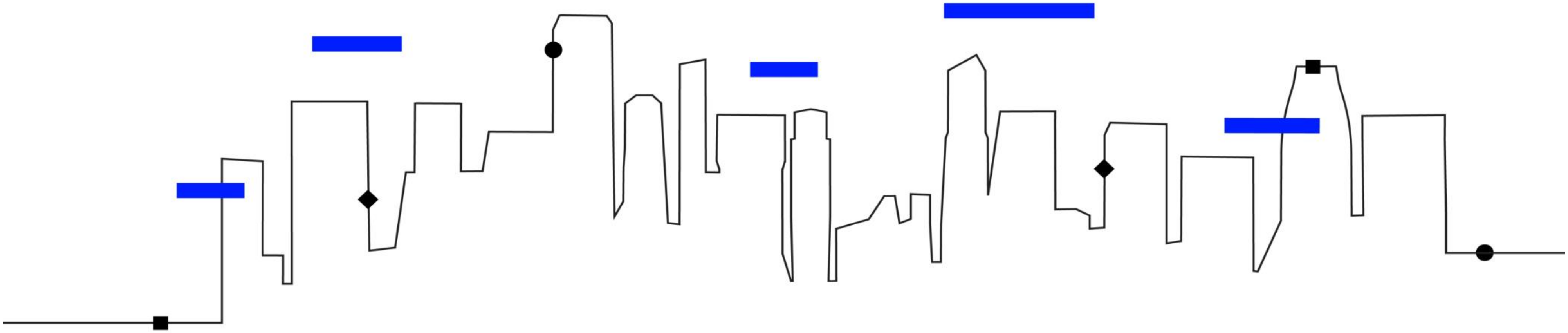
Global Debt Capital Markets Review

FIRST HALF 2020 | MANAGING UNDERWRITERS



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Global Debt Capital Markets Review

First Half 2020 | Managing Underwriters

Global Deals Intelligence

GLOBAL DEBT CAPITAL MARKETS ACTIVITY BREAKS ALL-TIME RECORDS
Overall global debt capital markets activity totaled US$5.5 trillion during the first half of 2020, a 35% increase compared to the first half of 2019 and the strongest opening six-month period for global debt capital markets activity since records began in 1980. The number of new offerings brought to market during the first half of 2020 surpassed 13,000 for the first time on record. Second quarter 2020 debt issuance, which ranks as the largest three-month period for activity on record, registered a 52% increase compared to the first quarter of 2020**.**

US INVESTMENT GRADE CORPORATE DEBT SURPASSES FULL YEAR 2019 TOTALS
Investment grade corporate debt offerings targeted to the US marketplace totaled US$1.2 trillion during the first half of 2020, more than double first half 2019 levels and the strongest first half for US high grade issuance since records began in 1980. Bolstered by the largest all-time months for high grade activity during April 2020 (US$293.6 billion), May 2020 (US$263.3 billion) and March 2020 (US$245.1 billion), first half 2020 debt issuance has already surpassed full year 2019 levels (US$1.1 trillion).

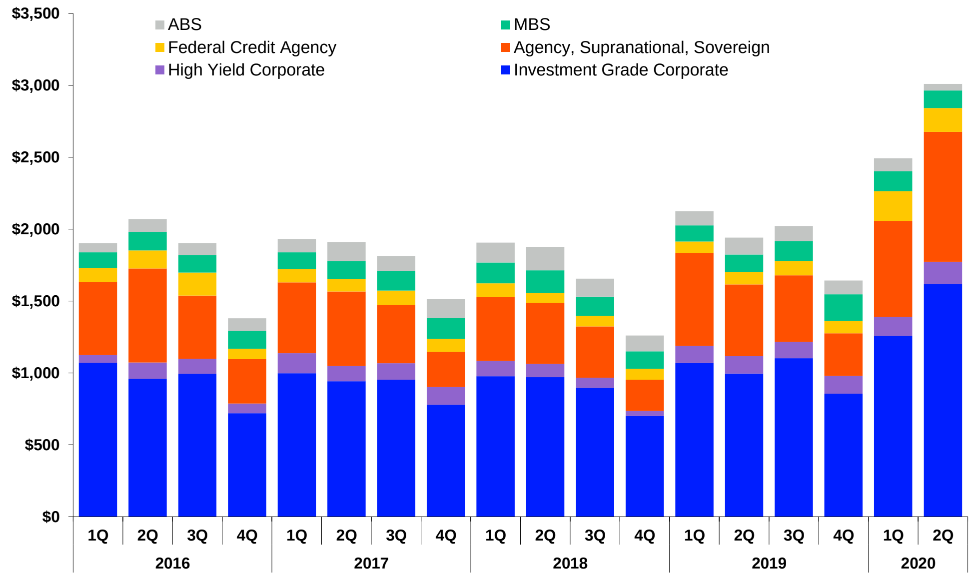
RECORD MONTHLY VOLUMES PUSH GLOBAL HIGH YIELD TO SIX-YEAR HIGH
With a record month for global high yield corporate debt in January (US$65.0 billion) and US high yield corporate debt in June (US$48.5 billion), first half 2020 global high yield debt reached US$251.4 billion during first half 2020, an increase of 22% compared to first half 2019 and the strongest opening six-month period for global high yield issuance since 2014. High yield offerings from issuers in the United States increased 61% compared to first half 2019 and accounted for 67% of first half 2020 activity, up from 51% a year ago.

ALL INDUSTRIES REGISTER DOUBLE-DIGIT GAINS
DCM activity from Retail, Media and Technology issuers saw strong year-over-year gains during the first half of 2020, as all industry sectors saw double-digit percentage increases compared to a year ago. Global debt issuance, excluding financials and governments & agencies, totaled US$1.8 trillion during the first half of 2020, a 60% increase levels and accounted for 32% of overall issuance, the highest percentage since first half 2015.

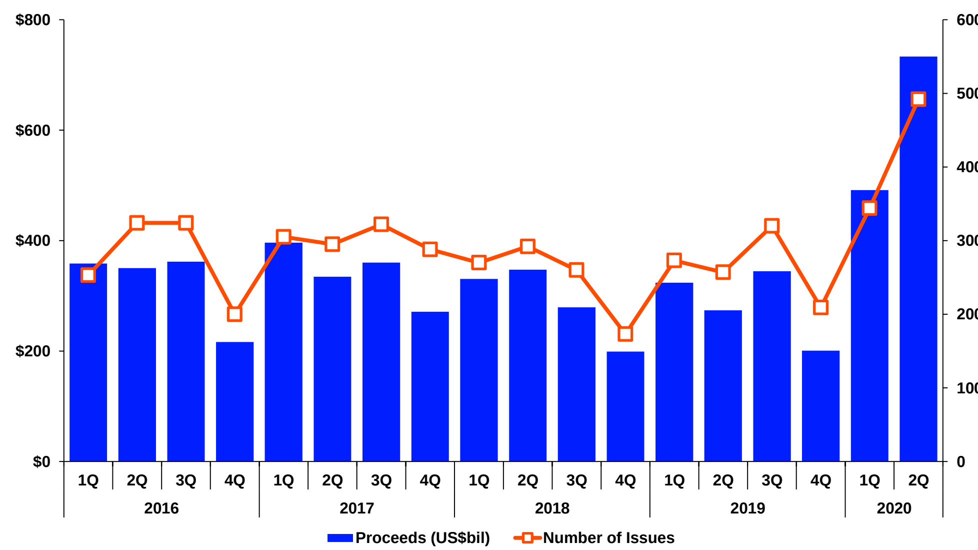
INTERNATIONAL BOND OFFERINGS INCREASE 38%; GREEN BONDS FALL 17%
International bond offerings totaled a record US$3.1 trillion during the first half of 2020, a 38% increase compared to a year ago and an all-time high. International offerings from issuers in Germany, France and the United Kingdom accounted for 21% of overall issuance, down from 23% a year ago. According to figures compiled by Refinitiv and The Climate Bonds Initiative, green bond issuance totaled US$73.9 billion during the first half of 2020, a 17% decrease compared to year ago levels. Second quarter 2020 green bond issuance totaled US$46.6 billion, a 74% increase compared to the first quarter of this year and the third largest quarter on record.

ASIA LOCAL CURRENCY DEBT UP 14%; JAPANESE YEN DEBT OFFERINGS DOWN 6%
Asia local currency bond offerings totaled US$1.3 trillion during the first half of 2020, a 14% increase compared to a year ago and the strongest opening six-month period for issuance on record. Japanese Yen offerings have decreased 6% compared to first half 2019, totaling JPY11.8 trillion and a two-year low.

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



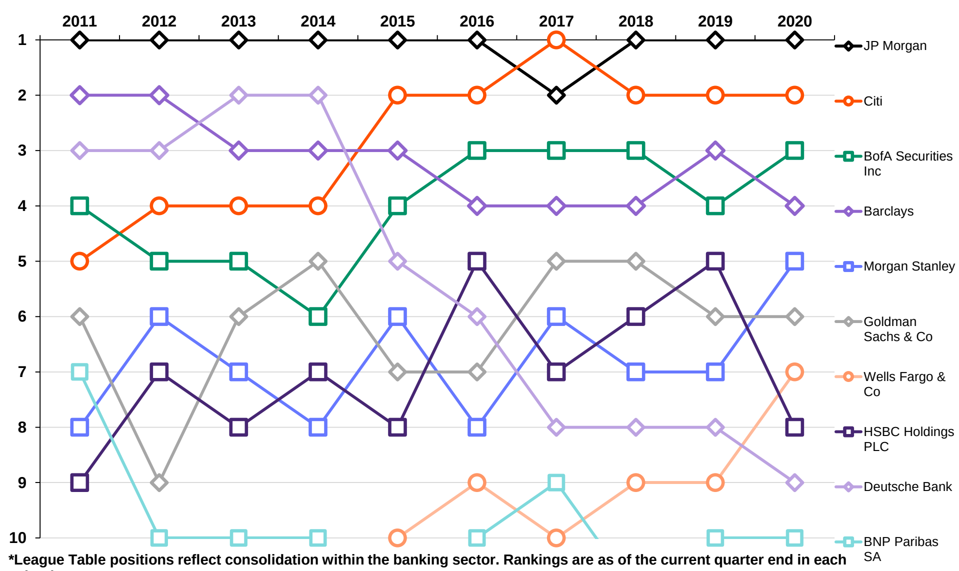
US Investment Grade Corporate Debt - Quarterly Issuance



Global Insights

First Half 2020 | Debt Capital Markets | Managing Underwriters

Global Debt Rankings by Proceeds

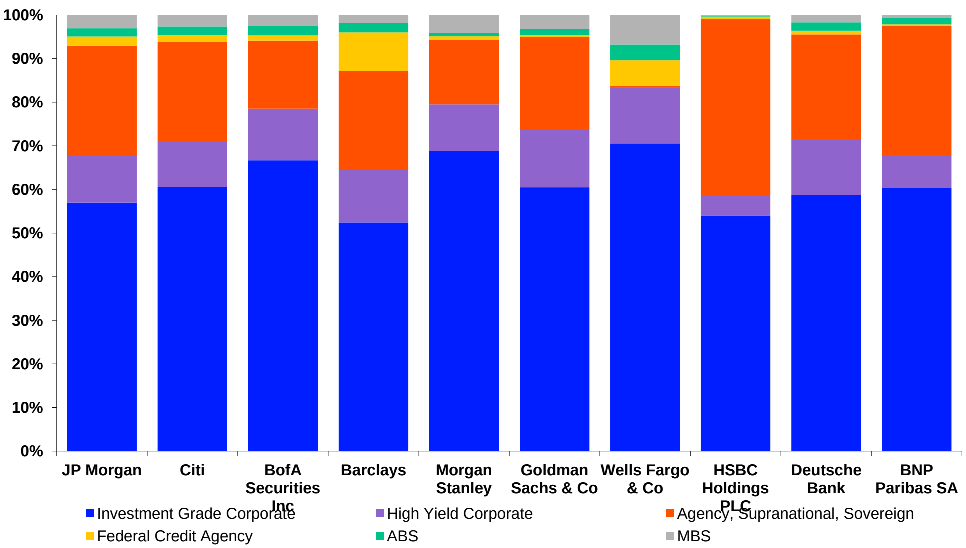


*League Table positions reflect consolidation within the banking sector. Rankings are as of the current quarter end in each calendar year.

