399	1.9	1.7	10
Erste Group	16	14	1,395	1.9	-0.6	12
Credit Agricole CIB	17	18	1,368	1.9	0.2	6
IMI - Intesa Sanpaolo	18	11	1,140	1.6	-1.2	6
ING	19	9	994	1.4	-2.7	11
Natixis	20	32	914	1.3	1.0	4
Industry Total			**72,726**	**100.0**		**91**

Latin America Emerging Market Bonds (L3)

YoY Change ($) 8% QoQ Change ($) -26%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	9,819	13.0	0.6	38
Citi	2	5	8,146	10.8	3.3	32
BofA Securities Inc	3	3	8,142	10.8	2.4	29
Morgan Stanley	4	12	6,472	8.5	4.7	23
Santander Corp & Invest Bkg	5	10	6,440	8.5	4.1	29
HSBC Holdings PLC	6	9	5,782	7.6	2.1	18
Goldman Sachs & Co	7	6	5,568	7.4	0.5	23
BNP Paribas SA	8	7	3,014	4.0	-2.4	15
BBVA	9	13	2,924	3.9	0.1	8
Itau Unibanco	10	4	1,969	2.6	-5.3	16
Credit Agricole CIB	11	23	1,912	2.5	2.0	7
Barclays	12	14	1,907	2.5	0.5	6
Credit Suisse	13	11	1,882	2.5	-1.8	9
Banco Bradesco SA	14	18	1,441	1.9	0.8	8
Deutsche Bank	15	2	1,208	1.6	-7.2	5
Banco BTG Pactual SA	16	17	1,191	1.6	0.5	12
Mizuho Financial Group	17	28*	963	1.3	1.1	5
UBS	18	21	962	1.3	0.7	10
Scotiabank	19	8	848	1.1	-4.9	3
Mitsubishi UFJ Financial Group	20	16	675	0.9	-0.2	5
Industry Total			**75,761**	**100.0**		**82**

Asia Pacific Emerging Market Bonds (L4)

YoY Change ($) 20% QoQ Change ($) -7%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
HSBC Holdings PLC	1	1	19,676	8.7	-0.8	188
Citi	2	2	14,716	6.5	-0.4	99
Standard Chartered PLC	3	3	12,899	5.7	0.4	134
JP Morgan	4	8	12,475	5.5	1.8	89
BofA Securities Inc	5	7	9,226	4.1	0.4	69
BNP Paribas SA	6	11	8,500	3.8	0.8	90
Bank of China Ltd	7	5	7,216	3.2	-0.7	123
Morgan Stanley	8	19	7,212	3.2	1.3	41
Credit Agricole CIB	9	10	6,817	3.0	-0.2	78
Deutsche Bank	10	15	6,576	2.9	0.3	77
Industry Total			**226,433**	**100.0**		**510**

Middle East Emerging Market Bonds (L5)

YoY Change ($) -19% QoQ Change ($) -6%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
HSBC Holdings PLC	1	3	7,600	11.6	1.0	34
Standard Chartered PLC	2	1	6,354	9.7	-6.8	35
Citi	3	2	5,567	8.5	-3.9	25
JP Morgan	4	6	4,280	6.5	1.5	24
Goldman Sachs & Co	5	4	4,149	6.3	-3.5	11
Qatar National Bank	6	14	2,831	4.3	3.0	8
Credit Suisse	7	16	2,825	4.3	3.4	8
First Abu Dhabi Bank PJSC	8	9	2,651	4.0	-0.2	20
Mitsubishi UFJ Financial Group	9	34*	2,462	3.8	3.5	7
Deutsche Bank	10	5	2,174	3.3	-3.9	6
Industry Total			**65,638**	**100.0**		**77**

All Global Debt, by Brazilian Issuers (BR1)

YoY Change ($) -8% QoQ Change ($) 13%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Itau Unibanco	1	2	2,576	11.8	-4.8	36
Banco Bradesco SA	2	8	1,763	8.1	3.3	13
Banco BTG Pactual SA	3	6	1,733	7.9	2.3	20
Santander Corp & Invest Bkg	4	7	1,661	7.6	2.2	19
Goldman Sachs & Co	5	9	1,519	6.9	3.6	8
Citi	6	12	1,514	6.9	4.9	15
JP Morgan	7	4	1,402	6.4	-3.9	13
Morgan Stanley	8	21	1,348	6.2	5.9	15
HSBC Holdings PLC	9	22*	1,245	5.7	5.5	5
UBS	10	-	1,080	4.9	4.9	15
Industry Total			**21,903**	**100.0**		**59**

Domestic Brazilian Debt, in Reals (BR2)

