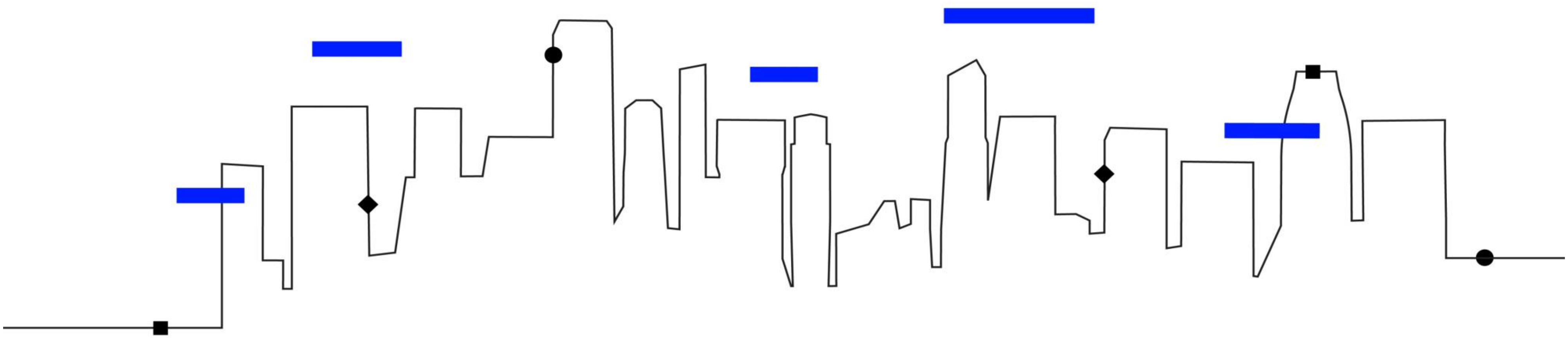
Global Debt Capital Markets Review

FIRST NINE MONTHS 2020 | MANAGING UNDERWRITERS



REFINITIV™

DATA IS JUST
THE BEGINNING

Global Debt Capital Markets Review

First Nine Months 2020 | Managing Underwriters

Global Deals Intelligence

GLOBAL DEBT CAPITAL MARKETS ACTIVITY SURPASSES US$8.0 TRILLION
Overall global debt capital markets activity totaled US$8.1 trillion during the first nine months of 2020, a 32% increase compared to the first nine months of 2019 and the strongest period for global debt capital markets activity since records began in 1980. The number of new offerings brought to market during the first nine months of 2020 surpassed 20,000 for the first time on record. Third quarter 2020 debt issuance registered a 21% decrease compared to the second quarter of 2020.

HALF OF TOP 10 ALL-TIME MONTHS FOR US INVESTMENT GRADE CORPORATE DEBT IN 2020
Investment grade corporate debt offerings targeted to the US marketplace totaled US$1.6 trillion during the first nine months of 2020, a 71% increase compared to 2019 levels and the strongest first nine months on record. Issuance during September 2020 totaled US$163.6 billion, joining April through June of this year atop the ranking of top 10 busiest months for US investment grade corporate debt.

GLOBAL HIGH YIELD UP 37% FOR ALL-TIME RECORD
With two consecutive quarters surpassing $US150 billion in issuance, global high yield debt activity during the first nine months of 2020 reached US$415.2 billion, an increase of 37% compared to 2019 levels and the strongest opening nine-month period for global high yield issuance on record. High yield offerings from issuers in the United States increased 78% compared to the first nine months of 2019 and accounted for 66% of overall 2020 activity, up from 51% a year ago.

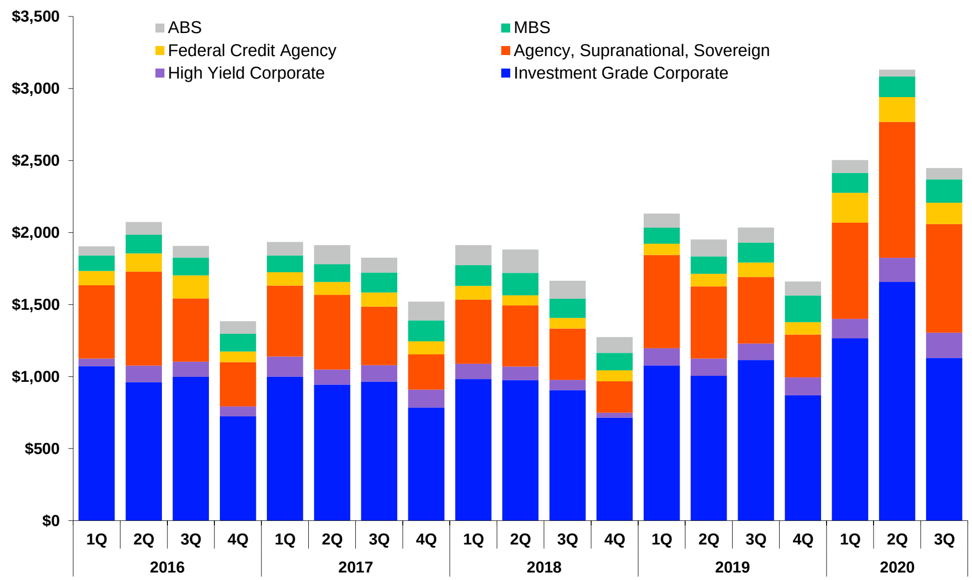
RETAIL, TECH & INDUSTRIALS OFFERINGS LEAD
DCM activity from Retail, Technology and Industrials issuers saw strong year-over-year gains during the first nine months of 2020, as 12 out of 13 industry sectors saw double-digit percentage increases compared to a year ago. Global debt issuance, excluding financials and governments & agencies, totaled US$2.5 trillion during the first nine months of 2020, a 42% increase from 2019 levels and accounted for 31% of overall issuance, the highest percentage since the first nine months of 2015.