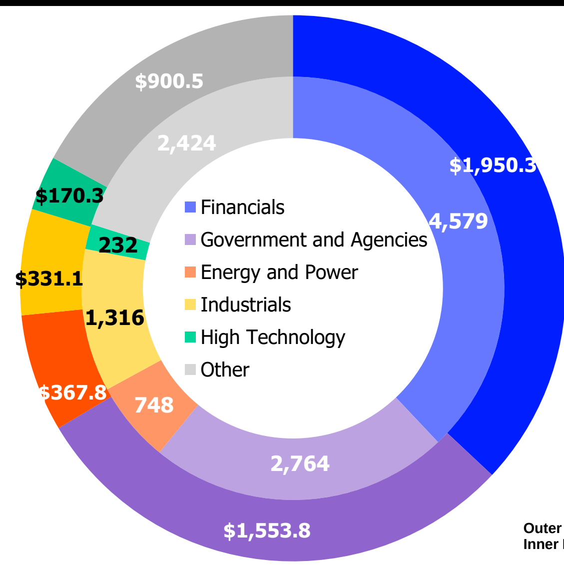
Global Scorecard

	1/1/2020 - 06/30/2020 Proceeds ($mil)	# of Deals	1/1/2019 - 06/30/2019 Proceeds ($mil)	# of Deals	YoY % Chg. ($)
All Global Debt (B1)	**5,535,059**	**13,656**	**4,091,859**	**12,221**	**35% ▲**
Global Long-term Debt (B2)	5,273,826	12,062	3,923,653	10,944	34% ▲
Global Long-term Debt ex MBS, ABS & Munis (B3	4,877,226	11,298	3,476,227	10,005	40% ▲
Global High Yield Corporate Debt (B4)	251,371	383	206,208	363	22% ▲
Global Investment Grade Corporate Debt (B7)	2,784,510	7,480	1,992,728	6,840	40% ▲
US Federal Credit Agency Debt (B8)	215,026	492	83,757	486	157% ▲
Global Agency, Sovereign & Supranational (B9)	1,556,127	2,838	1,131,710	2,210	38% ▲
Global Mortgage-backed Securities (B10)	259,700	446	232,113	478	12% ▲
Global Asset-backed Securities (B11)	136,900	318	215,313	461	-36% ▼
Global Short-term Debt (B14)	283,908	1,706	186,925	1,405	52% ▲
Global Emerging Markets Corporate Debt (B15)	185,177	598	174,933	705	6% ▲
All US Debt (F1)	**2,259,342**	**2,844**	**1,361,873**	**2,324**	**66% ▲**
US Long-term Debt (F2)	2,079,724	1,985	1,259,739	1,638	65% ▲
US Long-term Straight ex MBS, ABS & Munis (F3)	1,924,903	2,300	992,280	1,623	94% ▲
US Federal Credit Agency Debt (F7)	206,070	473	74,281	461	177% ▲
US High Yield Corporate Debt (F8)	192,071	265	133,687	190	44% ▲
US Investment Grade (F9)	1,224,969	836	597,497	530	105% ▲
Agency, Sovereign & Supranational Debt (F10)	256,791	672	155,844	400	65% ▲
US Mortgage-backed Securities (F11)	226,482	353	193,199	387	17% ▲
US Asset-backed Securities (F14)	107,956	191	176,394	314	-39% ▼
US Taxable Municipal Debt (F15)	34,406	552	10,036	294	243% ▲
US Short-term Debt - including MBS, ABS (F16)	179,618	859	102,134	686	76% ▲

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

Global Rankings

First Half 2020 | Debt Capital Markets | Managing Underwriters

Global Debt and Syndicated Loans (DL1)

YoY Change ($) -39% QoQ Change ($) 12%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	514,234	7.6	0.6	1,714
BofA Securities Inc	2	2	427,088	6.3	0.2	1,549
Citi	3	3	394,048	5.8	0.4	1,266
Barclays	4	5	290,085	4.3	0.8	951
Wells Fargo & Co	5	4	247,050	3.7	-0.1	911
BNP Paribas SA	6	9	236,961	3.5	0.7	783
Morgan Stanley	7	6	234,941	3.5	0.4	865
Goldman Sachs & Co	8	10	233,381	3.5	0.8	812
HSBC Holdings PLC	9	7	205,183	3.0	0.0	871
Deutsche Bank	10	12	190,943	2.8	0.3	769
Mizuho Financial Group	11	8	165,888	2.5	-0.3	951
RBC Capital Markets	12	13	137,124	2.0	-0.2	722
Credit Suisse	13	15	137,082	2.0	0.0	571
Credit Agricole CIB	14	17	134,156	2.0	0.3	515
Bank of China Ltd	15	14	131,010	1.9	-0.1	1,386
Mitsubishi UFJ Financial Group	16	11	122,990	1.8	-0.8	850
TD Securities Inc	17	18	112,267	1.7	0.2	550
Societe Generale	18	20	104,615	1.6	0.2	360
Sumitomo Mitsui Finl Grp Inc	19	16	99,630	1.5	-0.3	705
Industrial & Comm Bank China	20	19	93,760	1.4	-0.1	1,117
Nomura	21	24	92,416	1.4	0.3	310
CITIC	22	27	78,178	1.2	0.2	1,058
UniCredit	23	25	76,004	1.1	0.0	275
China Construction Bank	24	21	74,138	1.1	-0.2	1,136
Santander Corp & Invest Bkg	25	30	72,491	1.1	0.3	277
Industry Total			**6,769,865**	**100.0**		**52**

Global Debt (B11)

YoY Change ($) 35% QoQ Change ($) 20%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	389,195	7.0	1.3	1,333
Citi	2	2	313,608	5.7	0.7	1,030
BofA Securities Inc	3	4	303,451	5.5	1.3	1,031
Barclays	4	3	282,683	5.1	0.7	852
Morgan Stanley	5	7	212,728	3.8	0.8	853
Goldman Sachs & Co	6	6	209,448	3.8	0.7	707
Wells Fargo & Co	7	9	190,913	3.5	0.8	703
HSBC Holdings PLC	8	5	173,749	3.1	-0.4	757
Deutsche Bank	9	8	162,177	2.9	-0.1	679
BNP Paribas SA	10	10	152,663	2.8	0.2	584
Credit Suisse	11	11	122,459	2.2	-0.3	489
RBC Capital Markets	12	15	114,233	2.1	0.2	649
Nomura	13	20	102,403	1.9	0.3	338
TD Securities Inc	14	21	99,542	1.8	0.2	454
Credit Agricole CIB	15	14	98,499	1.8	-0.2	428
Bank of China Ltd	16	12	90,403	1.6	-0.8	1,223
Mizuho Financial Group	17	19	89,799	1.6	-0.1	606
Industrial & Comm Bank China	18	13	87,461	1.6	-0.4	1,114
CITIC	19	22	80,380	1.5	0.1	1,104
Societe Generale	20	18	79,555	1.4	-0.3	278
China Construction Bank	21	16	73,153	1.3	-0.5	1,149
Bank of Communications Co Ltd	22	17	61,340	1.1	-0.6	945
UniCredit	23	25	58,821	1.1	0.0	207
Mitsubishi UFJ Financial Group	24	24	55,207	1.0	-0.2	307
Agricultural Bank of China	25	23	54,797	1.0	-0.3	838
Industry Total			**5,535,059**	**100.0**		**13,656**

Global Investment Grade Corporate Debt (B7)

YoY Change ($) 40% QoQ Change ($) 29%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	187,424	6.7	2.3	629
BofA Securities Inc	2	2	168,784	6.1	1.9	557
Citi	3	3	149,078	5.4	1.2	525
Morgan Stanley	4	6	125,618	4.5	1.4	432
Goldman Sachs & Co	5	7	107,049	3.8	0.9	340
Barclays	6	4	98,025	3.5	-0.3	357
Wells Fargo & Co	7	11	93,044	3.3	1.2	270
HSBC Holdings PLC	8	5	87,990	3.2	-0.4	439
BNP Paribas SA	9	8	80,359	2.9	0.1	342
Deutsche Bank	10	9	79,685	2.9	0.1	298
Mizuho Financial Group	11	10	64,559	2.3	0.0	339
Credit Suisse	12	13	58,461	2.1	0.1	239
RBC Capital Markets	13	18	53,743	1.9	0.2	250
Credit Agricole CIB	14	12	51,192	1.8	-0.3	251
CITIC	15	17	50,756	1.8	0.1	528
Societe Generale	16	14	44,027	1.6	-0.4	180
Mitsubishi UFJ Financial Group	17	16	43,203	1.6	-0.1	218
Bank of China Ltd	18	15	38,101	1.4	-0.4	302
CSC Financial Co Ltd	19	19	35,688	1.3	-0.3	376
Sumitomo Mitsui Finl Grp Inc	20	20	35,625	1.3	-0.2	198
TD Securities Inc	21	27	34,344	1.2	0.2	169
Industrial & Comm Bank China	22	22	32,782	1.2	-0.1	212
Santander Corp & Invest Bkg	23	23	28,082	1.0	-0.3	136
US Bancorp	24	42	25,984	0.9	0.2	136
China Merchants Bank	25	36	24,607	0.9	0.1	227
Industry Total			**2,784,510**	**100.0**		**7,480**

Global MBS (B10)

YoY Change ($) 12% QoQ Change ($) -12%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	37,375	14.4	1.5	62
Credit Suisse	2	2	36,985	14.2	1.7	62
Wells Fargo & Co	3	3	31,204	12.0	0.9	50
Morgan Stanley	4	6	25,147	9.7	1.5	51
Citi	5	4	22,951	8.8	-2.2	49
BofA Securities Inc	6	5	19,863	7.7	-1.2	49
Goldman Sachs & Co	7	7	18,583	7.2	1.7	61
Nomura	8	8	14,873	5.7	1.3	44
Barclays	9	9	7,338	2.8	-0.6	29
Deutsche Bank	10	10	4,888	1.9	-0.3	28
Cantor Fitzgerald LP	11	15	4,050	1.6	0.3	15
Amherst Securities	12	33	3,463	1.3	1.0	11
Mizuho Financial Group	13	11	3,240	1.3	-0.1	27
Sumitomo Mitsui Finl Grp Inc	14	16	3,152	1.2	0.2	13
BNP Paribas SA	15	13	2,915	1.1	-0.3	11
Daiwa Securities Group Inc	16	17	2,703	1.0	0.0	2
Westpac Banking	17	12	2,505	1.0	-0.4	8
Lloyds Bank	18	20	1,549	0.6	-0.2	7
Credit Agricole CIB	19	42	1,514	0.6	0.5	2
National Australia Bank	20	18	1,509	0.6	-0.4	12
Jefferies LLC	21	23	1,477	0.6	0.1	9
BMO Capital Markets	22	30	1,098	0.4	0.0	6
Sumitomo Mitsui Trust Holdings	23	31	1,014	0.4	0.0	12
Commonwealth Bank of Australia	24	24	937	0.4	-0.1	7
PNC Financial Services Group	25	29	806	0.3	-0.1	3
Industry Total			**259,700**	**100.0**		**446**

*Indicates a Tie

Global ABS (B11)

YoY Change ($) -36% QoQ Change ($) -49%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	2	13,581	9.9	1.0	46
Citi	2	1	12,223	8.9	-1.2	50
Mizuho Financial Group	3	8	9,756	7.1	2.8	72
BofA Securities Inc	4	4	9,459	6.9	0.3	39
Barclays	5	3	8,457	6.2	-1.3	36
Wells Fargo & Co	6	5	7,410	5.4	-0.9	34
Goldman Sachs & Co	7	11	7,340	5.4	1.4	24
Mitsubishi UFJ Financial Group	8	13	6,488	4.7	1.0	28
Credit Suisse	9	7	6,478	4.7	-0.6	29
Deutsche Bank	10	6	6,022	4.4	-1.0	29
RBC Capital Markets	11	10	5,915	4.3	0.0	25
BNP Paribas SA	12	9	5,565	4.1	-0.2	20
TD Securities Inc	13	15	4,340	3.2	1.0	17
Morgan Stanley	14	12	3,350	2.5	-1.4	16
BMO Capital Markets	15	21	2,521	1.8	0.4	14
Societe Generale	16	14	2,289	1.7	-0.7	9
Sumitomo Mitsui Finl Grp Inc	17	20	1,988	1.5	0.0	10
Credit Agricole CIB	18	17	1,940	1.4	-0.2	9
Lloyds Bank	19	19	1,589	1.2	-0.3	6
Santander Corp & Invest Bkg	20	26	1,462	1.1	0.4	5
Natixis	21	18	1,402	1.0	-0.6	4
Commerzbank AG	22	52	1,259	0.9	0.8	3
Jefferies LLC	23	16	1,145	0.8	-0.9	4
Truist Financial Corp	24	32	1,038	0.8	0.4	6
ING	25	-	956	0.7	0.7	2
Industry Total			**136,900**	**100.0**		**318**