YoY Change ($) -23% QoQ Change ($) 7%

Bookrunner	Rank 2021	Rank 2020	Proceeds R$mil	Market Share	Mkt. Sh. Chg	# of Deals
Itau Unibanco	1	1	6,030	30.0	10.9	26
Banco BTG Pactual SA	2	4	4,354	21.6	7.5	11
Santander Corp & Invest Bkg	3	7	2,602	12.9	7.5	7
Banco Bradesco SA	4	2	1,597	7.9	-6.9	7
Citi	5	9	1,440	7.2	4.7	3
XP Investimentos	6	6	701	3.5	-3.8	3
Arab Banking Corporation	7	12	605	3.0	1.7	5
UBS	8	-	596	3.0	3.0	5
Banco Safra SA	9	11	417	2.1	0.7	2
Banco do Brasil SA	10	5	300	1.5	-9.3	1
Industry Total			**20,136**	**100.0**		**40**

*Indicates a Tie

Global Debt, Mexican Issuers (MX1)

YoY Change ($) -19% QoQ Change ($) -20%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Citi	1	3	2,902	11.9	-1.2	21
BBVA	2	5	2,669	10.9	2.9	36
Santander Corp & Invest Bkg	3	4	2,393	9.8	1.5	26
JP Morgan	4	1	2,307	9.5	-4.5	7
BofA Securities Inc	5	7	2,142	8.8	2.7	10
HSBC Holdings PLC	6	12	1,789	7.3	5.0	6
Goldman Sachs & Co	7	2	1,509	6.2	-7.0	6
BNP Paribas SA	8	8	1,272	5.2	-0.2	5
Barclays	9	9	1,252	5.1	0.5	4
Morgan Stanley	10	6	1,247	5.1	-1.4	4
Industry Total			**24,425**	**100.0**		**67**

Domestic Mexican Debt (MX3)

YoY Change ($) 47% QoQ Change ($) 75%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
BBVA	1	1	1,036	25.5	0.6	29
Santander Corp & Invest Bkg	2	2	816	20.1	1.6	21
Casas de Bolsa Bital, S.A.	3	4	655	16.1	1.3	11
Casa de Bolsa Inverlat	4	3	403	9.9	-8.6	13
Citi	5	5	400	9.9	1.2	11
Grupo Financiero Banorte-Ixe	6	6	207	5.1	2.1	9
Multibanco Comermex SNC	7	-	200	4.9	4.9	5
Invex Casa de Bolsa, SA de CV	8	-	99	2.4	2.4	2
GBM Grupo Bursatil Mexicano	9	8	59	1.5	-1.1	1
Industry Total			**4,060**	**100.0**		**50**

Asia-Pacific Rankings

First Half 2021 | Debt Capital Markets | Managing Underwriters

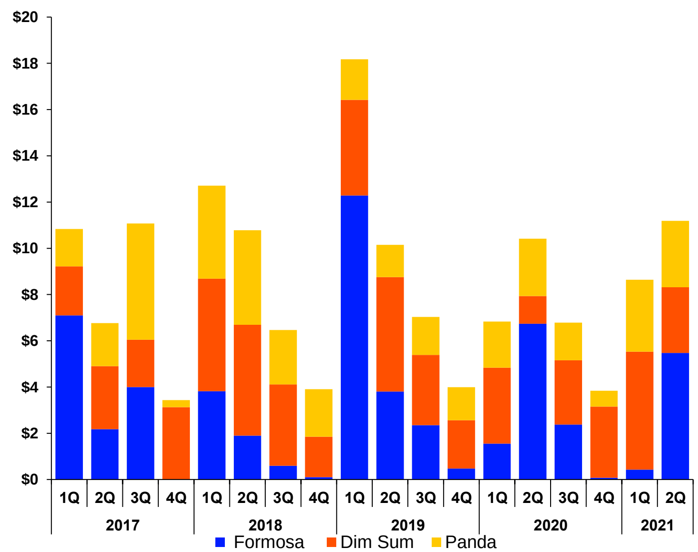
Asian G3 Bonds (ex-Japan & Australia) (AR2) YoY Change ($) 17% QoQ Change ($) -6%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
HSBC Holdings PLC	1	1	17,843	8.1	-0.9	153
Citi	2	2	16,381	7.4	0.1	94
JP Morgan	3	8	13,708	6.2	2.6	84
Standard Chartered PLC	4	3	11,955	5.4	0.3	120
BofA Securities Inc	5	4	9,671	4.4	-0.1	65
Morgan Stanley	6	15	8,033	3.6	1.1	38
BNP Paribas SA	7	11	7,775	3.5	0.6	79
Deutsche Bank	8	12	7,641	3.5	0.7	73
Credit Agricole CIB	9	10	6,630	3.0	-0.1	54
Bank of China Ltd	10	7	6,312	2.9	-0.8	107
Goldman Sachs & Co	11	5	6,138	2.8	-1.6	26
Credit Suisse	12	9	6,095	2.8	-0.6	71
UBS	13	6	5,857	2.7	-1.1	81
DBS Group Holdings	14	13	5,594	2.5	-0.2	65
CITIC	15	14	5,033	2.3	-0.4	133
Mizuho Financial Group	16	18	4,683	2.1	-0.1	51
China International Capital Co	17	31	4,354	2.0	1.1	81
Barclays	18	16	3,801	1.7	-0.7	37
Guotai Junan Securities	19	21	3,675	1.7	0.2	115
Industrial & Comm Bank China	20	17	3,623	1.6	-0.8	60
Mitsubishi UFJ Financial Group	21	19	3,535	1.6	-0.4	26
Haitong Securities Co Ltd	22	20	3,358	1.5	-0.2	113
Bank of Communications Co Ltd	23	22	3,070	1.4	-0.1	83
China Minsheng Banking Corp	24	33	3,019	1.4	0.6	92
Societe Generale	25	23	2,867	1.3	-0.1	21
Industry Total			**220,816**	**100.0**		**409**