EMERGING MARKETS CORPORATE DEBT UP 3%
Debt from emerging market corporate issuers totaled US$269.3 billion during the first nine months of 2020, up 3% compared to a year ago and an all-time high. Corporate debt issuers from India, Brazil, Mexico and the Malaysia accounted for 44% of activity.

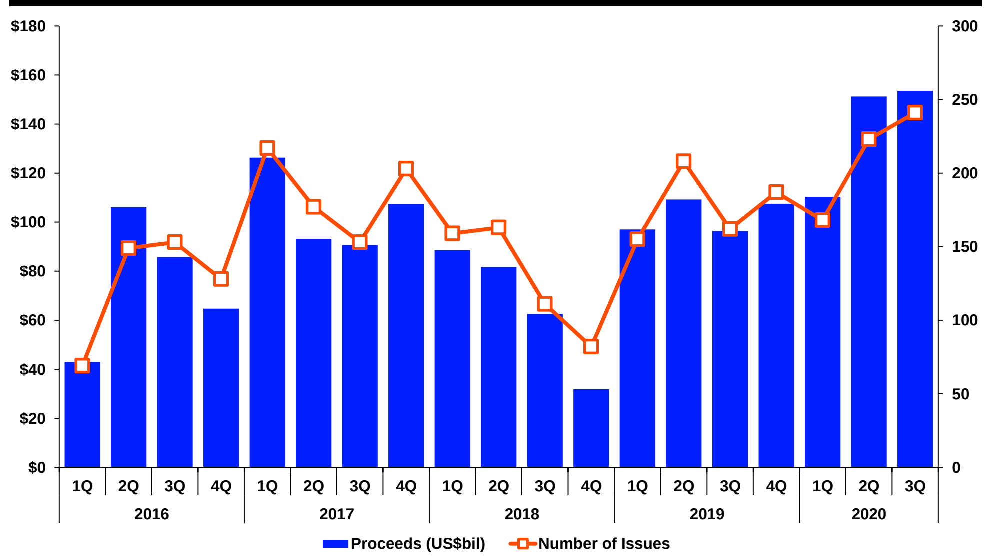
INTERNATIONAL BONDS UP 31%; RECORD QUARTER PUSHES GREEN BONDS UP 23%
International bond offerings totaled a record US$4.2 trillion during the first nine months of 2020, a 31% increase compared to a year ago. According to figures compiled by Refinitiv and The Climate Bonds Initiative, green bond issuance totaled US$146.8 billion during the first nine months of 2020, a 23% increase compared to year ago levels. Third quarter 2020 green bond issuance totaled US$70.6 billion, a 48% increase compared to the second quarter of this year and the largest quarter for green bonds on record.

ASIA LOCAL CURRENCY DEBT UP 18%; JAPANESE YEN DEBT OFFERINGS DOWN 4%
Asia local currency bond offerings totaled US$2.1 trillion during the first nine months of 2020, an 18% increase compared to a year ago and the strongest opening nine-month period for issuance on record. Japanese Yen offerings have decreased 4% compared to the first nine months of 2019, totaling JPY20.0 trillion and a two-year low.