Global Debt and Loans Islamic Finance

YoY Change ($) -51% QoQ Change ($) -11%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Standard Chartered PLC	1	1	2,914	12.1	1.6	17
HSBC Holdings PLC	2	4	2,049	8.5	2.9	14
Malayan Banking Bhd	3	2	1,867	7.7	-0.1	18
CIMB Group Holdings Bhd	4	3	1,678	6.9	-0.3	17
Dubai Islamic Bank PJSC	5	5	1,370	5.7	0.3	9
RHB	6	6	1,227	5.1	0.4	12
First Abu Dhabi Bank PJSC	7	10	1,114	4.6	0.7	8
Citi	8	11	1,020	4.2	0.4	7
AMMB Holdings Bhd	9	12	848	3.5	0.0	11
Natixis	10	30	786	3.3	2.6	3
Islamic Development Bank	11	53	747	3.1	2.8	6
JP Morgan	12	7	686	2.8	-1.7	3
Emirates NBD PJSC	13	8	651	2.7	-1.8	8
K&N Kenanga Holdings Berhad	14	23	611	2.5	1.6	8
BNP Paribas SA	15	20	500	2.1	0.8	1
Intl Islamic Trade Finance	16	9	411	1.7	-2.5	2
Arab Banking Corporation	17	17	411	1.7	0.2	4
Gulf International Bank	18	14	392	1.6	-0.4	3
Kuwait Finance House	19	13	377	1.6	-1.4	5
Hong Leong Financial Group Bhd	20	71	342	1.4	1.3	4
Credit Agricole CIB	21	31	302	1.3	0.7	2
Riyadh Bank Ltd	22	-	300	1.2	-	1
Sharjah Islamic Bank PJSC	23	18	298	1.2	-0.2	3
Landesbanken	24	-	286	1.2	-	1
MashreqBank PSC	25	33	285	1.2	0.6	4
Industry Total			**24,189**	**100.0**		**68**

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United States Insights

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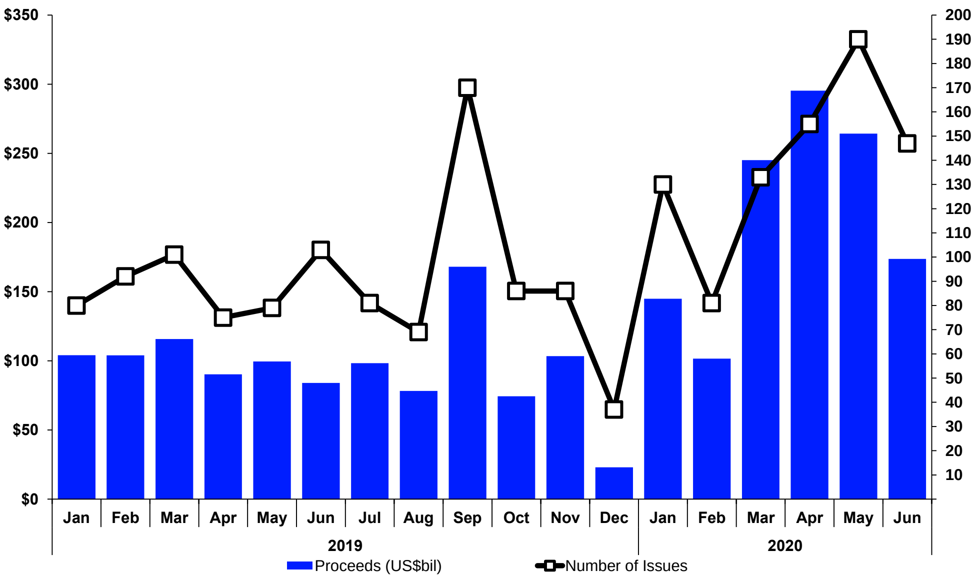
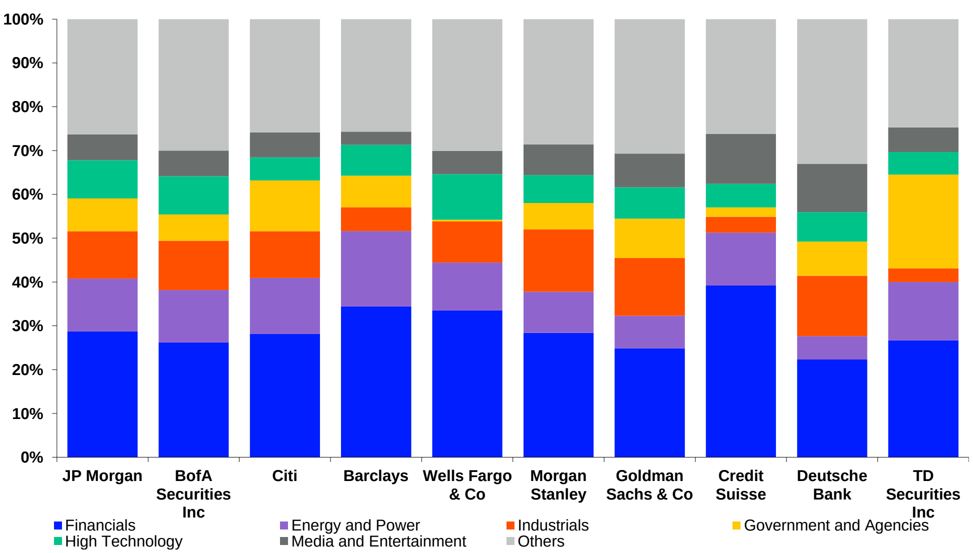
United States Marketed Monthly High Yield Volume



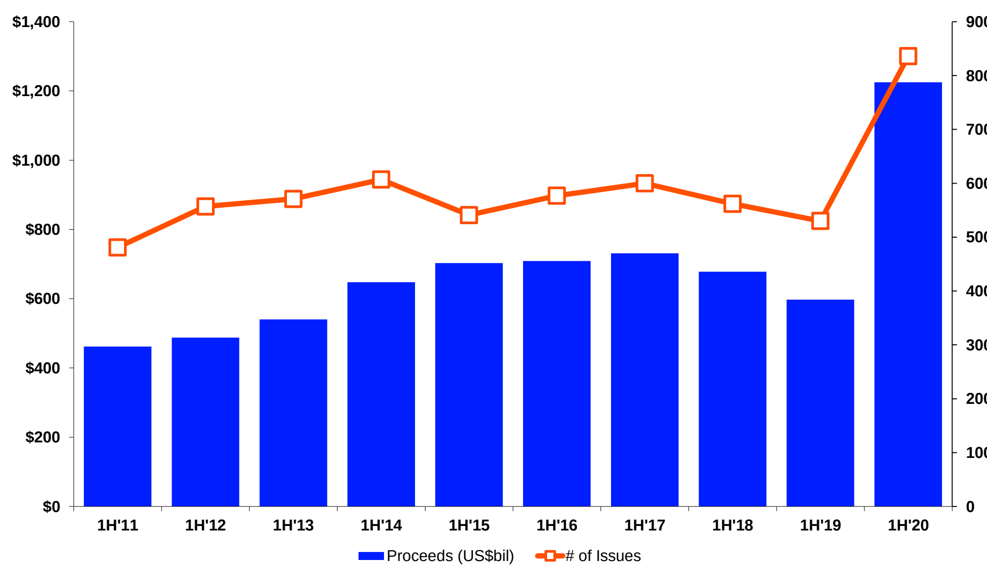
Top United States Investment Grade Corporate Deals

Issue Date	Issuer	Domicile Nation	Deal Size (US$mil)	Issue Type	Macro Sector
4/30/20	Boeing Co	United States	25,000	Investment Grade Corporate	Industrials
3/30/20	Oracle Corp	United States	19,953	Investment Grade Corporate	High Technology
4/2/20	T-Mobile US Inc	Germany	18,895	Investment Grade Corporate	Telecommunications
5/21/20	AT&T Inc	United States	12,466	Investment Grade Corporate	Telecommunications
5/11/20	Walt Disney Co	United States	10,984	Investment Grade Corporate	Media and Entertainment
4/15/20	JPMorgan Chase & Co	United States	10,000	Investment Grade Corporate	Financials
6/1/20	Amazon.com Inc	United States	9,946	Investment Grade Corporate	Retail
4/13/20	Exxon Mobil Corp	United States	9,659	Investment Grade Corporate	Energy and Power
2/13/20	UTC Climate Controls	United States	9,250	Investment Grade Corporate	Industrials
6/16/20	Pacific Gas & Electric Co	United States	8,904	Investment Grade Corporate	Energy and Power
3/17/20	Exxon Mobil Corp	United States	8,500	Investment Grade Corporate	Energy and Power
5/4/20	Apple Inc	United States	8,442	Investment Grade Corporate	High Technology
5/7/20	Chevron Corp	United States	8,000	Investment Grade Corporate	Energy and Power

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



United States Investment Grade - Proceeds



United States Rankings

First Half 2020 | Debt Capital Markets | Managing Underwriters

U.S. Debt (F1)
YoY Change ($) 66% QoQ Change ($) 32%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	272,737	12.1	1.1	839
BofA Securities Inc	2	3	217,598	9.6	1.0	753
Citi	3	2	215,591	9.5	-0.7	695
Barclays	4	5	167,115	7.4	0.7	451
Wells Fargo & Co	5	4	167,021	7.4	0.4	562
Morgan Stanley	6	7	151,299	6.7	0.8	521
Goldman Sachs & Co	7	6	147,950	6.6	0.6	513
Credit Suisse	8	8	88,858	3.9	-1.1	277
Deutsche Bank	9	9	74,843	3.3	-0.4	297
RBC Capital Markets	10	10	63,393	2.8	-0.3	348
HSBC Holdings PLC	11	11	59,971	2.7	-0.4	190
TD Securities Inc	12	15	53,598	2.4	0.2	199
Nomura	13	16	48,095	2.1	0.5	103
Mizuho Financial Group	14	14	47,338	2.1	-0.2	242
BNP Paribas SA	15	12	46,561	2.1	-0.5	196
Mitsubishi UFJ Financial Group	16	13	39,905	1.8	-0.7	197
US Bancorp	17	21	29,119	1.3	0.3	162
Sumitomo Mitsui Finl Grp Inc	18	17	25,162	1.1	-0.1	119
Scotiabank	19	20	21,787	1.0	0.0	130
Credit Agricole CIB	20	22	20,890	0.9	-0.1	89
Industry Total			**2,259,342**	**100.0**		**2,844**

U.S. High Yield Corporate Debt (F8)
YoY Change ($) 44% QoQ Change ($) 90%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	26,090	13.6	2.5	172
BofA Securities Inc	2	3	19,557	10.2	2.5	163
Citi	3	2	16,252	8.5	-0.5	131
Goldman Sachs & Co	4	5	14,440	7.5	0.6	122
Barclays	5	4	14,419	7.5	0.3	115
Wells Fargo & Co	6	10	11,383	5.9	1.8	102
Morgan Stanley	7	6	11,027	5.7	-0.8	76
Deutsche Bank	8	8	9,734	5.1	-0.6	84
Credit Suisse	9	7	7,290	3.8	-2.0	72
RBC Capital Markets	10	9	6,611	3.4	-1.5	67
Truist Financial Corp	11	14	4,652	2.4	0.5	46
Mitsubishi UFJ Financial Group	12	15	3,409	1.8	0.0	39
BNP Paribas SA	13	11	3,351	1.7	-0.8	46
Jefferies LLC	14	12	3,181	1.7	-0.5	15
TD Securities Inc	15	20	3,039	1.6	0.5	28
US Bancorp	16	29	2,981	1.6	1.0	25
BMO Capital Markets	17	16	2,970	1.6	-0.2	35
Mizuho Financial Group	18	17	2,919	1.5	-0.2	33
Scotiabank	19	18	2,368	1.2	-0.4	34
PNC Financial Services Group	20	40	2,339	1.2	1.0	25
Industry Total			**192,071**	**100.0**		**265**