Asian G3 High Yield Bonds (ex Japan & Australia) (AR10) YoY Change ($) 9% QoQ Change ($) -26%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
Deutsche Bank	1	11	2,190	7.4	3.9	49
CITIC	2	5	2,041	6.9	1.3	55
HSBC Holdings PLC	3	10	1,875	6.3	2.6	41
Guotai Junan Securities	4	7	1,819	6.1	1.9	61
Haitong Securities Co Ltd	5	4	1,607	5.4	-0.3	59
Credit Suisse	6	1	1,463	4.9	-5.4	41
UBS	7	2	1,457	4.9	-3.7	48
Standard Chartered PLC	8	8	1,149	3.9	-0.1	30
JP Morgan	9	17	1,095	3.7	1.8	19
China International Capital Co	10	25	933	3.1	2.3	20
Morgan Stanley	11	12	902	3.0	-0.5	16
China Merchants Bank	12	18	770	2.6	0.8	27
Bank of East Asia Ltd	13	26	740	2.5	1.7	22
Bank of China Ltd	14	13	701	2.4	-1.0	21
Bank of Communications Co Ltd	15	20	655	2.2	0.8	21
China Construction Bank	16	15	639	2.2	-0.7	23
China Minsheng Banking Corp	17	38	610	2.1	1.7	24
Barclays	18	16	590	2.0	-0.6	17
Citi	19	51	566	1.9	1.7	13
BNP Paribas SA	20	14	563	1.9	-1.3	18
Nomura	21	27	488	1.6	0.8	7
BofA Securities Inc	22	3	433	1.5	-4.3	13
HeungKong Group Ltd	23	22	411	1.4	0.0	14
Goldman Sachs & Co	24	9	400	1.4	-2.5	9
DBS Group Holdings	25	30	336	1.1	0.5	12
Industry Total			**29,693**	**100.0**		**100**

Dim Sum, Panda and Formosa Bond Issuance (ex self-funded) (US$bil)

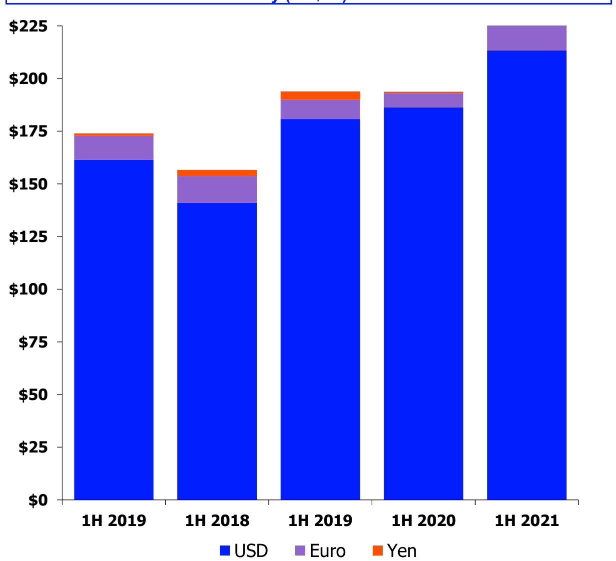


All Asian Currencies (ex Japan & Australia) (AS1) YoY Change ($) 4% QoQ Change ($) 34%