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



Global High Yield Corporate Debt - Quarterly Issuance



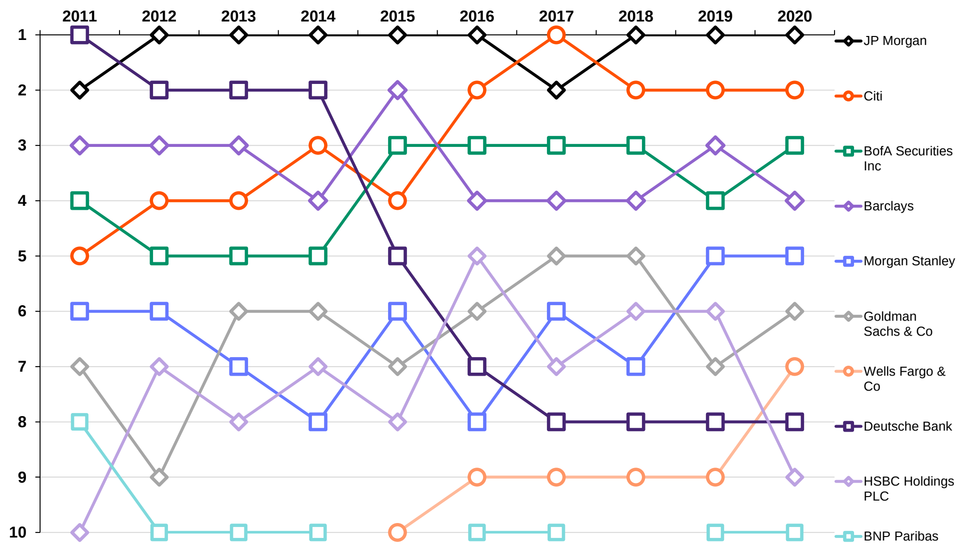
REFINITIV™
DATA IS JUST THE BEGINNING

www.refinitiv.com/dealsintelligence

Global Insights

First Nine Months 2020 | Debt Capital Markets | Managing Underwriters

Global Debt Rankings by Proceeds

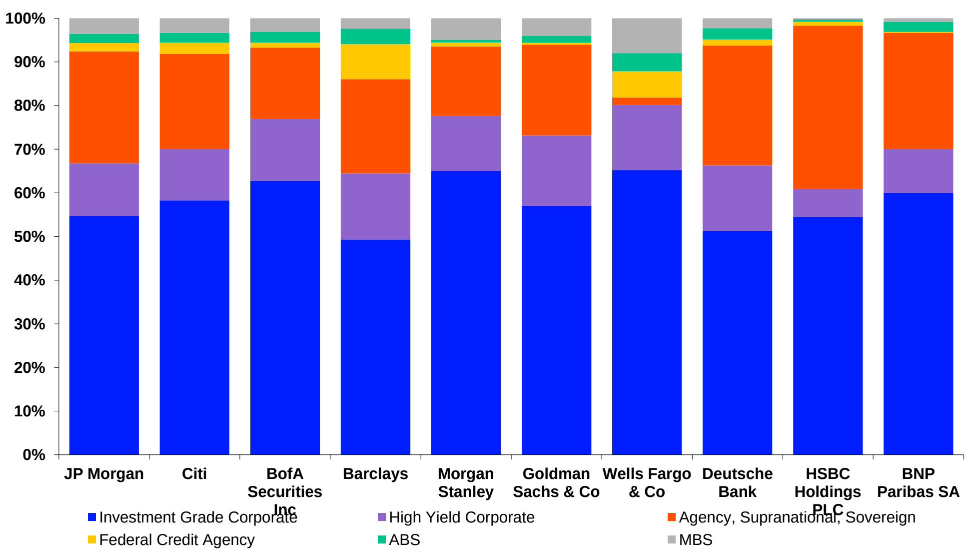


*League Table positions reflect consolidation within the banking sector. Rankings are as of the current quarter end in each calendar year.

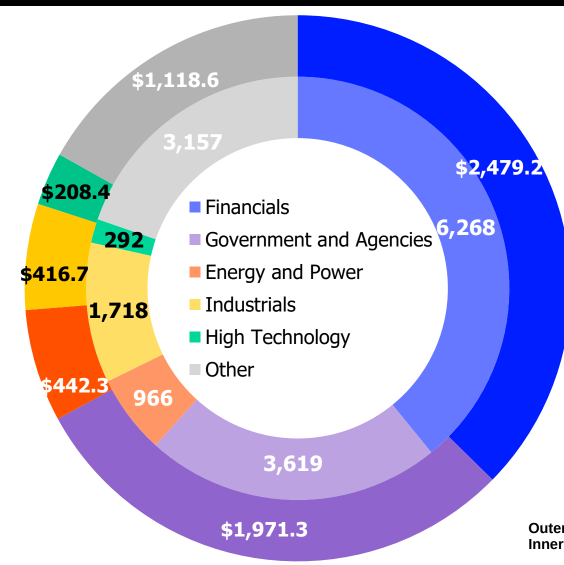
Global Scorecard

	1/1/2020 - 09/30/2020 Proceeds ($mil)	1/1/2020 - 09/30/2020 # of Deals	1/1/2019 - 09/30/2019 Proceeds ($mil)	1/1/2019 - 09/30/2019 # of Deals	YoY % Chg. ($)
All Global Debt (B1)	**8,124,125**	**20,759**	**6,156,063**	**17,654**	**32%** ▲
Global Long-term Debt (B2)	7,734,676	17,951	5,894,508	15,709	31% ▲
Global Long-term Debt ex MBS, ABS & Munis (B3	7,075,116	16,691	5,205,131	14,280	36% ▲
Global High Yield Corporate Debt (B4)	415,151	632	302,597	525	37% ▲
Global Investment Grade Corporate Debt (B7)	3,910,253	10,517	3,090,760	9,534	27% ▲
US Federal Credit Agency Debt (B8)	309,602	944	137,157	694	126% ▲
Global Agency, Sovereign & Supranational (B9)	2,335,256	4,447	1,584,533	3,370	47% ▲
Global Mortgage-backed Securities (B10)	442,225	762	369,483	722	20% ▲
Global Asset-backed Securities (B11)	216,881	493	319,894	707	-32% ▼
Global Short-term Debt (B14)	426,235	3,000	287,785	2,117	48% ▲
Global Emerging Markets Corporate Debt (B15)	269,347	915	262,018	1,036	3% ▲
All US Debt (F1)	**3,238,948**	**4,708**	**2,136,892**	**3,591**	**52%** ▲
US Long-term Debt (F2)	2,974,606	3,143	1,977,082	2,562	50% ▲
US Long-term Straight ex MBS, ABS & Munis (F3)	2,678,740	3,795	1,569,073	2,528	71% ▲
US Federal Credit Agency Debt (F7)	297,931	918	126,536	661	135% ▲
US High Yield Corporate Debt (F8)	309,733	425	192,838	271	61% ▲
US Investment Grade (F9)	1,616,885	1,255	943,020	851	71% ▲
Agency, Sovereign & Supranational Debt (F10)	389,886	1,113	252,552	672	54% ▲
US Mortgage-backed Securities (F11)	384,055	598	309,976	585	24% ▲
US Asset-backed Securities (F14)	175,699	310	257,844	478	-32% ▼
US Taxable Municipal Debt (F15)	62,086	930	22,643	510	174% ▲
US Short-term Debt - including MBS, ABS (F16)	264,343	1,565	159,810	1,029	65% ▲

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™
DATA IS JUST THE BEGINNING