U.S. Investment Grade Debt (F9)
YoY Change ($) 105% QoQ Change ($) 49%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	2	153,677	12.6	2.6	451
BofA Securities Inc	2	1	142,130	11.6	1.1	435
Citi	3	3	119,585	9.8	0.7	362
Morgan Stanley	4	5	96,828	7.9	1.1	277
Wells Fargo & Co	5	6	90,046	7.4	0.9	257
Goldman Sachs & Co	6	4	89,474	7.3	0.4	253
Barclays	7	7	57,562	4.7	-1.1	184
Deutsche Bank	8	11	40,732	3.3	-0.3	124
Mizuho Financial Group	9	10	36,449	3.0	-0.7	155
HSBC Holdings PLC	10	9	35,111	2.9	-0.9	114
RBC Capital Markets	11	13	34,957	2.9	0.0	145
Credit Suisse	12	12	32,775	2.7	-0.6	105
Mitsubishi UFJ Financial Group	13	8	31,528	2.6	-1.5	139
BNP Paribas SA	14	14	30,576	2.5	0.0	112
US Bancorp	15	15	25,890	2.1	0.0	135
Sumitomo Mitsui Finl Grp Inc	16	16	21,256	1.7	-0.3	89
TD Securities Inc	17	17	21,120	1.7	-0.1	95
Scotiabank	18	18	14,008	1.1	-0.2	77
Truist Financial Corp	19	20	13,022	1.1	0.0	76
Societe Generale	20	19	11,347	0.9	-0.3	40
Industry Total			**1,224,969**	**100.0**		**836**

U.S. MBS (F11)
YoY Change ($) 17% QoQ Change ($) -4%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Credit Suisse	1	2	36,985	16.3	1.2	62
JP Morgan	2	1	36,146	16.0	0.6	57
Wells Fargo & Co	3	3	30,966	13.7	0.3	49
Morgan Stanley	4	6	24,247	10.7	2.5	48
Citi	5	4	21,542	9.5	-2.7	43
BofA Securities Inc	6	5	17,723	7.8	-1.9	42
Goldman Sachs & Co	7	7	16,543	7.3	0.9	58
Nomura	8	8	12,831	5.7	0.4	43
Barclays	9	9	6,280	2.8	-0.9	24
Deutsche Bank	10	10	4,723	2.1	-0.2	26
Industry Total			**226,482**	**100.0**		**353**

U.S. ABS (F14)
YoY Change ($) -39% QoQ Change ($) -51%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	2	12,931	12.0	1.4	43
Citi	2	1	10,386	9.6	-1.9	44
Barclays	3	3	7,821	7.2	-1.9	32
Wells Fargo & Co	4	4	7,410	6.9	-0.8	34
BofA Securities Inc	5	5	7,160	6.6	-0.7	30
Goldman Sachs & Co	6	9	5,803	5.4	1.2	21
RBC Capital Markets	7	8	5,721	5.3	0.5	23
Credit Suisse	8	6	5,050	4.7	-1.1	22
Mizuho Financial Group	9	15	5,002	4.6	2.2	19
Mitsubishi UFJ Financial Group	10	11	4,701	4.4	0.7	18
Industry Total			**107,956**	**100.0**		**191**

U.S. ABS ex Self & CDOs (F14b)
YoY Change ($) -29% QoQ Change ($) -35%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	4	8,026	9.1	0.7	37
Wells Fargo & Co	2	5	6,960	7.9	1.7	33
Citi	3	1	6,278	7.1	-3.6	34
Barclays	4	2	6,003	6.8	-2.1	28
BofA Securities Inc	5	3	5,952	6.8	-1.6	27
RBC Capital Markets	6	6	5,283	6.0	0.0	22
Goldman Sachs & Co	7	10	4,928	5.6	1.5	18
Mizuho Financial Group	8	14	4,562	5.2	2.0	18
Deutsche Bank	9	8	4,503	5.1	-0.7	25
Mitsubishi UFJ Financial Group	10	9	4,283	4.9	0.0	17
Industry Total			**87,887**	**100.0**		**148**

U.S. Securitizations (ex CMBS, Agency, CMO, Self-Funded & CDOs (F20a)
YoY Change ($) -26% QoQ Change ($) -48%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Wells Fargo & Co	1	6	10,468	8.5	2.1	43
JP Morgan	2	3	10,412	8.4	-1.7	48
BofA Securities Inc	3	4	10,333	8.4	-1.1	41
Credit Suisse	4	2	9,688	7.8	-2.7	50
Barclays	5	5	7,843	6.3	-1.5	39
Goldman Sachs & Co	6	9	7,700	6.2	2.3	35
Citi	7	1	7,141	5.8	-4.9	40
Deutsche Bank	8	7	5,791	4.7	-0.4	37
Nomura	9	10	5,450	4.4	0.6	28
RBC Capital Markets	10	8	5,432	4.4	-0.1	24
Industry Total			**123,803**	**100.0**		**229**

*Indicates a Tie

US Residential MBS (F13b)
YoY Change ($) -20% QoQ Change ($) -70%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Credit Suisse	1	1	5,908	15.8	-6.5	31
Nomura	2	3	5,047	13.5	0.1	26
BofA Securities Inc	3	4	4,381	11.7	0.1	14
Wells Fargo & Co	4	6	3,963	10.6	1.5	11
Goldman Sachs & Co	5	7	3,807	10.2	6.5	20
Morgan Stanley	6	9	3,556	9.5	7.5	16
JP Morgan	7	2	2,386	6.4	-12.3	11
Barclays	8	8	1,840	4.9	1.8	11
Deutsche Bank	9	11	1,288	3.4	1.5	12
Cantor Fitzgerald LP	10	13	869	2.3	1.8	5
Industry Total			**37,406**	**100.0**		**85**

All Federal Credit Agency Debt (H1)
YoY Change ($) 101% QoQ Change ($) -19%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Barclays	1	1	92,953	18.5	6.6	136
Wells Fargo & Co	2	5	53,942	10.7	1.2	385
Nomura	3	3	48,684	9.7	-0.1	120
Citi	4	7	43,434	8.6	3.0	142
JP Morgan	5	4	42,147	8.4	-1.3	201
TD Securities Inc	6	2	32,233	6.4	-3.5	98
BofA Securities Inc	7	14	24,274	4.8	2.7	35
First Horizon National Corp	8	10	16,058	3.2	0.3	302
Jefferies LLC	9	8	15,498	3.1	-0.2	110
Deutsche Bank	10	6	13,019	2.6	-5.1	44
Industry Total			**503,154**	**100.0**		**2,344**

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International Debt & ESG Bonds Rankings

First Half 2020 | Debt Capital Markets | Managing Underwriters

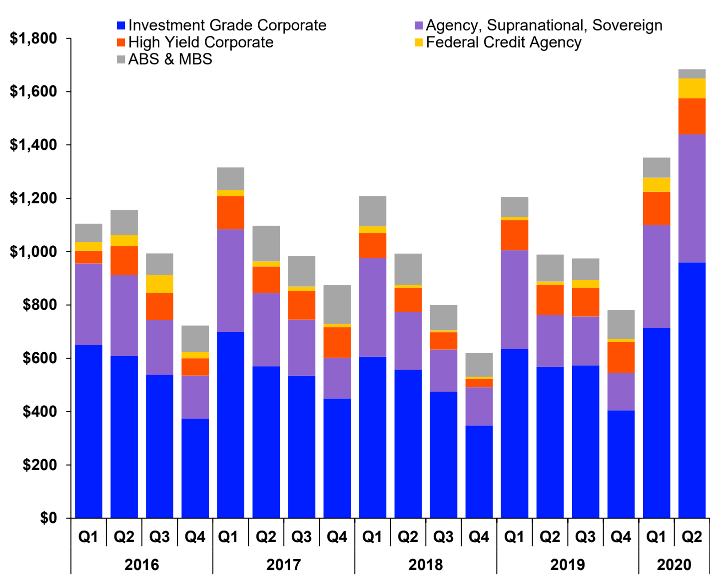
All International Bonds (J01) — YoY Change ($) 38% QoQ Change ($) 23%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
JP Morgan	1	1	271,368	8.8	0.9	989
Citi	2	2	226,372	7.4	0.6	772
BofA Securities Inc	3	5	223,626	7.3	1.8	799
Barclays	4	3	205,923	6.7	0.5	668
Goldman Sachs & Co	5	6	163,287	5.3	0.6	544
HSBC Holdings PLC	6	4	153,612	5.0	-0.6	622
BNP Paribas SA	7	8	145,839	4.8	0.4	522
Deutsche Bank	8	10	139,560	4.6	0.0	517
Morgan Stanley	9	9	134,829	4.4	0.9	432
Credit Agricole CIB	10	14	94,972	3.1	-0.4	376
Wells Fargo & Co	11	12	87,245	2.8	0.8	333
Societe Generale	12	11	74,104	2.4	-0.5	255
Credit Suisse	13	13	69,551	2.3	-0.8	350
RBC Capital Markets	14	15	69,507	2.3	0.0	280
UniCredit	15	16	58,060	1.9	-0.1	202
TD Securities Inc	16	23	55,514	1.8	0.1	242
Nomura	17	18	53,071	1.7	0.4	137
Mizuho Financial Group	18	17	50,719	1.7	0.0	269
NatWest Markets	19	19	48,338	1.6	-0.1	185
Mitsubishi UFJ Financial Group	20	21	42,478	1.4	-0.3	221
Santander Corp & Invest Bkg	21	20	37,948	1.2	-0.3	149
Natixis	22	24	36,973	1.2	-0.3	156
Commerzbank AG	23	25	35,690	1.2	-0.1	176
Standard Chartered PLC	24	26	32,505	1.1	0.0	154
ING	25	22	27,725	0.9	-0.1	145
Industry Total			**3,069,887**	**100.0**		**3,365**

All Bonds In Euros (N01) — YoY Change ($) 33% QoQ Change ($) 13%

Bookrunner	Rank 2020	Rank 2019	Proceeds €mil	Market Share	Mkt. Sh Chg	# of Deals
BNP Paribas SA	1	1	85,283	8.4	1.3	291
JP Morgan	2	2	71,974	7.1	0.6	240
HSBC Holdings PLC	3	6	64,224	6.4	0.5	246
Barclays	4	5	62,402	6.2	0.3	224
Credit Agricole CIB	5	3	61,462	6.1	-0.2	214
Deutsche Bank	6	7	56,746	5.6	0.1	204
Societe Generale	7	4	50,982	5.0	-1.2	178
UniCredit	8	8	50,749	5.0	0.1	190
Citi	9	9	48,963	4.8	0.6	166
BofA Securities Inc	10	11	47,371	4.7	0.8	172
Goldman Sachs & Co	11	10	34,914	3.5	-0.6	116
Natixis	12	12	30,505	3.0	-0.4	131
Commerzbank AG	13	13	26,811	2.7	-0.1	148
NatWest Markets	14	14	25,566	2.5	-0.1	96
Santander Corp & Invest Bkg	15	15	24,432	2.4	-0.1	97
Morgan Stanley	16	18	24,044	2.4	0.5	82
ING	17	16	21,312	2.1	-0.1	109
Banca IMI (Intesa Sanpaolo)	18	22	15,819	1.6	0.3	53
Nomura	19	24	15,129	1.5	0.6	31
BBVA	20	19	14,289	1.4	-0.2	58
Credit Suisse	21	20	12,377	1.2	-0.3	60
DZ Bank	22	23	11,871	1.2	0.1	67
BMPS	23	48	9,620	1.0	0.8	6
Danske Bank	24	35	9,306	0.9	0.4	43
Mizuho Financial Group	25	37	7,868	0.8	0.3	44
Industry Total			**1,011,581**	**100.0**		**1,069**

International Bonds - Issue Type Composition (US$bil)