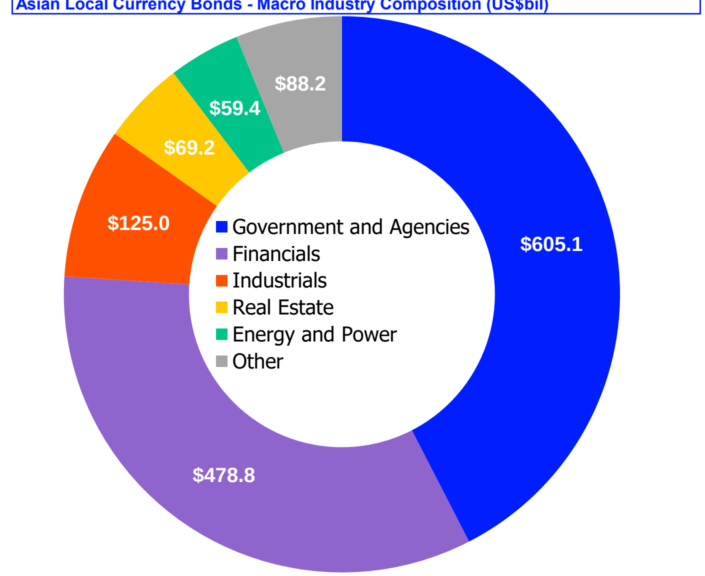
Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
CITIC	1	3	92,355	6.5	0.7	1,059
Bank of China Ltd	2	1	89,587	6.3	-0.4	875
Industrial & Comm Bank China	3	2	86,819	6.1	-0.3	857
China Construction Bank	4	4	79,369	5.6	-0.2	893
Agricultural Bank of China	5	6	72,737	5.1	0.6	725
Bank of Communications Co Ltd	6	5	67,000	4.7	-0.2	731
China Securities Co Ltd	7	7	65,099	4.6	0.7	749
Industrial Bank Co Ltd	8	8	46,049	3.2	0.0	582
Huatai Securities Co Ltd	9	12	42,097	3.0	1.0	441
Guotai Junan Securities	10	10	36,465	2.6	0.3	421
China International Capital Co	11	16	32,606	2.3	0.6	314
China Merchants Bank	12	9	29,943	2.1	-0.5	419
Postal Savings Bank Of China	13	15	27,048	1.9	0.1	305
Haitong Securities Co Ltd	14	13	25,190	1.8	-0.1	298
Shanghai Pudong Development Bk	15	14	22,383	1.6	-0.2	313
China Minsheng Banking Corp	16	11	21,449	1.5	-0.6	324
Everbright Securities Co Ltd	17	20	17,558	1.2	0.2	214
KB Financial Group Inc	18	21	17,438	1.2	0.2	414
China Merchants Securities Co	19	23	16,859	1.2	0.4	203
Orient Securities Co Ltd	20	26	16,765	1.2	0.4	224
NH Investment & Securities Co	21	18	15,895	1.1	0.0	326
Shenwan Hongyuan Securities Co	22	30	14,958	1.1	0.4	155
Guosen Securities Co Ltd	23	33	13,835	1.0	0.4	187
Korea Investment Holdings Co	24	38	12,267	0.9	0.4	269
China Everbright Bank	25	17	10,826	0.8	-0.5	167
Industry Total			**1,425,632**	**100.0**		**6,410**

*Indicates a Tie

Asian G3 Bond Volume - Currency (US$bil)



Asian Local Currency Bonds - Macro Industry Composition (US$bil)



REFINITIV

Australia & China Rankings

First Half 2021 | Debt Capital Markets | Managing Underwriters

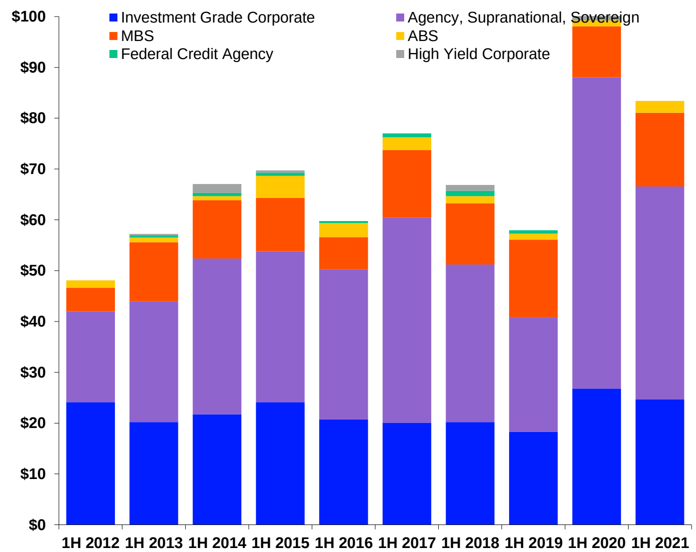
All Australian Debt (ex self-funded) (AJ3a) YoY Change ($) -16% QoQ Change ($) 39%