Global Rankings

First Nine Months 2020 | Debt Capital Markets | Managing Underwriters

Global Debt (B1)
YoY Change ($) 32% QoQ Change ($) -22%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	539,939	6.7	1.0	2,006
Citi	2	2	445,286	5.5	0.5	1,539
BofA Securities Inc	3	4	423,797	5.2	1.0	1,535
Barclays	4	3	374,269	4.6	0.3	1,251
Morgan Stanley	5	5	312,577	3.9	0.4	1,305
Goldman Sachs & Co	6	7	302,154	3.7	0.5	1,067
Wells Fargo & Co	7	9	267,119	3.3	0.5	1,122
Deutsche Bank	8	8	244,308	3.0	0.2	1,073
HSBC Holdings PLC	9	6	237,764	2.9	-0.3	1,128
BNP Paribas SA	10	10	203,229	2.5	0.0	863
Credit Suisse	11	11	172,447	2.1	-0.3	744
RBC Capital Markets	12	14	165,213	2.0	0.1	988
Nomura	13	17	150,762	1.9	0.2	552
Bank of China Ltd	14	12	146,637	1.8	-0.6	1,954
Mizuho Financial Group	15	15	143,819	1.8	0.0	962
TD Securities Inc	16	21	141,274	1.7	0.1	657
Industrial & Comm Bank China	17	13	140,979	1.7	-0.4	1,819
Credit Agricole CIB	18	19	138,065	1.7	0.1	651
CITIC	19	22	128,770	1.6	0.1	1,708
China Construction Bank	20	16	119,509	1.5	-0.3	1,853
Societe Generale	21	20	106,079	1.3	-0.3	402
Bank of Communications Co Ltd	22	18	102,890	1.3	-0.4	1,550
Agricultural Bank of China	23	23	99,152	1.2	-0.2	1,481
CSC Financial Co Ltd	24	26	84,284	1.0	0.0	1,077
Mitsubishi UFJ Financial Group	25	24	78,893	1.0	-0.2	487
Industry Total			**8,124,125**	**100.0**		**20,759**

Global Investment Grade Corporate Debt (B7)
YoY Change ($) 27% QoQ Change ($) -33%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	252,981	6.5	1.9	927
BofA Securities Inc	2	2	223,246	5.7	1.5	783
Citi	3	3	196,192	5.0	0.9	740
Morgan Stanley	4	5	166,972	4.3	0.8	625
Goldman Sachs & Co	5	7	141,045	3.6	0.6	483
HSBC Holdings PLC	6	4	124,866	3.2	-0.3	644
Barclays	7	6	123,609	3.2	-0.3	473
Wells Fargo & Co	8	12	113,794	2.9	0.9	392
BNP Paribas SA	9	8	105,598	2.7	0.0	480
Deutsche Bank	10	9	103,304	2.6	0.0	405
Mizuho Financial Group	11	10	100,076	2.6	0.1	529
CITIC	12	13	80,752	2.1	0.1	797
Credit Suisse	13	14	73,315	1.9	0.0	331
RBC Capital Markets	14	19	70,135	1.8	0.1	345
Credit Agricole CIB	15	16	67,238	1.7	0.0	357
CSC Financial Co Ltd	16	18	61,311	1.6	-0.1	618
Societe Generale	17	15	60,209	1.5	-0.4	259
Bank of China Ltd	18	11	59,376	1.5	-0.5	486
Mitsubishi UFJ Financial Group	19	17	56,986	1.5	-0.2	324
Sumitomo Mitsui Finl Grp Inc	20	21	52,736	1.4	-0.1	320
Industrial & Comm Bank China	21	20	50,083	1.3	-0.3	362
TD Securities Inc	22	29	46,689	1.2	0.2	233
Guotai Junan Securities	23	25	41,185	1.1	0.0	414
China International Capital Co	24	24	37,759	1.0	-0.1	336
Haitong Securities Co Ltd	25	26	37,465	1.0	0.0	365
Industry Total			**3,910,253**	**100.0**		**10,517**

Global Agency, Sovereign Corporate Debt (B9)
YoY Change ($) 47% QoQ Change ($) -21%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	2	120,629	5.2	0.3	327
Citi	2	6	106,091	4.5	0.5	209
Industrial & Comm Bank China	3	4	85,579	3.7	-1.1	1,403
HSBC Holdings PLC	4	7	85,394	3.7	0.2	230
China Construction Bank	5	3	84,314	3.6	-1.3	1,407
BofA Securities Inc	6	10	82,847	3.6	0.7	212
Bank of China Ltd	7	1	81,865	3.5	-1.4	1,378
Bank of Communications Co Ltd	8	5	76,945	3.3	-1.3	1,222
Barclays	9	9	76,814	3.3	0.3	188
Deutsche Bank	10	11	74,945	3.2	0.6	250
Goldman Sachs & Co	11	12	74,349	3.2	0.7	147
Agricultural Bank of China	12	8	67,810	2.9	-0.5	1,166
BNP Paribas SA	13	14	65,791	2.8	0.4	147
RBC Capital Markets	14	17	58,812	2.5	0.5	281
Morgan Stanley	15	16	57,439	2.5	0.4	210
TD Securities Inc	16	13	50,812	2.2	-0.2	237
Credit Agricole CIB	17	18	49,302	2.1	0.1	122
Nomura	18	19	42,922	1.8	0.0	164
UniCredit	19	23	41,645	1.8	0.4	90
CITIC	20	22	39,621	1.7	0.2	780
Industrial Bank Co Ltd	21	15	35,212	1.5	-0.6	656
Societe Generale	22	21	34,482	1.5	0.0	66
National Bank of Canada Fin'l	23	24	30,690	1.3	0.0	167
BMO Capital Markets	24	26	30,370	1.3	0.2	125
NatWest Markets	25	25	29,507	1.3	0.1	67
Industry Total			**2,335,256**	**100.0**		**4,447**