All Global ESG Bonds (GESG1) — YoY Change ($) 54% QoQ Change ($) 103%

Bookrunner	Rank 2020	Rank 2019	Proceeds €mil	Market Share	Mkt. Sh Chg	# of Deals
HSBC Holdings PLC	1	1	11,835	6.8	-0.1	54
Barclays	2	9	10,964	6.3	3.0	36
JP Morgan	3	5	10,820	6.2	1.7	40
Credit Agricole CIB	4	2	10,508	6.0	-0.1	42
Citi	5	6*	9,544	5.5	1.3	35
BNP Paribas SA	6	3	9,489	5.5	-0.1	44
BofA Securities Inc	7	4	8,738	5.0	0.0	42
Societe Generale	8	6*	6,708	3.9	-0.3	28
Morgan Stanley	9	20	6,443	3.7	2.1	33
Nomura	10	10	5,234	3.0	0.6	15
Deutsche Bank	11	14	5,193	3.0	0.8	24
ING	12	8	4,607	2.7	-1.4	30
TD Securities Inc	13	28	4,587	2.6	1.7	11
SEB	14	13	4,549	2.6	0.3	31
NatWest Markets	15	22	4,465	2.6	1.1	18
Natixis	16	16	4,282	2.5	0.5	13
Goldman Sachs & Co	17	15	3,552	2.0	-0.1	16
Santander Corp & Invest Bkg	18	18	3,456	2.0	0.2	20
UniCredit	19	11	3,305	1.9	-0.5	20
RBC Capital Markets	20	29	2,980	1.7	0.8	6
Mizuho Financial Group	21	19	2,840	1.6	-0.1	26
BMO Capital Markets	22	61	2,685	1.5	1.2	3
Danske Bank	23	12	2,339	1.3	-1.0	14
Credit Suisse	24	47	2,211	1.3	0.9	14
DZ Bank	25	49	2,157	1.2	0.8	10
Industry Total			**173,947**	**100.0**		**301**

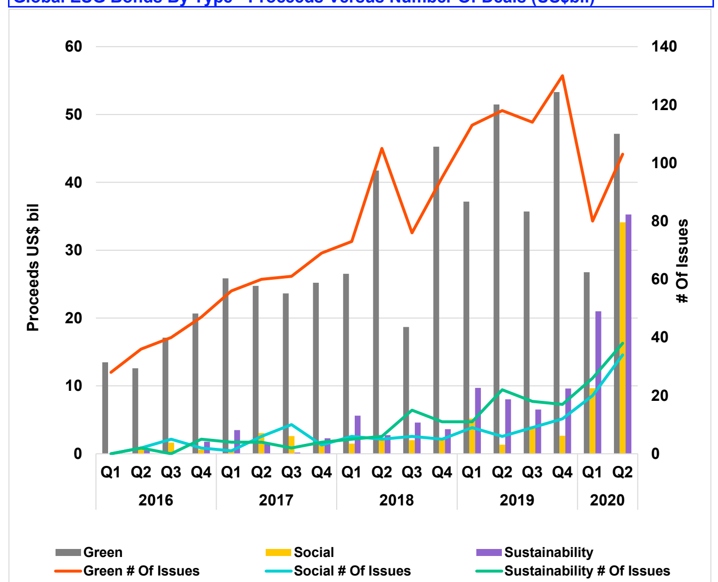
*Indicates a Tie

All Global Green Bonds (GR01)** — YoY Change ($) -17% QoQ Change ($) 76%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
JP Morgan	1	5	4,583	6.2	1.2	27
BNP Paribas SA	2	3	4,470	6.1	0.8	25
Citi	3	6	3,923	5.3	0.7	17
Credit Agricole CIB	4	2	3,514	4.8	-1.6	18
ING	5	11	3,287	4.5	1.6	22
BofA Securities Inc	6	4	3,259	4.4	-0.8	24
Barclays	7	7	3,128	4.2	0.9	18
Societe Generale	8	8	2,980	4.0	0.7	13
HSBC Holdings PLC	9	1	2,956	4.0	-2.6	21
SEB	10	12	2,720	3.7	0.8	25
Morgan Stanley	11	19	2,580	3.5	1.8	21
Deutsche Bank	12	14	2,381	3.2	0.7	12
Santander Corp & Invest Bkg	13	18	2,164	2.9	1.2	12
Goldman Sachs & Co	14	13	2,111	2.9	0.3	11
UniCredit	15	10	1,880	2.5	-0.4	11
Credit Suisse	16	46	1,746	2.4	2.0	12
NatWest Markets	17	17	1,670	2.3	0.5	10
ABN AMRO Bank	18	32	1,429	1.9	1.0	12
Danske Bank	19	9	1,358	1.8	-1.2	11
BBVA	20	16	1,333	1.8	-0.1	12
Nordea	21	15	1,179	1.6	-0.4	13
Nomura	22	24	1,107	1.5	0.2	7
Swedbank	23	23	1,016	1.4	0.0	8
Mizuho Financial Group	24	21	1,014	1.4	-0.1	13
Mitsubishi UFJ Financial Group	25	33	943	1.3	0.4	11
Industry Total			**73,917**	**100.0**		**183**

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

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



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High Yield Corporate Debt Rankings

First Half 2020 | Debt Capital Markets | Managing Underwriters

Global High Yield Debt (B4) — YoY Change ($) 22% — QoQ Change ($) 27%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
JP Morgan	1	1	29,378	11.7	2.9	202
BofA Securities Inc	2	5	22,459	8.9	3.0	180
Citi	3	2	18,981	7.6	0.8	152
Barclays	4	8	16,993	6.8	2.0	143
Goldman Sachs & Co	5	3	16,802	6.7	0.2	146
Morgan Stanley	6	7	12,608	5.0	-0.3	94
Deutsche Bank	7	6	12,571	5.0	-0.9	118
Credit Suisse	8	4	11,801	4.7	-1.6	112
Wells Fargo & Co	9	11	11,628	4.6	1.8	103
RBC Capital Markets	10	9	6,922	2.8	-0.3	67
BNP Paribas SA	11	10	6,299	2.5	-0.4	76
HSBC Holdings PLC	12	12	4,563	1.8	-0.9	62
Truist Financial Corp	13	22	4,519	1.8	0.7	45
Mitsubishi UFJ Financial Group	14	18	3,568	1.4	0.1	40
UBS	15	13	3,481	1.4	-1.0	41
Credit Agricole CIB	16	14	3,403	1.4	-0.9	33
Mizuho Financial Group	17	20	3,379	1.3	0.2	37
Jefferies LLC	18	17	3,369	1.3	-0.1	17
BMO Capital Markets	19	19	3,062	1.2	0.0	35
TD Securities Inc	20	29	3,016	1.2	0.5	27
US Bancorp	21	43	2,876	1.1	0.7	24
Scotiabank	22	23	2,712	1.1	0.0	38
Societe Generale	23	21	2,407	1.0	-0.1	25
PNC Financial Services Group	24	66	2,394	1.0	0.9	26
ING	25	66	2,120	0.8	-0.2	23
Industry Total			**251,371**	**100.0**		**383**

Global High Yield Debt USD Denominated (B5) — YoY Change ($) 28% — QoQ Change ($) 48%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
JP Morgan	1	1	26,617	12.2	3.2	181
BofA Securities Inc	2	4	21,037	9.7	3.3	171
Citi	3	3	16,498	7.6	0.7	134
Goldman Sachs & Co	4	5	15,401	7.1	0.8	133
Barclays	5	8	14,947	6.9	2.0	127
Morgan Stanley	6	6	11,687	5.4	-0.4	85
Wells Fargo & Co	7	10	11,272	5.2	2.0	102
Deutsche Bank	8	7	10,167	4.7	-0.7	104
Credit Suisse	9	2	10,010	4.6	-2.5	101
RBC Capital Markets	10	9	6,372	2.9	-0.7	65
Truist Financial Corp	11	20	4,519	2.1	0.7	45
BNP Paribas SA	12	13	4,232	1.9	-0.2	59
Mitsubishi UFJ Financial Group	13	18	3,516	1.6	0.2	39
UBS	14	11	3,427	1.6	-0.7	39
Jefferies LLC	15	17	3,181	1.5	-0.2	15
BMO Capital Markets	16	19	3,062	1.4	0.0	35
Mizuho Financial Group	17	21	3,049	1.4	0.1	34
TD Securities Inc	18	27	3,016	1.4	0.5	27
US Bancorp	19	39	2,876	1.3	0.9	24
HSBC Holdings PLC	20	12	2,831	1.3	-1.0	44
Scotiabank	21	22	2,498	1.2	0.0	35
PNC Financial Services Group	22	58	2,394	1.1	0.9	26
Credit Agricole CIB	23	15	2,045	0.9	-0.9	26
Fifth Third Bancorp	24	38	2,020	0.9	0.4	24
Haitong Securities Co Ltd	25	14	1,540	0.7	-1.3	41
Industry Total			**217,911**	**100.0**		**332**

Top High Yield Corporate Deals

Issue Date	Issuer	Domicile Nation	Proceeds US$mil	Coupon %	Macro Sector
4/17/20	Ford Motor Co	United States	8,000.0	8.500	Industrials
6/19/20	Colt Merger Sub Inc.	United States	5,200.0	6.250	Financials
1/21/20	Scenery Journey Ltd	Hong Kong	4,000.0	12.000	Real Estate
1/8/20	Altice Financing SA	Luxembourg	3,087.5	3.000	Media and Entertainment
5/29/20	WESCO Distribution Inc	United States	2,815.0	7.125	High Technology
2/11/20	HCA Inc	United States	2,700.0	3.500	Healthcare
3/4/20	CCO Holdings, LLC	United States	2,527.5	4.500	Media and Entertainment
2/20/20	Front Range Bidco Inc.	United States	2,500.1	4.000	Financials
1/22/20	VICI Properties Inc	United States	2,500.0	4.125	Real Estate
6/24/20	American Airlines Inc	United States	2,475.0	11.750	Industrials
6/17/20	Iron Mountain Inc	United States	2,400.0	5.250	High Technology
1/22/20	Albertsons Cos Inc	United States	2,356.0	4.875	Retail
1/23/20	Altice FR	Luxembourg	2,326.9	6.000	Media and Entertainment

Global High Yield Debt Non-USD Denominated (B6) — YoY Change ($) -4% — QoQ Change ($) -53%

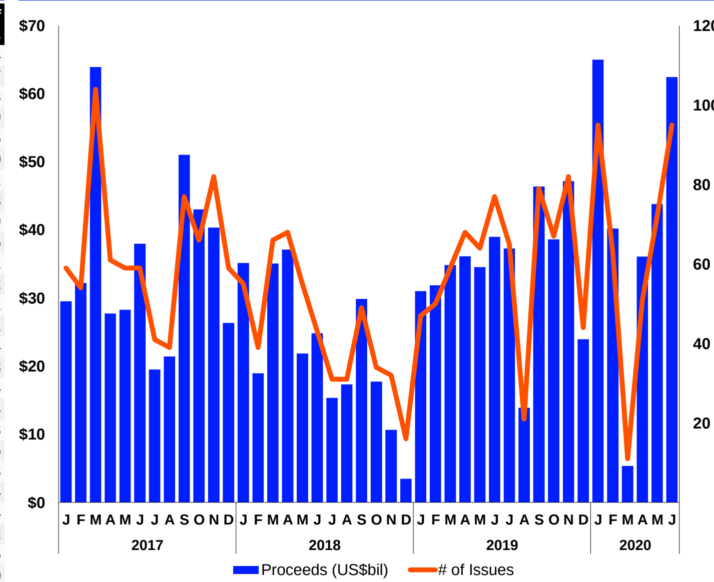
Bookrunner	Rank 2020	Rank 2019	Proceeds €mil	Market Share	Mkt. Sh Chg	# of Deals
JP Morgan	1	2	2,511	8.3	0.5	26
Citi	2	5	2,240	7.4	1.2	22
Deutsche Bank	3	1	2,177	7.2	-0.7	20
BNP Paribas SA	4	4	1,866	6.2	-0.3	20
Barclays	5	8	1,865	6.2	1.7	19
Credit Suisse	6	15	1,611	5.3	2.5	14
HSBC Holdings PLC	7	7	1,577	5.2	0.3	20
BofA Securities Inc	8	10	1,294	4.3	0.6	12
Goldman Sachs & Co	9	3	1,276	4.2	-3.1	17
Credit Agricole CIB	10	6	1,227	4.0	-1.1	10
ING	11	12	1,212	4.0	0.7	13
UniCredit	12	9	1,127	3.7	0.0	12
Societe Generale	13	11	986	3.3	0.0	12
NatWest Markets	14	16	880	2.9	0.6	10
Morgan Stanley	15	13	835	2.8	-0.3	12
KKR & Co LP	16	28	746	2.5	1.7	4
Natixis	17	18	504	1.7	-0.3	4
RBC Capital Markets	18	30	498	1.6	0.9	5
Nordea	19	25	471	1.6	0.7	7
Santander Corp & Invest Bkg	20	20	370	1.2	-0.4	5
Mediobanca	21	24	365	1.2	0.3	5
ABN AMRO Bank	22	-	361	1.2	1.2	4
Wells Fargo & Co	23	23	330	1.1	0.1	3
Mizuho Financial Group	24	42	301	1.0	0.7	4
Banca IMI (Intesa Sanpaolo)	25	19	290	1.0	-0.7	6
Industry Total			**30,335**	**100.0**		**60**