Bookrunner	Rank 2021	Rank 2020	Proceeds AU$mil	Market Share	Mkt. Sh Chg	# of Deals
Commonwealth Bank of Australia	1	4	12,214	14.6	0.4	50
National Australia Bank	2	6	10,655	12.8	4.1	62
Westpac Banking	3	1	10,524	12.6	-2.2	46
ANZ Banking Group	4	2	9,576	11.5	-3.3	52
UBS	5	3	6,979	8.4	-6.2	18
Deutsche Bank	6	7	6,762	8.1	2.7	19
Citi	7	5	3,212	3.9	-5.6	10
RBC Capital Markets	8	12	3,190	3.8	2.0	20
TD Securities Inc	9	8	3,064	3.7	0.5	33
Nomura	10	9	2,881	3.5	1.4	24
JP Morgan	11	11	2,022	2.4	0.6	19
Standard Chartered PLC	12	15	1,524	1.8	1.1	8
BofA Securities Inc	13	10	1,503	1.8	-0.2	5
Macquarie Group	14	13	1,297	1.6	0.2	8
Mizuho Financial Group	15	20	1,252	1.5	1.1	9
Sumitomo Mitsui Finl Grp Inc	16	14	1,202	1.4	0.6	6
Natixis	17	17	1,150	1.4	0.8	6
Mitsubishi UFJ Financial Group	18	16	1,077	1.3	0.7	6
HSBC Holdings PLC	19	18	619	0.7	0.2	5
Bank of China Ltd	20	22	535	0.6	0.3	6
Industry Total			**83,406**	**100.0**		**173**

All Australian International Bonds (AJ7) YoY Change ($) 5% QoQ Change ($) 31%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
Citi	1	1	4,642	16.0	3.0	17
BofA Securities Inc	2	2	2,850	9.8	-0.7	9
Morgan Stanley	3	17	2,627	9.1	6.8	7
HSBC Holdings PLC	4	3	2,376	8.2	-1.5	12
JP Morgan	5	4	2,186	7.5	-0.6	8
Goldman Sachs & Co	6	8	1,626	5.6	1.2	6
BNP Paribas SA	7	13	1,545	5.3	2.1	8
National Australia Bank	8	15	1,178	4.1	1.1	6
RBC Capital Markets	9	5	1,111	3.8	-2.5	4
Westpac Banking	10	7	1,036	3.6	-1.1	4
Macquarie Group	11	18	963	3.3	1.4	5
Wells Fargo & Co	12	21	848	2.9	2.0	4
UBS	13	16	728	2.5	-0.1	4
Deutsche Bank	14	10	581	2.0	-1.8	4
Credit Suisse	15	19	577	2.0	0.2	3
Commonwealth Bank of Australia	16	11	550	1.9	-1.6	1
Barclays	17	14	494	1.7	-1.4	3
TD Securities Inc	18	9	436	1.5	-2.6	2
Societe Generale	19	-	301	1.0	1.0	2
ANZ Banking Group	20	6	293	1.0	-4.0	2
Industry Total			**29,003**	**100.0**		**32**

All Australian Debt - Issue Type Composition (AU$bil)



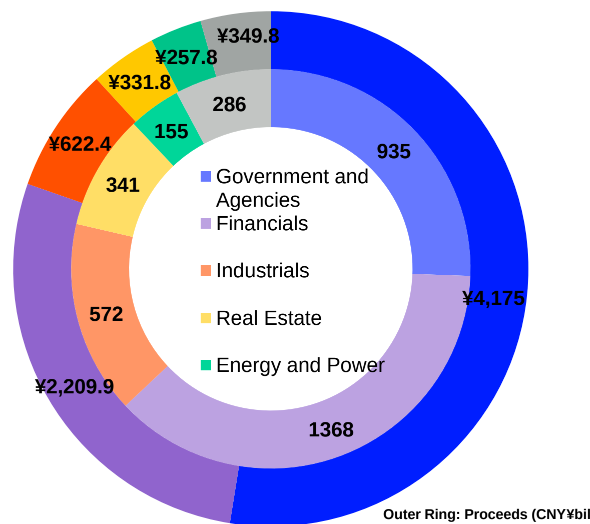
China G3 Currency Bonds (AR5) YoY Change ($) 7% QoQ Change ($) -14%

Bookrunner	Rank 2021	Rank 2020	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
Morgan Stanley Huaxin Securities	1	22	4,182	5.2	3.2	23
HSBC Holdings PLC	2	1	3,905	4.9	-1.5	52
Bank of China Ltd	3	2	3,512	4.4	-1.5	82
China International Capital Co	4	23	3,500	4.4	2.5	66
CITIC	5	5	3,499	4.4	0.0	105
JP Morgan	6	9	3,314	4.2	0.5	29
Guotai Junan Securities	7	14	3,181	4.0	1.4	97
Citi	8	12	3,133	3.9	0.8	28
Standard Chartered PLC	9	13	2,715	3.4	0.3	54
BofA Securities Inc	10	11	2,648	3.3	0.0	26
Haitong Securities Co Ltd	11	10	2,626	3.3	-0.3	92
Industrial & Comm Bank China	12	3	2,469	3.1	-1.9	45
Credit Suisse	13	8	2,451	3.1	-0.6	41
UBS	14	7	2,336	2.9	-0.9	55
Bank of Communications Co Ltd	15	19	2,262	2.8	0.7	62
China Minsheng Banking Corp	16	25	2,221	2.8	1.4	73
China Merchants Bank	17	21	2,194	2.8	0.8	64
China Construction Bank	18	16	1,807	2.3	-0.1	45
BNP Paribas SA	19	20	1,798	2.3	0.2	30
Deutsche Bank	20	15	1,640	2.1	-0.5	45
Industry Total			**79,889**	**100.0**		**196**