Global MBS (B10)
YoY Change ($) 20% QoQ Change ($) 13%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	58,214	13.2	-0.3	104
Credit Suisse	2	2	56,468	12.8	0.4	113
Wells Fargo & Co	3	3	52,977	12.0	1.1	80
Morgan Stanley	4	6	43,780	9.9	0.7	81
Citi	5	4	39,177	8.9	-1.9	94
BofA Securities Inc	6	5	34,692	7.8	-1.6	82
Goldman Sachs & Co	7	7	33,431	7.6	2.2	102
Nomura	8	8	24,009	5.4	0.7	72
Barclays	9	9	14,007	3.2	-0.1	57
Deutsche Bank	10	10	9,155	2.1	-0.1	50
Amherst Securities	11	26	7,610	1.7	1.2	26
Cantor Fitzgerald LP	12	12	6,235	1.4	0.2	21
Sumitomo Mitsui Finl Grp Inc	13	13	5,496	1.2	0.0	20
Mizuho Financial Group	14	17	5,468	1.2	0.2	45
BNP Paribas SA	15	11	4,525	1.0	-0.3	20
BMO Capital Markets	16	34	3,926	0.9	0.7	15
Westpac Banking	17	14	3,450	0.8	-0.3	15
National Australia Bank	18	16	3,437	0.8	-0.3	25
Daiwa Securities Group Inc	19	20	2,703	0.6	0.0	2
Lloyds Bank	20	18	2,361	0.5	-0.2	10
Jefferies LLC	21	23	2,177	0.5	0.0	13
Commonwealth Bank of Australia	22	24	1,997	0.5	0.0	13
Credit Agricole CIB	23	48	1,878	0.4	0.3	3
Mitsubishi UFJ Financial Group	24	31	1,858	0.4	0.1	13
PNC Financial Services Group	25	27	1,836	0.4	-0.1	6
Industry Total			**442,225**	**100.0**		**762**

Global ABS (B11)
YoY Change ($) -32% QoQ Change ($) 64%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	2	20,059	9.3	0.9	77
Barclays	2	3	18,459	8.5	0.6	79
Citi	3	1	16,923	7.8	-2.1	69
BofA Securities Inc	4	5	14,518	6.7	0.2	64
Mizuho Financial Group	5	9	14,359	6.6	2.0	106
Goldman Sachs & Co	6	12	12,721	5.9	1.8	37
Deutsche Bank	7	7	11,896	5.5	0.0	60
Wells Fargo & Co	8	4	11,547	5.3	-1.5	56
RBC Capital Markets	9	8	11,412	5.3	0.6	50
Credit Suisse	10	6	10,508	4.9	-0.6	52
Mitsubishi UFJ Financial Group	11	13	10,195	4.7	1.0	42
BNP Paribas SA	12	10	8,873	4.1	-0.2	36
TD Securities Inc	13	15	6,972	3.2	1.3	28
BMO Capital Markets	14	23	4,132	1.9	0.8	21
Sumitomo Mitsui Finl Grp Inc	15	20	4,013	1.9	0.6	18
Morgan Stanley	16	11	3,953	1.8	-2.3	16
Societe Generale	17	14	3,892	1.8	-0.7	15
Credit Agricole CIB	18	18	3,210	1.5	0.2	13
Truist Financial Corp	19	36	2,681	1.2	0.9	17
Lloyds Bank	20	19	2,629	1.2	-0.1	12
Natixis	21	16	2,228	1.0	-0.8	7
Santander Corp & Invest Bkg	22	26	2,071	1.0	0.4	8
Guggenheim Securities LLC	23	21	1,940	0.9	-0.3	12
Daiwa Securities Group Inc	24	27	1,628	0.8	0.3	4
Jefferies LLC	25	17	1,627	0.8	-0.8	6
Industry Total			**216,881**	**100.0**		**493**

Global Debt and Loans Islamic Finance
YoY Change ($) -2% QoQ Change ($) -16%

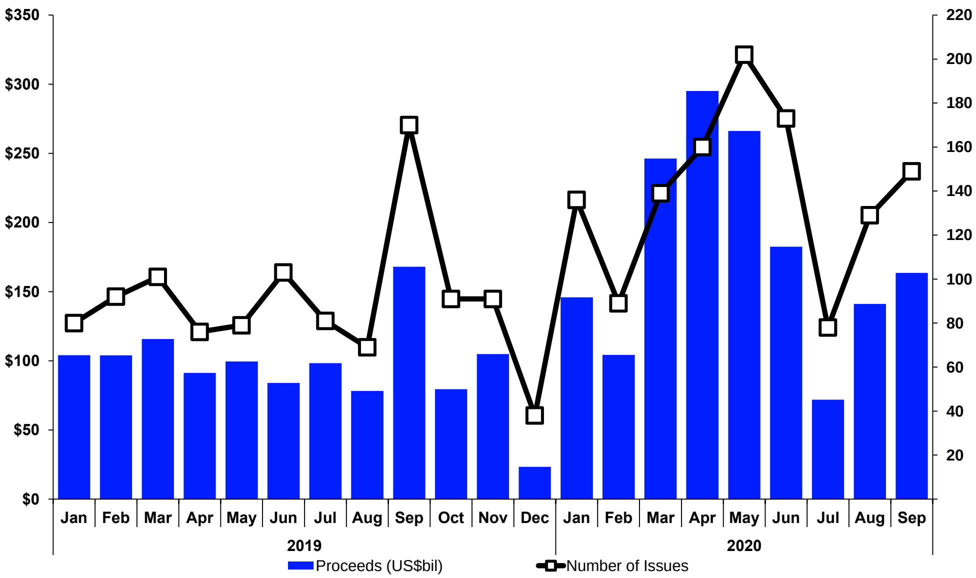
Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Standard Chartered PLC	1	1	3,967	11.8	2.6	26
HSBC Holdings PLC	2	4	3,309	9.8	3.9	26
Malayan Banking Bhd	3	2	3,004	8.9	0.6	29
CIMB Group Holdings Bhd	4	3	2,540	7.5	-0.4	24
RHB	5	8	1,971	5.9	1.5	22
First Abu Dhabi Bank PJSC	6	9	1,659	4.9	0.5	11
Dubai Islamic Bank PJSC	7	5	1,641	4.9	-0.6	11
Citi	8	7	1,217	3.6	-1.1	9
AMMB Holdings Bhd	9	12	1,193	3.5	0.2	15
JP Morgan	10	13	946	2.8	0.0	4
K&N Kenanga Holdings Berhad	11	22	924	2.7	1.5	13
Emirates NBD PJSC	12	6	922	2.7	-2.5	10
Islamic Development Bank	13	-	818	2.4	-	7
Natixis	14	35*	786	2.3	1.7	3
Arab Banking Corporation	15	23	663	2.0	0.8	6
Gulf International Bank	16	15	559	1.7	-0.3	4
BNP Paribas SA	17	20	500	1.5	0.0	1
Intl Islamic Trade Finance	18	10	411	1.2	-3.1	2
Credit Agricole CIB	19	24	396	1.2	0.3	3
Kuwait Finance House	20	11	377	1.1	-3.0	5
MashreqBank PSC	21	28	370	1.1	0.5	5
Mitsubishi UFJ Financial Group	22	56	354	1.1	1.0	2
Affin Holdings Bhd	23	27	343	1.0	0.4	8
Hong Kong Financial Group Bhd	24	62	342	1.0	0.9	4
Sumitomo Mitsui Finl Grp Inc	25	-	335	1.0	-	2
Industry Total			**33,721**	**100.0**		**108**