*Indicates a Tie

Global High Yield Debt EURO Denominated (B06b) — YoY Change ($) -4% — QoQ Change ($) -59%

Bookrunner	Rank 2020	Rank 2019	Proceeds €mil	Market Share	Mkt. Sh Chg	# of Deals
JP Morgan	1	2	2,414	9.1	0.8	24
Deutsche Bank	2	1	2,012	7.5	-1.4	17
Citi	3	5	1,936	7.3	0.4	18
BNP Paribas SA	4	4	1,820	6.8	-0.2	19
Barclays	5	16	1,503	5.6	3.4	16
Credit Suisse	6	14	1,359	5.1	2.0	10
BofA Securities Inc	7	9	1,279	4.8	1.0	11
HSBC Holdings PLC	8	7	1,260	4.7	-0.3	18
Credit Agricole CIB	9	6	1,177	4.4	-1.4	9
Goldman Sachs & Co	10	3	1,144	4.3	-2.8	15
ING	11	13	1,128	4.2	0.9	11
UniCredit	12	8	1,127	4.2	0.0	12
Societe Generale	13	10	940	3.5	-0.2	11
Morgan Stanley	14	11	790	3.0	-0.4	11
KKR & Co LP	15	24	780	2.9	2.0	4
NatWest Markets	16	20	639	2.4	0.6	8
Natixis	17	15	504	1.9	-0.3	4
Nordea	18	33	397	1.5	1.0	4
RBC Capital Markets	19	49*	379	1.4	1.2	3
Santander Corp & Invest Bkg	20	18	370	1.4	-0.5	5
Wells Fargo & Co	21	25	330	1.2	0.3	3
Mizuho Financial Group	22	39	301	1.1	0.8	4
Mediobanca	23	21	295	1.1	0.1	4
Cooperatieve Rabobank UA	24	37	276	1.0	0.7	2
Commerzbank AG	25	19	245	0.9	-0.9	5
Industry Total			**26,678**	**100.0**		**49**

Global High Yield Corporate Debt Issuance



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Emerging Markets Rankings

First Half 2020 | Debt Capital Markets | Managing Underwriters

All International Emerging Market Bonds (L1)

YoY Change ($) 10% QoQ Change ($) 6%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Citi	1	1	36,794	8.9	1.1	141
HSBC Holdings PLC	2	2	32,254	7.8	0.3	190
JP Morgan	3	3	31,474	7.6	0.2	139
Standard Chartered PLC	4	4	22,951	5.6	0.2	113
Deutsche Bank	5	9	21,938	5.3	2.0	74
Goldman Sachs & Co	6	6	19,456	4.7	1.1	74
BNP Paribas SA	7	5	18,534	4.5	0.6	85
BofA Securities Inc	8	8	17,740	4.3	0.8	75
Credit Agricole CIB	9	7	12,869	3.1	-0.4	73
Barclays	10	12	12,192	3.0	0.6	70
Credit Suisse	11	11	11,154	2.7	0.0	78
Morgan Stanley	12	10	10,564	2.6	-0.6	50
UBS	13	13	9,718	2.4	0.0	80
Societe Generale	14	20	9,487	2.3	1.0	44
Bank of China Ltd	15	14	7,514	1.8	-0.5	91
Mizuho Financial Group	16	15	5,891	1.4	-0.6	49
Industrial & Comm Bank China	17	19	5,811	1.4	0.1	58
Mitsubishi UFJ Financial Group	18	27	5,648	1.4	0.4	32
DBS Group Holdings	19	18	5,551	1.3	0.0	60
CITIC	20	17	5,195	1.3	-0.3	79
Industry Total			**413,338**	**100.0**		**624**

EMEA Emerging Market Bonds (L2)

YoY Change ($) 9% QoQ Change ($) 38%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	10,921	15.7	0.0	32
Citi	2	2	8,709	12.5	0.3	22
BNP Paribas SA	3	5	5,536	8.0	1.8	13
Deutsche Bank	4	11	4,533	6.5	3.4	9
Societe Generale	5	7	4,119	5.9	1.9	13
Barclays	6	23	3,633	5.2	4.3	10
UniCredit	7	17	3,493	5.0	3.5	11
HSBC Holdings PLC	8	9	2,988	4.3	0.9	11
ING	9	12	2,953	4.2	1.2	9
Banca IMI (Intesa Sanpaolo)	10	15	2,133	3.1	1.1	7
Gazprombank	11	3	1,981	2.9	-3.7	7
Erste Group	12	10	1,899	2.7	-0.4	5
Raiffeisen Bank International	13	29	1,895	2.7	2.1	7
Standard Chartered PLC	14	6	1,788	2.6	-3.3	5
Morgan Stanley	15	20	1,346	1.9	0.8	2
Credit Agricole CIB	16	16	1,239	1.8	0.2	3
Industrial & Comm Bank China	17	-	1,161	1.7	1.7	4
Goldman Sachs & Co	18	8	874	1.3	-2.7	5
BofA Securities Inc	19	13	862	1.2	-1.4	4
Raiffeisen Schweiz Genossensch	20	-	783	1.1	1.1	2
Industry Total			**69,563**	**100.0**		**61**

Latin America Emerging Market Bonds (L3)

YoY Change ($) 34% QoQ Change ($) -44%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	8,743	12.5	0.6	29
Deutsche Bank	2	12	6,312	9.0	5.6	10
BofA Securities Inc	3	2	5,757	8.2	-3.4	24
Citi	4	3	5,725	8.2	-1.6	16
Goldman Sachs & Co	5	9	4,946	7.1	2.6	21
BNP Paribas SA	6	8	4,663	6.7	2.2	11
Itau Unibanco	7	13	4,578	6.5	3.8	14
Scotiabank	8	6	4,204	6.0	0.2	14
HSBC Holdings PLC	9	7	3,293	4.7	-0.2	10
Credit Suisse	10	19	3,048	4.4	3.1	9
Morgan Stanley	11	5	2,757	3.9	-3.0	12
BBVA	12	23	2,660	3.8	3.1	8
Santander Corp & Invest Bkg	13	4	2,212	3.2	-4.6	11
Barclays	14	11	1,557	2.2	-1.3	5
Credit Agricole CIB	15	20	1,429	2.0	0.9	3
Sumitomo Mitsui Finl Grp Inc	16	16	1,161	1.7	-0.2	2
Mitsubishi UFJ Financial Group	17	26	791	1.1	0.6	2
Societe Generale	18	25	741	1.1	0.5	2
Banco BTG Pactual SA	19	21	718	1.0	0.1	5
Oppenheimer Holdings Inc	20	-	699	1.0	1.0	2
Industry Total			**70,147**	**100.0**		**76**

Asia Pacific Emerging Market Bonds (L4)

YoY Change ($) -5% QoQ Change ($) -3%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
HSBC Holdings PLC	1	1	18,036	9.3	0.4	149
Citi	2	2	12,946	6.7	1.2	83
Standard Chartered PLC	3	3	10,005	5.2	0.6	82
UBS	4	8	8,119	4.2	0.8	70
Bank of China Ltd	5	4	7,477	3.9	-0.2	90
BofA Securities Inc	6	17	7,296	3.8	1.4	42
Credit Suisse	7	6	7,117	3.7	0.0	65
JP Morgan	8	7	7,100	3.7	0.1	62
Credit Agricole CIB	9	5	6,287	3.2	-0.7	54
BNP Paribas SA	10	12	6,028	3.1	0.5	55
Industry Total			**193,781**	**100.0**		**410**

Middle East Emerging Market Bonds (L5)

YoY Change ($) 51% QoQ Change ($) 86%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Standard Chartered PLC	1	1	11,094	14.7	1.5	25
Citi	2	3	9,277	12.3	2.6	18
HSBC Holdings PLC	3	2	7,937	10.5	0.1	20
Goldman Sachs & Co	4	8	7,412	9.8	3.9	6
Deutsche Bank	5	7	5,879	7.8	1.0	10
JP Morgan	6	4	4,057	5.4	-2.5	14
Credit Agricole CIB	7	5	3,725	4.9	-2.5	12
BofA Securities Inc	8	29	3,660	4.8	4.5	4
First Abu Dhabi Bank PJSC	9	14	3,302	4.4	2.9	11
Barclays	10	10	2,494	3.3	-1.3	6
Industry Total			**75,683**	**100.0**		**73**

All Global Debt, by Brazilian Issuers (BR1)

YoY Change ($) -3% QoQ Change ($) -24%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Deutsche Bank	1	25	5,295	26.2	25.6	5
Itau Unibanco	2	3	3,321	16.5	6.2	15
BofA Securities Inc	3	6	2,548	12.6	7.1	8
JP Morgan	4	7	2,281	11.3	6.1	7
Santander Corp & Invest Bkg	5	2	1,136	5.6	-8.8	6
Banco BTG Pactual SA	6	5	829	4.1	-2.1	6
BNP Paribas SA	7	8	803	4.0	-0.7	2
Goldman Sachs & Co	8	11	723	3.6	0.5	3
Banco Bradesco SA	9	1	650	3.2	-13.0	7
Industry Total			**20,193**	**100.0**		**37**

Domestic Brazilian Debt, in Reals (BR2)

YoY Change ($) -77% QoQ Change ($) 1%

Bookrunner	Rank 2020	Rank 2019	Proceeds R$mil	Market Share	Mkt. Sh. Chg	# of Deals
Itau Unibanco	1	1	2,500	23.6	-0.1	8
Banco Bradesco SA	2	4	1,825	17.2	-0.8	7
XP Investimentos	3	7	1,404	13.2	12.0	2
Banco Votorantim	4	9	1,283	12.1	11.3	4
Banco BTG Pactual SA	5	5	1,183	11.2	3.5	2
Santander Corp & Invest Bkg	6	2	753	7.1	-16.6	6
Banco do Brasil SA	7	3	618	5.8	-13.0	7
Citi	8	13	605	5.7	5.3	6
BNP Paribas SA	9	-	140	1.3	1.3	1
Sumitomo Mitsui Finl Grp Inc	10	-	83	0.8	0.8	4
Industry Total			**10,602**	**100.0**		**36**

*Indicates a Tie

Global Debt, Mexican Issuers (MX1)

YoY Change ($) 42% QoQ Change ($) -25%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	4	4,195	14.3	5.3	10
Goldman Sachs & Co	2	11	3,972	13.6	10.0	8
Citi	3	2	3,902	13.3	3.0	12
Santander Corp & Invest Bkg	4	1	2,361	8.1	-3.7	15
BBVA	5	7	2,273	7.8	2.5	17
Morgan Stanley	6	5	1,964	6.7	-1.1	6
BofA Securities Inc	7	3	1,829	6.2	-3.2	6
BNP Paribas SA	8	24	1,625	5.6	5.0	4
Barclays	9	6	1,376	4.7	-2.6	4
Credit Suisse	10	-	974	3.3	3.3	1
Industry Total			**29,297**	**100.0**		**37**

Domestic Mexican Debt (MX3)

YoY Change ($) -53% QoQ Change ($) 36%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
BBVA	1	3	418	24.0	4.8	15
Casas de Bolsa Bital, S.A.	2	2	348	20.0	0.2	13
Casa de Bolsa Inverlat	3	9	347	19.9	18.6	9
Santander Corp & Invest Bkg	4	1	341	19.6	-15.1	13
Citi	5	5	214	12.3	5.5	5
Inversora Bursatil SA de CV	6	4	55	3.1	-5.4	1
Corporacion Actinver Sab de CV	7	7	12	0.7	-2.2	2
Grupo Financiero Banorte-Ixe	8	6	9	0.5	-3.3	1
Industry Total			**1,742**	**100.0**		**21**

Asia-Pacific Rankings

First Half 2020 | Debt Capital Markets | Managing Underwriters

Asian G3 Bonds (ex-Japan & Australia) (AR2)