Chinese Yuan Bonds (ex-Self Funded) (AS24) YoY Change ($) -6% QoQ Change ($) 39%

Bookrunner	Rank 2021	Rank 2020	Proceeds CN¥mil	Market Share	Mkt. Sh Chg	# of Deals
CITIC	1	3	597,853	7.5	0.8	1,058
Bank of China Ltd	2	1	570,003	7.2	-0.4	868
Industrial & Comm Bank China	3	2	559,430	7.0	-0.3	852
China Construction Bank	4	4	512,259	6.5	-0.1	888
Agricultural Bank of China	5	6	469,851	5.9	0.8	721
Bank of Communications Co Ltd	6	5	430,052	5.4	-0.1	726
China Securities Co Ltd	7	7	420,936	5.3	0.8	748
Industrial Bank Co Ltd	8	8	297,775	3.8	0.1	581
Huatai Securities Co Ltd	9	12	272,448	3.4	1.1	440
Guotai Junan Securities	10	10	235,878	3.0	0.4	420
China International Capital Co	11	16	210,847	2.7	0.7	312
China Merchants Bank	12	9	193,546	2.4	-0.6	416
Postal Savings Bank Of China	13	15	174,744	2.2	0.2	305
Haitong Securities Co Ltd	14	13	162,894	2.1	-0.1	297
Shanghai Pudong Development Bk	15	14	144,582	1.8	-0.3	311
China Minsheng Banking Corp	16	11	138,452	1.7	-0.7	322
Everbright Securities Co Ltd	17	19	113,497	1.4	0.2	214
China Merchants Securities Co	18	21	108,825	1.4	0.4	202
Orient Securities Co Ltd	19	24	108,541	1.4	0.5	224
Shenwan Hongyuan Securities Co	20	27	96,821	1.2	0.4	155
Industry Total			**7,947,023**	**100.0**		**3,657**

Chinese Yuan Bonds - Macro Industry Composition



Outer Ring: Proceeds (CNY¥bil)
Inner Ring: # of Issues

*Indicates a Tie

Japan Rankings

First Half 2021 | Debt Capital Markets | Managing Underwriters

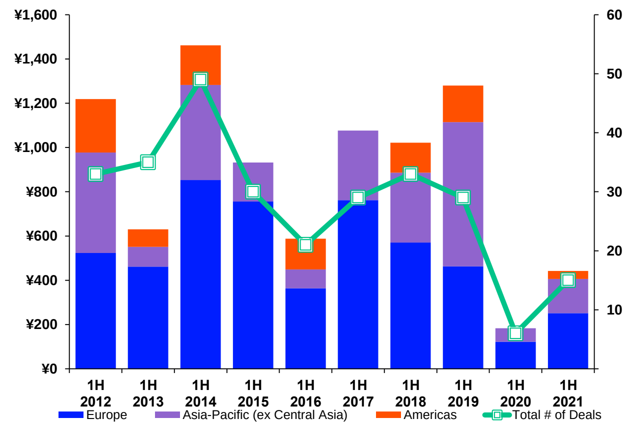
All Bonds in Yen (AP05) — YoY Change (¥) 6% — QoQ Change (¥) 57%

Lead Manager	Rank 2021	Rank 2020	Proceeds JPY¥bil	Market Share	Mkt. Sh. Chg	# of Deals
Mizuho Financial Group	1	1	2,809	22.2	1.1	373
Nomura	2	2	2,288	18.1	-0.8	279
Sumitomo Mitsui Finl Grp Inc	3	4	2,082	16.5	0.7	278
Mitsubishi UFJ Morgan Stanley	4	5	1,934	15.3	-0.1	248
Daiwa Securities Group Inc	5	3	1,928	15.3	-2.2	248
Sumitomo Mitsui Trust Holdings	6	8	256	2.0	0.4	16
Mitsubishi UFJ Financial Group	7	7	230	1.8	-0.4	13
BofA Securities Inc	8	9	157	1.2	-0.2	11
Goldman Sachs & Co	9	6	151	1.2	-1.2	17
Tokai Tokyo Financial Holdings	10	10	133	1.1	0.2	34
Barclays	11	24	119	0.9	0.9	12
Norinchukin Bank	12	23	110	0.9	0.9	3
BNP Paribas SA	13	12	90	0.7	0.3	6
JP Morgan	14	13	77	0.6	0.2	5
Shinkin Central Bank	15	11	62	0.5	-0.1	20
Industry Total			**12,644**	**100.0**		**599**