*Indicates a Tie

United States Insights

First Nine Months 2020 | Debt Capital Markets | Managing Underwriters

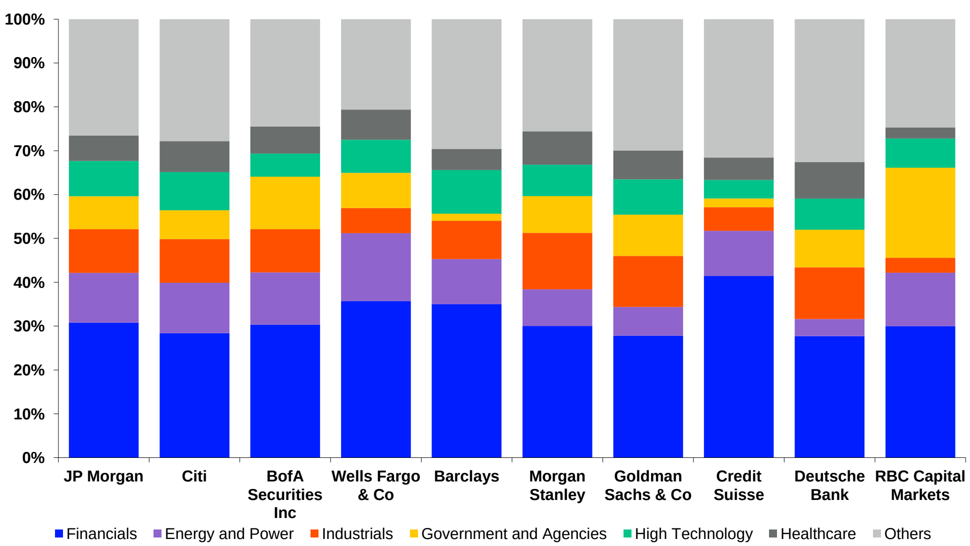
United States Marketed Monthly High Yield Volume



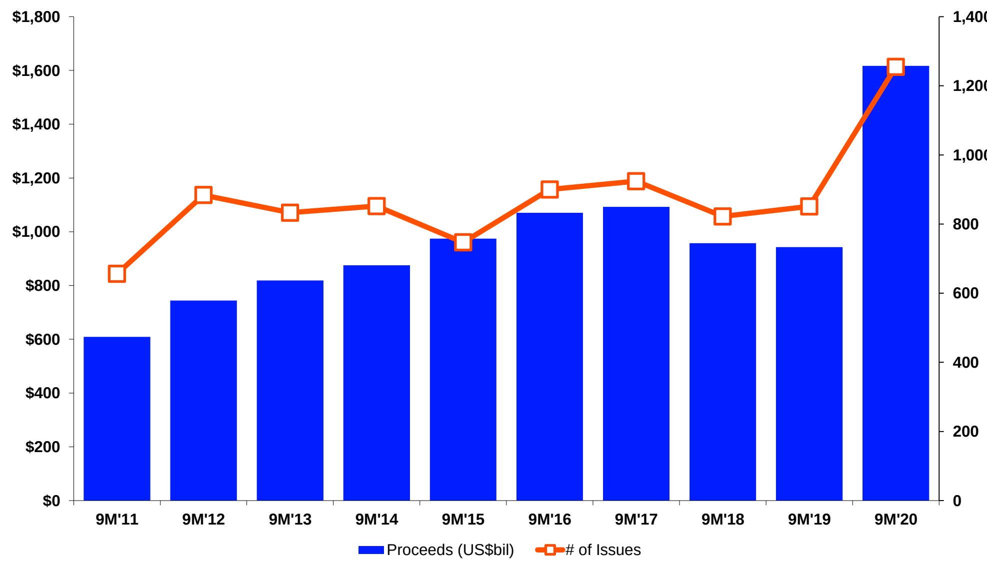
Top United States Investment Grade Corporate Deals

Issue Date	Issuer	Domicile Nation	Deal Size (US$mil)	Issue Type	Macro Sector
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	United States	18,895	Investment Grade Corporate	Telecommunications
5/21/20	AT&T Inc	United States	12,466	Investment Grade Corporate	Telecommunications
7/27/20	AT&T Inc	United States	10,989	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
8/3/20	Alphabet Inc	United States	9,941	Investment Grade Corporate	High Technology
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