YoY Change ($) -2% QoQ Change ($) 0%

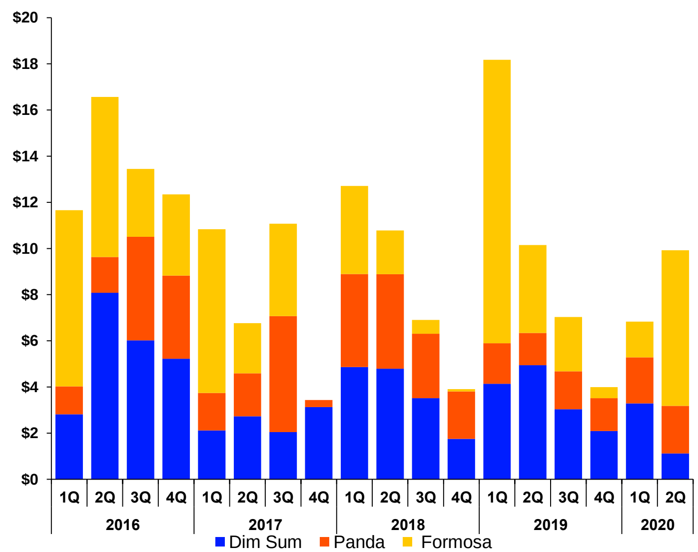
Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
HSBC Holdings PLC	1	1	16,897	9.0	0.6	118
Citi	2	2	13,678	7.3	2.1	76
Standard Chartered PLC	3	3	9,547	5.1	0.4	75
BofA Securities Inc	4	16	8,538	4.6	2.2	39
Goldman Sachs & Co	5	8	7,546	4.0	0.6	40
UBS	6	10	7,125	3.8	0.6	64
Bank of China Ltd	7	4	6,841	3.7	-0.6	82
JP Morgan	8	6	6,764	3.6	-0.5	52
Credit Suisse	9	7	6,365	3.4	-0.5	59
Credit Agricole CIB	10	5	5,777	3.1	-1.1	40
BNP Paribas SA	11	14	5,244	2.8	0.4	50
DBS Group Holdings	12	15	5,117	2.7	0.3	52
CITIC	13	12	5,017	2.7	-0.2	74
Deutsche Bank	14	17	4,773	2.5	0.1	41
Morgan Stanley	15	13	4,657	2.5	0.0	28
Barclays	16	19	4,555	2.4	0.3	42
Industrial & Comm Bank China	17	18	4,398	2.3	0.1	44
Mizuho Financial Group	18	11	4,177	2.2	-0.9	36
Mitsubishi UFJ Financial Group	19	23	3,781	2.0	0.5	21
Haitong Securities Co Ltd	20	9	3,118	1.7	-1.5	75
Guotai Junan Securities	21	20	2,754	1.5	-0.5	63
Bank of Communications Co Ltd	22	24	2,744	1.5	0.1	41
Societe Generale	23	35	2,575	1.4	0.7	16
RBC Capital Markets	24	40	2,559	1.4	0.9	2
China Merchants Bank	25	25	2,315	1.2	-0.2	51
Industry Total			**187,668**	**100.0**		**321**

Asian G3 High Yield Bonds (ex Japan & Australia) (AR10)

YoY Change ($) -33% QoQ Change ($) -66%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
Credit Suisse	1	1	3,281	10.0	0.1	37
UBS	2	4	2,876	8.7	2.9	31
Standard Chartered PLC	3	11	1,725	5.2	1.7	19
Deutsche Bank	4	6	1,614	4.9	0.3	28
BofA Securities Inc	5	19	1,585	4.8	3.0	10
CITIC	6	3	1,583	4.8	-1.1	29
Haitong Securities Co Ltd	7	2	1,582	4.8	-2.3	42
Tianfeng Securities Co Ltd	8	-	1,362	4.1	4.1	5
HSBC Holdings PLC	9	5	1,346	4.1	-1.4	26
Morgan Stanley	10	9	1,310	4.0	0.1	15
Barclays	11	16	1,210	3.7	1.7	21
Goldman Sachs & Co	12	10	1,050	3.2	-0.6	12
BNP Paribas SA	13	20	1,018	3.1	1.3	18
Guotai Junan Securities	14	8	1,001	3.0	-1.1	28
Bank of China Ltd	15	13	932	2.8	-0.3	18
JP Morgan	16	7	889	2.7	-1.5	15
China Construction Bank	17	27	790	2.4	1.5	19
China Merchants Bank	18	17	503	1.5	-0.4	17
Orient Securities Co Ltd	19	15	442	1.3	-0.9	10
Kaisa Securities Ltd	20	55	417	1.3	1.1	8
Bank of Communications Co Ltd	21	24	379	1.2	0.2	8
HeungKong Group Ltd	22	22	368	1.1	-0.2	10
China Everbright Bank	23	21	322	1.0	-0.5	3
DBS Group Holdings	24	29	287	0.9	0.2	7
Cntrl Wealth Sec Invest Ltd	25	41	278	0.8	0.5	6
Industry Total			**32,913**	**100.0**		**88**

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



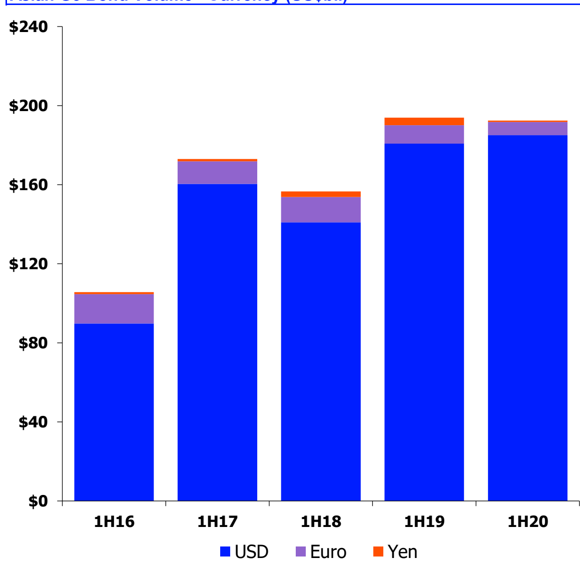
All Asian Currencies (ex Japan & Australia) (AS1)

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

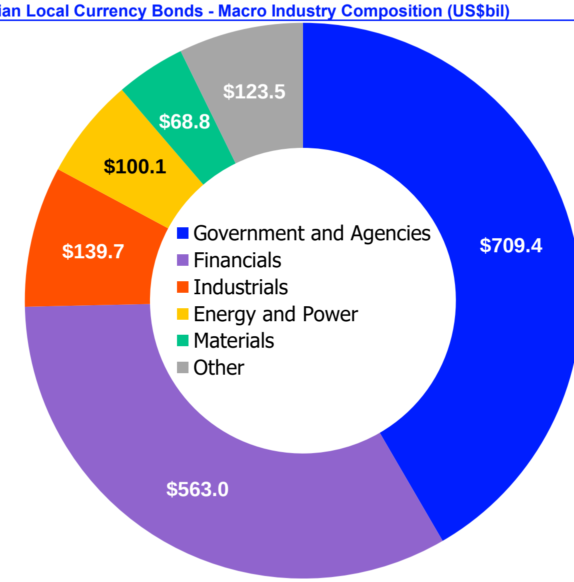
Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
Bank of China Ltd	1	1	82,260	6.5	-1.4	1,129
Industrial & Comm Bank China	2	2	79,177	6.3	-0.7	1,047
CITIC	3	5	75,274	6.0	1.4	1,028
China Construction Bank	4	3	70,602	5.6	-0.7	1,102
Bank of Communications Co Ltd	5	4	58,384	4.6	-1.5	901
Agricultural Bank of China	6	6	53,203	4.2	-0.3	815
CSC Financial Co Ltd	7	7	48,802	3.9	0.4	641
Industrial Bank Co Ltd	8	8	42,735	3.4	0.4	658
China Merchants Bank	9	10	34,497	2.7	0.4	469
Guotai Junan Securities	10	13	28,444	2.3	0.4	448
China Minsheng Banking Corp	11	9	27,983	2.2	-0.1	424
Huatai Securities Co Ltd	12	19	25,473	2.0	0.8	330
Haitong Securities Co Ltd	13	15	25,392	2.0	0.5	273
Shanghai Pudong Development Bk	14	12	23,982	1.9	0.0	336
China International Capital Co	15	11	22,874	1.8	-0.3	208
Postal Savings Bank Of China	16	16	21,417	1.7	0.2	340
China Everbright Bank	17	20	17,329	1.4	0.3	236
NH Investment & Securities Co	18	22	14,923	1.2	0.2	296
Agricultural Dev Bank of China	19	14	14,379	1.1	-0.6	216
KB Financial Group Inc	20	18	13,719	1.1	-0.2	267
Everbright Securities Co Ltd	21	23	13,100	1.0	0.1	236
China Merchants Securities Co	22	21	11,107	0.9	-0.2	128
Bank of Beijing	23	25	10,635	0.8	-0.1	190
GF Securities	24	17	10,485	0.8	-0.5	130
China Guangfa Bank	25	52	9,667	0.8	0.5	153
Industry Total			**1,263,739**	**100.0**		**6,774**

*Indicates a Tie

Asian G3 Bond Volume - Currency (US$bil)



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



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Australia & China Rankings

First Half 2020 | Debt Capital Markets | Managing Underwriters

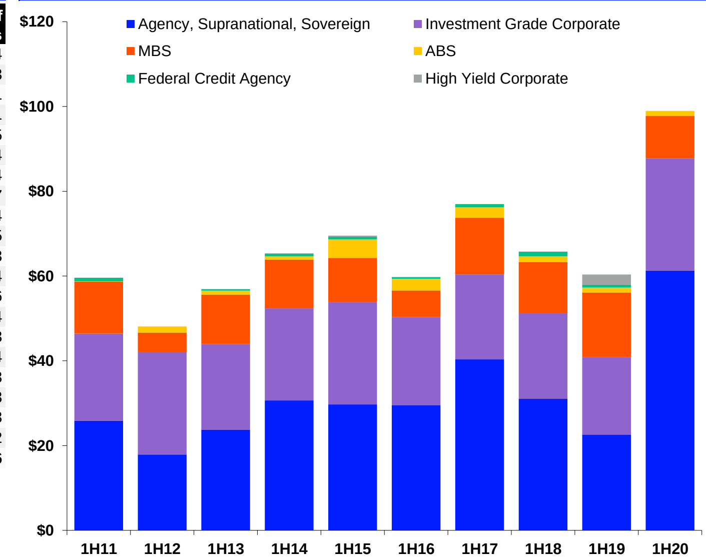
All Australian Debt (ex self-funded) (AJ3a) YoY Change ($) 64% QoQ Change ($) 189%

Bookrunner	Rank 2020	Rank 2019	Proceeds AU$mil	Market Share	Mkt. Sh Chg	# of Deals
Westpac Banking	1	1	14,692	14.9	-2.4	38
ANZ Banking Group	2	2	14,690	14.8	1.8	40
UBS	3	8	14,437	14.6	9.1	17
Commonwealth Bank of Australia	4	4	14,046	14.2	3.7	36
Citi	5	14	9,462	9.6	7.5	14
National Australia Bank	6	3	8,490	8.6	-3.1	43
Deutsche Bank	7	5	5,321	5.4	-1.2	10
TD Securities Inc	8	7	3,143	3.2	-2.8	29
Nomura	9	6	2,048	2.1	-4.0	17
BofA Securities Inc	10	19	2,029	2.1	1.3	7
JP Morgan	11	11	1,734	1.8	-0.6	10
RBC Capital Markets	12	13	1,732	1.8	-0.3	10
Macquarie Group	13	10	1,361	1.4	-1.1	8
Sumitomo Mitsui Finl Grp Inc	14	23	833	0.8	0.3	3
Standard Chartered PLC	15	16	711	0.7	-0.6	4
Mitsubishi UFJ Financial Group	16	15	557	0.6	-0.7	3
Natixis	17	28	555	0.6	0.4	5
BMO Capital Markets	18	-	500	0.5	0.5	1
Mizuho Financial Group	19	12	376	0.4	-1.7	8
HSBC Holdings PLC	20	9	356	0.4	-2.4	2
Industry Total			**98,964**	**100.0**		**139**