Samurai Bonds (AP01) — YoY Change (¥) 142% — QoQ Change (¥) 286%

Lead Manager	Rank 2021	Rank 2020	Proceeds JPY¥bil	Market Share	Mkt. Sh. Chg	# of Deals
Sumitomo Mitsui Finl Grp Inc	1	1	278	62.8	18.4	14
Daiwa Securities Group Inc	2	2*	47	10.6	-0.5	9
Nomura	3*	2*	42	9.5	-1.6	8
Mizuho Financial Group	3*	2*	42	9.5	-1.6	8
Mitsubishi UFJ Morgan Stanley	5*	2*	17	3.8	-7.3	2
Credit Agricole CIB	5*	2*	17	3.8	-7.3	2
Industry Total			**442**	**100.0**		**15**

Samurai Bonds Issuance - Domicile Region (JP¥bil)



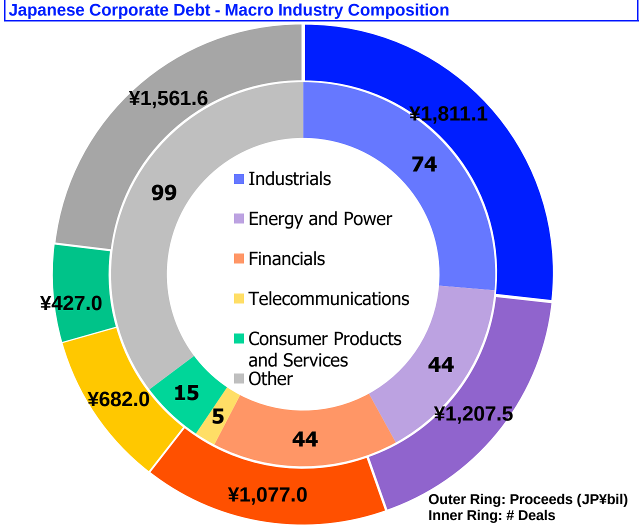
Japanese Securitizations (AP02) — YoY Change (¥) 17% — QoQ Change (¥) -25%

Lead Manager	Rank 2021	Rank 2020	Proceeds JPY¥bil	Market Share	Mkt. Sh. Chg	# of Deals
Mizuho Financial Group	1	1	787	29.2	-1.1	80
Mitsubishi UFJ Morgan Stanley	2	8	361	13.4	8.9	9
Sumitomo Mitsui Finl Grp Inc	3	5	304	11.3	1.2	15
Sumitomo Mitsui Trust Holdings	4	6	256	9.5	1.4	16
Nomura	5	3	246	9.1	-2.2	7
Mitsubishi UFJ Financial Group	6	4	193	7.2	-3.4	11
Daiwa Securities Group Inc	7	2	137	5.1	-9.3	3
Norinchukin Bank	8	13	110	4.1	3.9	3
BNP Paribas SA	9	10	86	3.2	2.4	4
BofA Securities Inc	10	9	68	2.5	-1.4	2
Goldman Sachs & Co	11	7	64	2.4	-2.3	3
Barclays	12	-	55	2.1	2.1	3
ORIX Corp	13	11	19	0.7	0.0	3
Resona Holdings Inc	14	-	4	0.2	0.2	1
North Pacific Bank Ltd	15	-	3	0.1	0.1	1
Industry Total			**2,696**	**100.0**		**141**

Japanese Corporate Debt (AP03) — YoY Change (¥) 2% — QoQ Change (¥) 49%

Lead Manager	Rank 2021	Rank 2020	Proceeds JPY¥bil	Market Share	Mkt. Sh. Chg	# of Deals
Mizuho Financial Group	1	2	1,496	22.1	2.3	218
Nomura	2	1	1,489	22.0	-0.4	180
Daiwa Securities Group Inc	3	4	1,373	20.3	1.8	173
Mitsubishi UFJ Morgan Stanley	4	3	1,140	16.8	-2.2	162
Sumitomo Mitsui Finl Grp Inc	5	5	1,026	15.2	-1.1	175
Tokai Tokyo Financial Holdings	6	8	61	0.9	0.0	22
Shinkin Central Bank	7	7	51	0.8	-0.1	17
SBI Holdings Inc	8	9	51	0.8	0.4	7
BofA Securities Inc	9	10	26	0.4	0.0	7
Okasan Securities Group Inc	10	12	19	0.3	0.1	13
Citi	11	14	10	0.2	0.2	5
Goldman Sachs & Co	12	6	9	0.1	-0.9	5
Barclays	13	-	6	0.1	0.1	2
Aozora Bank Ltd	14	13	4	0.1	0.0	1
JP Morgan	15	-	3	0.0	0.0	2
Industry Total			**6,766**	**100.0**		**281**