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



United States Investment Grade - Proceeds



REFINITIV™
DATA IS JUST THE BEGINNING

United States Rankings

First Nine Months 2020 | Debt Capital Markets | Managing Underwriters

U.S. Debt (F1) — YoY Change ($) 52% | QoQ Change ($) -31%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	375,980	11.6	0.4	1,290
Citi	2	2	309,308	9.6	-0.6	1,030
BofA Securities Inc	3	3	304,605	9.4	0.8	1,141
Wells Fargo & Co	4	4	236,277	7.3	0.3	892
Barclays	5	5	226,035	7.0	0.5	709
Morgan Stanley	6	6	218,926	6.8	0.3	777
Goldman Sachs & Co	7	7	218,134	6.7	0.6	789
Credit Suisse	8	8	126,656	3.9	-1.0	426
Deutsche Bank	9	9	109,181	3.4	0.1	465
RBC Capital Markets	10	10	94,485	2.9	-0.2	549
HSBC Holdings PLC	11	11	88,314	2.7	-0.3	284
TD Securities Inc	12	14	80,451	2.5	0.2	304
Nomura	13	16	74,645	2.3	0.6	167
Mizuho Financial Group	14	15	73,029	2.3	0.1	374
BNP Paribas SA	15	12	67,823	2.1	-0.4	296
Mitsubishi UFJ Financial Group	16	13	57,019	1.8	-0.6	315
US Bancorp	17	22	37,837	1.2	0.3	232
Sumitomo Mitsui Finl Grp Inc	18	17	34,991	1.1	-0.1	180
BMO Capital Markets	19	19	32,688	1.0	0.0	170
Scotiabank	20	20	30,293	0.9	-0.1	185
Industry Total			**3,238,948**	**100.0**		**4,708**

U.S. High Yield Corporate Debt (F8) — YoY Change ($) 61% | QoQ Change ($) -8%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	35,210	11.4	1.2	270
BofA Securities Inc	2	3	31,057	10.0	2.0	270
Citi	3	2	24,793	8.0	-1.1	201
Goldman Sachs & Co	4	4	22,686	7.3	0.2	194
Barclays	5	6	21,938	7.1	1.1	178
Morgan Stanley	6	5	19,775	6.4	-0.6	127
Wells Fargo & Co	7	9	18,934	6.1	0.9	169
Deutsche Bank	8	7	15,195	4.9	-0.7	138
Credit Suisse	9	8	12,126	3.9	-1.3	111
RBC Capital Markets	10	10	11,844	3.8	-1.0	112
Mitsubishi UFJ Financial Group	11	17	7,185	2.3	0.4	79
Truist Financial Corp	12	13	7,134	2.3	0.1	78
Mizuho Financial Group	13	15	5,791	1.9	-0.1	63
BNP Paribas SA	14	12	5,747	1.9	-0.6	71
BMO Capital Markets	15	14	5,250	1.7	-0.4	63
HSBC Holdings PLC	16	19	4,956	1.6	0.3	44
TD Securities Inc	17	22	4,731	1.5	0.5	47
Jefferies LLC	18	11	4,236	1.4	-1.1	28
Credit Agricole CIB	19	16	4,169	1.4	-0.5	47
US Bancorp	20	27	3,922	1.3	0.7	38
Industry Total			**309,733**	**100.0**		**425**

U.S. Investment Grade Debt (F9) — YoY Change ($) 71% | QoQ Change ($) -49%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	205,536	12.7	2.0	662
BofA Securities Inc	2	2	187,790	11.6	1.1	612
Citi	3	3	154,805	9.6	0.3	500
Morgan Stanley	4	4	124,108	7.7	0.5	392
Goldman Sachs & Co	5	5	118,903	7.4	0.4	365
Wells Fargo & Co	6	6	110,420	6.8	0.7	374
Barclays	7	7	73,480	4.5	-1.3	251
Mizuho Financial Group	8	10	52,663	3.3	-0.2	221
HSBC Holdings PLC	9	9	51,884	3.2	-0.6	160
Deutsche Bank	10	11	51,060	3.2	0.0	170
RBC Capital Markets	11	12	46,498	2.9	-0.1	199
BNP Paribas SA	12	14	42,576	2.6	0.1	161
Mitsubishi UFJ Financial Group	13	8	41,589	2.6	-1.3	201
Credit Suisse	14	13	39,980	2.5	-0.4	135
US Bancorp	15	16	33,562	2.1	0.2	191
TD Securities Inc	16	17	31,111	1.9	0.2	138
Sumitomo Mitsui Finl Grp Inc	17	15	27,015	1.7	-0.2	122
Scotiabank	18	19	19,750	1.2	0.0	111
Truist Financial Corp	19	20	18,045	1.1	0.0	116
Societe Generale	20	18	17,816	1.1	-0.2	66
Industry Total			**1,616,885**	**100.0**		**1,255**

U.S. MBS (F11) — YoY Change ($) 24% | QoQ Change ($) 7%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	56,504	14.7	-1.3	96
Credit Suisse	2	2	56,232	14.6	0.2	111
Wells Fargo & Co	3	3	52,599	13.7	0.7	78
Morgan Stanley	4	5	41,467	10.8	0.9	77
Citi	5	4	36,399	9.5	-2.5	80
BofA Securities Inc	6	6	30,283	7.9	-1.5	68
Goldman Sachs & Co	7	7	30,121	7.8	1.5	98
Nomura	8	8	21,967	5.7	0.6	71
Barclays	9	9	11,322	3.0	-0.5	47
Deutsche Bank	10	10	8,338	2.2	-0.1	44
Industry Total			**384,055**	**100.0**		**598**

U.S. ABS (F14) — YoY Change ($) -32% | QoQ Change ($) 78%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	2	18,774	10.7	0.5	72
Barclays	2	3	16,424	9.4	0.0	70
Citi	3	1	14,644	8.3	-3.0	61
BofA Securities Inc	4	5	12,088	6.9	-0.3	53
Wells Fargo & Co	5	4	11,547	6.6	-1.8	56
RBC Capital Markets	6	7	11,143	6.3	0.8	47
Goldman Sachs & Co	7	9	10,825	6.2	1.8	33
Deutsche Bank	8	8	9,768	5.6	0.6	54
Credit Suisse	9	6	8,742	5.0	-1.2	44
Mizuho Financial Group	10	13	7,527	4.3	1.3	29
Industry Total			**175,699**	**100.0**		**310**