All Australian International Bonds (AJ7) YoY Change ($) 9% QoQ Change ($) -67%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
Citi	1	1	3,618	13.2	0.5	14
HSBC Holdings PLC	2	2	2,692	9.8	-2.3	13
BofA Securities Inc	3	4	2,468	9.0	3.0	11
JP Morgan	4	3	2,236	8.2	-0.9	11
RBC Capital Markets	5	8	1,752	6.4	1.3	5
ANZ Banking Group	6	15	1,337	4.9	2.3	4
Westpac Banking	7	7	1,299	4.7	-0.4	4
Goldman Sachs & Co	8	19	1,228	4.5	2.8	7
TD Securities Inc	9	17	1,128	4.1	2.1	4
Deutsche Bank	10	14	1,060	3.9	0.9	5
Commonwealth Bank of Australia	11	12	978	3.6	-0.3	3
Mitsubishi UFJ Financial Group	12	18	895	3.3	1.5	4
BNP Paribas SA	13	5	879	3.2	-2.8	6
Barclays	14	13	852	3.1	0.1	4
National Australia Bank	15	11	841	3.1	-1.2	3
UBS	16	6	730	2.7	-2.9	4
Morgan Stanley	17	9	648	2.4	-2.3	3
Macquarie Group	18	-	512	1.9	1.9	3
Credit Suisse	19	10	495	1.8	-2.6	3
NatWest Markets	20	21	308	1.1	0.0	2
Industry Total			**27,385**	**100.0**		**36**

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



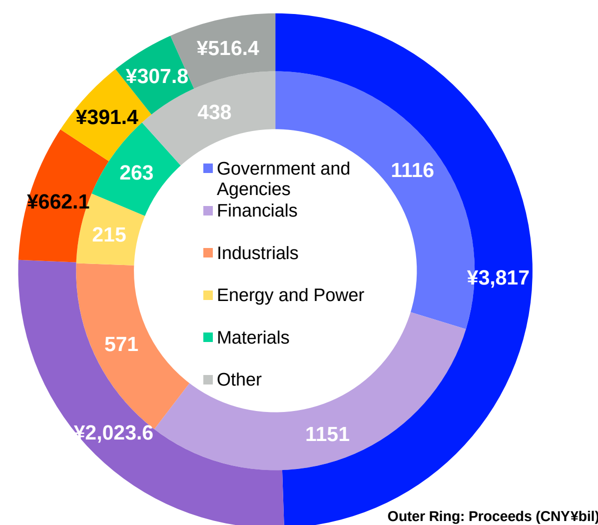
China G3 Currency Bonds (AR5) YoY Change ($) -25% QoQ Change ($) 2%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
HSBC Holdings PLC	1	4	4,789	6.5	1.7	47
Bank of China Ltd	2	1	4,332	5.9	-0.1	56
Industrial & Comm Bank China	3	9	3,678	5.0	1.5	34
CITIC	4	5	3,244	4.4	0.0	58
Credit Agricole CIB	5	6	3,086	4.2	0.2	17
UBS	6	8	2,812	3.8	0.2	35
Credit Suisse	7	2	2,782	3.8	-1.3	35
JP Morgan	8	28	2,717	3.7	2.2	23
Haitong Securities Co Ltd	9	3	2,642	3.6	-1.4	64
Goldman Sachs & Co	10	7	2,542	3.5	-0.2	21
BofA Securities Inc	11	20	2,415	3.3	1.4	14
Citi	12	19	2,335	3.2	1.3	16
Standard Chartered PLC	13	11	2,266	3.1	0.4	29
Deutsche Bank	14	21	1,944	2.6	0.7	26
Guotai Junan Securities	15	10	1,822	2.5	-1.0	46
China Construction Bank	16	12	1,738	2.4	-0.1	30
Shanghai Pudong Development Bk	17	29	1,681	2.3	0.9	26
Barclays	18	23	1,573	2.1	0.3	23
Bank of Communications Co Ltd	19	15	1,540	2.1	-0.1	25
BNP Paribas SA	20	18	1,528	2.1	0.2	21
Industry Total			**73,509**	**100.0**		**164**

Chinese Yuan Bonds (ex-Self Funded) (AS24) YoY Change ($) 24% QoQ Change ($) -15%

Bookrunner	Rank 2020	Rank 2019	Proceeds CN¥mil	Market Share	Mkt. Sh Chg	# of Deals
Bank of China Ltd	1	1	576,905	7.5	-2.0	1,123
Industrial & Comm Bank China	2	2	557,149	7.2	-1.3	1,045
CITIC	3	5	529,612	6.9	1.3	1,028
China Construction Bank	4	3	497,169	6.4	-1.3	1,102
Bank of Communications Co Ltd	5	4	408,107	5.3	-1.7	897
Agricultural Bank of China	6	6	374,428	4.9	-0.5	813
CSC Financial Co Ltd	7	7	343,115	4.5	0.3	641
Industrial Bank Co Ltd	8	8	300,433	3.9	0.3	658
China Merchants Bank	9	10	242,548	3.1	0.4	469
Guotai Junan Securities	10	13	200,235	2.6	0.4	448
China Minsheng Banking Corp	11	9	197,091	2.6	-0.2	422
Huatai Securities Co Ltd	12	18	179,620	2.3	0.9	330
Haitong Securities Co Ltd	13	15	178,735	2.3	0.5	273
Shanghai Pudong Development Bk	14	12	169,070	2.2	-0.1	335
China International Capital Co	15	11	161,322	2.1	-0.4	208
Postal Savings Bank Of China	16	16	150,688	2.0	0.2	340
China Everbright Bank	17	19	121,946	1.6	0.2	236
Agricultural Dev Bank of China	18	14	100,919	1.3	-0.8	216
Everbright Securities Co Ltd	19	21	92,077	1.2	0.1	235
China Merchants Securities Co	20	20	78,293	1.0	-0.3	128
Industry Total			**7,717,966**	**100.0**		**3,754**

Chinese Yuan Bonds - Macro Industry Composition



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

*Indicates a Tie

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Japan Rankings

First Half 2020 | Debt Capital Markets | Managing Underwriters

All Bonds in Yen (AP05)

YoY Change (¥) -6% QoQ Change (¥) 44%

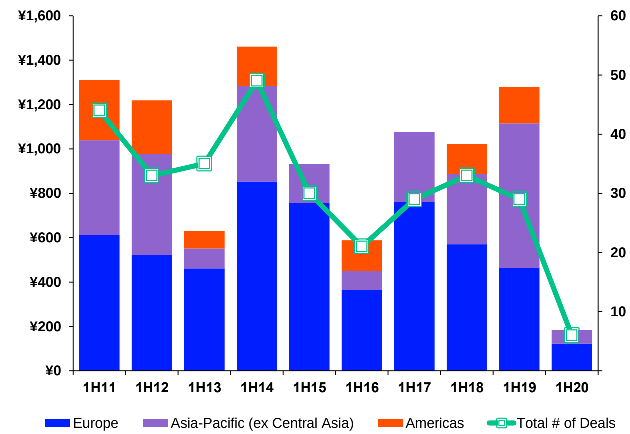
Lead Manager	Rank 2020	Rank 2019	Proceeds JPY¥bil	Market Share	Mkt. Sh. Chg	# of Deals
Mizuho Financial Group	1	1	2,515	21.2	-2.7	358
Nomura	2	5	2,243	18.9	4.1	284
Daiwa Securities Group Inc	3	2	2,076	17.5	0.4	277
Sumitomo Mitsui Finl Grp Inc	4	4	1,844	15.6	0.7	289
Mitsubishi UFJ Morgan Stanley	5	3	1,829	15.4	0.2	253
Goldman Sachs & Co	6	8	288	2.4	1.1	28
Mitsubishi UFJ Financial Group	7	7	255	2.2	0.0	15
Sumitomo Mitsui Trust Holdings	8	6	184	1.6	-1.1	15
BofA Securities Inc	9	13	164	1.4	0.7	10
Tokai Tokyo Financial Holdings	10	11	101	0.9	0.1	28
Shinkin Central Bank	11	14	73	0.6	-0.1	18
BNP Paribas SA	12	10	53	0.4	-0.6	7
JP Morgan	13	26*	49	0.4	0.4	1
Okasan Securities Group Inc	14	19	35	0.3	0.1	11
Credit Agricole CIB	15	20	32	0.3	0.1	5
Industry Total			**11,843**	**100.0**		**596**

Samurai Bonds (AP01)

YoY Change (¥) -86% QoQ Change (¥) 100%

Lead Manager	Rank 2020	Rank 2019	Proceeds JPY¥bil	Market Share	Mkt. Sh. Chg	# of Deals
Sumitomo Mitsui Finl Grp Inc	1	2*	81	44.4	23.4	6
Daiwa Securities Group Inc	2*	2*	20	11.1	-9.9	3
Nomura	2*	4	20	11.1	-2.8	3
Mitsubishi UFJ Morgan Stanley	2*	6	20	11.1	5.5	3
Mizuho Financial Group	2*	1	20	11.1	-14.0	3
Credit Agricole CIB	2*	10	20	11.1	10.6	3
Industry Total			**183**	**100.0**		**6**

Samurai Bonds Issuance - Domicile Region (JP¥bil)



Japanese Securitizations (AP02)

YoY Change (¥) -13% QoQ Change (¥) -32%

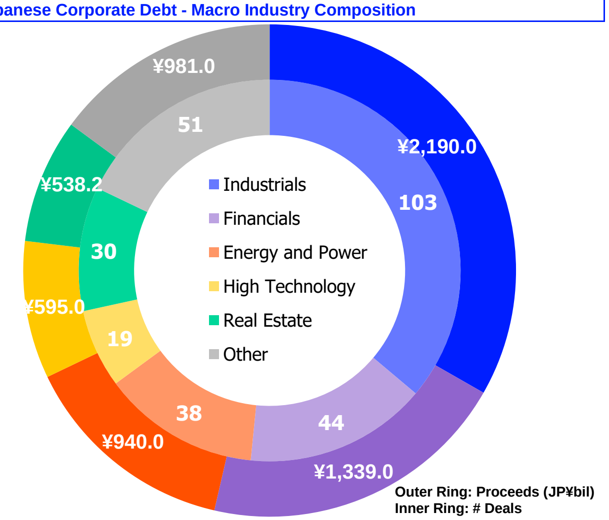
Lead Manager	Rank 2020	Rank 2019	Proceeds JPY¥bil	Market Share	Mkt. Sh. Chg	# of Deals
Mizuho Financial Group	1	1	690	30.0	-3.7	77
Daiwa Securities Group Inc	2	3	332	14.5	3.4	9
Nomura	3	8	261	11.4	6.9	6
Mitsubishi UFJ Financial Group	4	4	242	10.6	2.1	14
Sumitomo Mitsui Finl Grp Inc	5	5	234	10.2	2.6	15
Sumitomo Mitsui Trust Holdings	6	2	184	8.0	-4.8	15
Goldman Sachs & Co	7	10	109	4.7	2.4	2
Mitsubishi UFJ Morgan Stanley	8	6	103	4.5	-2.8	2
BofA Securities Inc	9	9	90	3.9	1.3	3
BNP Paribas SA	10	12	19	0.8	-0.3	1
ORIX Corp	11	15	17	0.7	0.5	2
Godo Kaisha Yu	12	-	10	0.4	0.4	1
Norinchukin Bank	13	13	4	0.2	-0.4	2
Development Bank of Japan Inc	14	-	2	0.1	0.1	1
Industry Total			**2,296**	**100.0**		**131**

Japanese Corporate Debt (AP03)

YoY Change (¥) 14% QoQ Change (¥) 48%

Lead Manager	Rank 2020	Rank 2019	Proceeds JPY¥bil	Market Share	Mkt. Sh. Chg	# of Deals
Nomura	1	4	1,489	22.6	4.4	203
Mizuho Financial Group	2	1	1,280	19.4	-3.7	196
Mitsubishi UFJ Morgan Stanley	3	3	1,238	18.8	0.3	176
Daiwa Securities Group Inc	4	2	1,224	18.6	0.0	184
Sumitomo Mitsui Finl Grp Inc	5	5	1,089	16.5	-0.5	196
Goldman Sachs & Co	6	9	63	1.0	0.1	13
Shinkin Central Bank	7	6	60	0.9	-0.3	14
Tokai Tokyo Financial Holdings	8	8	57	0.9	-0.1	19
SBI Holdings Inc	9	7	26	0.4	-0.8	9
BofA Securities Inc	10	13	26	0.4	0.4	6
Shinsei Bank	11	-	14	0.2	0.2	2
Okasan Securities Group Inc	12	10	11	0.2	0.0	6
Aozora Bank Ltd	13	11	4	0.1	0.0	1
Citi	14	-	2	0.0	0.0	2
BNP Paribas SA	15	14	2	0.0	0.0	1
Industry Total			**6,583**	**100.0**		**285**

Japanese Corporate Debt - Macro Industry Composition



Outer Ring: Proceeds (JP¥bil)
Inner Ring: # Deals

*Indicates a Tie

Debt Capital Markets Criteria

First Half 2020 | 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:

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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, 2020.

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.

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