Japanese Corporate Debt - Macro Industry Composition



*Indicates a Tie

Debt Capital Markets Criteria

First Half 2021 | Managing Underwriters

If you would like to participate in the submission process, receive quarterly press releases, or have questions about our full league table criteria please contact:

AMERICAS
Sam Boehle
Tel: +1 646 599 7365
sam.boehle@refinitiv.com

EMEA
Ian Willmott
Tel: +44 207 542 4376
ian.willmott@refinitiv.com

ASIA PACIFIC
Carina Causon-Israel
Tel: +63 917 807 4038
carina.causon@refinitiv.com

JAPAN
Aki Sato
Tel: +813 6441 1120
aki.sato@refinitiv.com

CHINA
Xiaoxue Yu
Tel: +86 10 6627 1007
xiaoxue.yu@refinitiv.com

Database coverage includes all US public, Euro public and Rule 144a fee-eligible global debt transactions (including Global bonds, Euro/144a transactions, Yankee Bonds, Eurobonds, Foreign Bonds and preferred stock) as well as MBS, ABS & Taxable Munis.

Transactions must be received within 5 business days of pricing for league table accreditation. (Rule 144a transactions sold exclusively in the US market, MBS, ABS transactions in all markets and all Federal Credit Agency transactions must be received within 5 business days of settlement.) Transactions not received by the applicable deadline are entered into the database but classified as rank ineligible and are not included in league tables for the current calendar year.

All league tables are based on deal proceeds (total issue amount multiplied by the issue price) unless otherwise stated; and current data and previous year's data is as of 9:00am EST on June 30, 2021.

Full credit is given to the bookrunner, equal if joint books. In cases of underwriter consolidation, credit is given to the surviving/parent firm. Non-US dollar denominated transactions are converted to the US dollar equivalent at the time of announcement.

Long-term league tables exclude deals with a minimum life of less than 1.5 years (or 18 months), except for Asian local currency denominated bonds and all securitized tranches, which require a minimum life of more than 360 days. Minimum life is defined as the difference between the settlement date and the earliest maturity date or first call/put option.

US marketplace league tables include US dollar denominated domestic, Yankee, Global and Euro/144a bond and preferred stock transactions. Global bond league tables include domestic, foreign, Global, Euromarket and Euro/144a bond and preferred stock transactions issued in any currency.
League table volumes for Mitsubishi UFJ Financial Group and Morgan Stanley, included herein, reflect changes after the commencement of their jointly established securities firms in Japan: (1) Mitsubishi UFJ Morgan Stanley Securities and (2) Morgan Stanley MUFG Securities. Credit for the newly established joint ventures rolls up to Morgan Stanley. For Japanese involvement league tables Morgan Stanley will be represented as "Mitsubishi UFJ Morgan Stanley."

League table volumes for Huaxin Securities and Morgan Stanley, included herein, reflect changes after the commencement of their jointly established securities firm in China: Morgan Stanley Huaxin Securities. Credit for the newly established joint ventures rolls up to Morgan Stanley. For Chinese involvement league tables Morgan Stanley will be represented as "Morgan Stanley Huaxin Securities".

As concluded following our 2014 DCM Roundtable in Tokyo, Refinitiv will begin publishing domestic Japanese rankings on an "Anbun Hoshiki" (Proportional) basis beginning with Japanese Fiscal Year 2014 - 2015 after April 1st, 2014. Please note that the Samurai Bonds ranking (AP1) will be consistent with all other international bonds rankings and will remain on the "Equal-to-Each" allocation basis.
Following our mid-year League Table Inquiry, all 2014 US mortgage-related securitizations have been classified as mortgage backed regardless of risk category or deal structure.

While Refinitiv has used reasonable endeavors to ensure that the information provided in this document is accurate and up to date as at the time of issue, neither Refinitiv nor its third party content providers shall be liable for any errors, inaccuracies or delays in the information, nor for any actions taken in reliance thereon, nor does it endorse any views or opinions of any third party content provider. Refinitiv disclaims all warranties, express or implied, as to the accuracy or completeness of any of the content provided, or as to the fitness of the content for any purpose to the extent permitted by law. The content herein is not appropriate for the purposes of making a decision to carry out a transaction or trade and does not provide any form of advice (investment, tax, legal) amounting to investment advice, nor make any recommendations or solicitations regarding particular financial instruments, investments or products, including the buying or selling of securities. Refinitiv has not undertaken any liability or obligation relating to the purchase or sale of securities for or by any person in connection with this document.