U.S. ABS ex Self & CDOs (F14b) — YoY Change ($) -16% | QoQ Change ($) 82%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	3	13,450	8.9	0.1	65
Barclays	2	2	12,707	8.4	-1.2	61
Wells Fargo & Co	3	5	11,098	7.3	-0.2	55
BofA Securities Inc	4	4	10,880	7.2	-0.5	50
RBC Capital Markets	5	6	10,704	7.1	0.2	46
Citi	6	1	10,123	6.7	-3.2	51
Goldman Sachs & Co	7	10	10,014	6.6	2.5	31
Deutsche Bank	8	8	9,642	6.4	0.8	53
Credit Suisse	9	7	7,471	4.9	-1.2	41
Mizuho Financial Group	10	11	7,087	4.7	0.8	28
Industry Total			**151,911**	**100.0**		**258**

U.S. Securitizations (ex CMBS, Agency, CMO, Self-Funded & CDOs (F20a) — YoY Change ($) -13% | QoQ Change ($) 67%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
BofA Securities Inc	1	4	18,638	8.7	0.0	75
Credit Suisse	2	1	18,123	8.4	-2.2	98
JP Morgan	3	3	17,658	8.2	-1.2	84
Barclays	4	5	17,071	8.0	-0.5	87
Goldman Sachs & Co	5	9	15,320	7.1	2.9	61
Wells Fargo & Co	6	6	15,155	7.1	-0.1	70
Citi	7	2	12,865	6.0	-4.4	65
Deutsche Bank	8	7	12,651	5.9	0.8	73
RBC Capital Markets	9	8	10,990	5.1	0.0	49
Nomura	10	10	8,017	3.7	0.1	46
Industry Total			**214,799**	**100.0**		**404**

*Indicates a Tie

US Residential MBS (F13b) — YoY Change ($) -3% | QoQ Change ($) 46%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Credit Suisse	1	1	10,996	15.5	-5.5	59
BofA Securities Inc	2	5	7,757	10.9	0.5	25
Nomura	3	3	7,749	10.9	-0.9	46
Goldman Sachs & Co	4	7	7,530	10.6	5.8	39
JP Morgan	5	2	6,522	9.2	-7.3	25
Wells Fargo & Co	6	6	6,130	8.6	0.4	20
Morgan Stanley	7	8	5,631	7.9	3.8	26
Barclays	8	9	4,364	6.1	2.2	26
Deutsche Bank	9	10	3,185	4.5	1.7	23
Citi	10	4	2,846	4.0	-6.6	16
Industry Total			**71,123**	**100.0**		**169**

All Federal Credit Agency Debt (H1) — YoY Change ($) 74% | QoQ Change ($) -12%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Barclays	1	1	110,322	15.4	3.1	194
Wells Fargo & Co	2	2	72,796	10.2	0.0	581
Citi	3	6	72,402	10.1	3.7	220
Nomura	4	3	70,054	9.8	-0.1	175
JP Morgan	5	4	52,026	7.3	-1.3	281
TD Securities Inc	6	5	42,799	6.0	-2.5	157
First Horizon National Corp	7	9	27,774	3.9	0.5	500
BofA Securities Inc	8	11	27,739	3.9	1.3	58
Deutsche Bank	9	7	26,400	3.7	-2.0	83
Jefferies LLC	10	8	19,687	2.8	-0.6	150
Industry Total			**715,807**	**100.0**		**3,841**

REFINITIV™
DATA IS JUST THE BEGINNING

International Debt & ESG Bonds Rankings

First Nine Months 2020 | Debt Capital Markets | Managing Underwriters

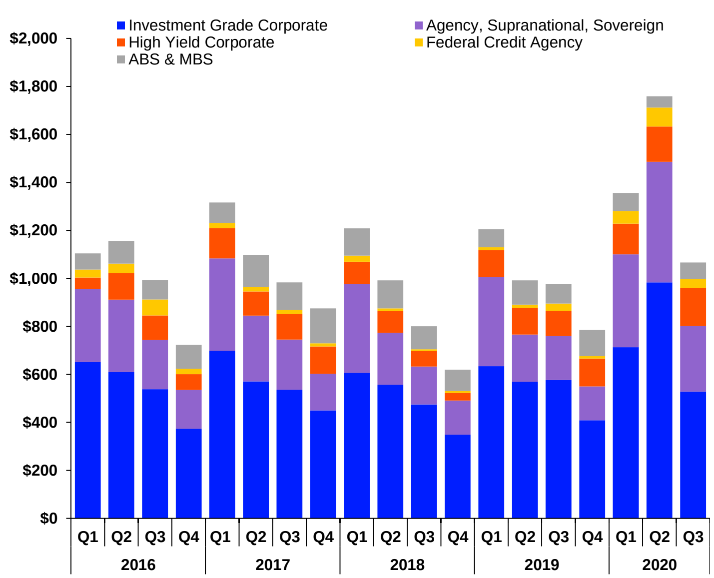
All International Bonds (J01) — YoY Change ($) 31% — QoQ Change ($) -39%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
JP Morgan	1	1	368,896	8.7	0.7	1,446
Citi	2	2	316,249	7.5	0.5	1,131
BofA Securities Inc	3	4	299,912	7.1	1.3	1,165
Barclays	4	3	275,197	6.5	0.3	973
Goldman Sachs & Co	5	6	227,818	5.4	0.5	804
HSBC Holdings PLC	6	5	210,479	5.0	-0.4	911
Deutsche Bank	7	7	201,166	4.8	0.3	794
Morgan Stanley	8	9	189,037	4.5	0.5	667
BNP Paribas SA	9	8	188,662	4.5	0.2	757
Credit Agricole CIB	10	11	127,834	3.0	0.0	541
Wells Fargo & Co	11	13	119,098	2.8	0.4	509
RBC Capital Markets	12	14	100,166	2.4	0.1	418
Societe Generale	13	12	98,283	2.3	-0.5	366
Credit Suisse	14	10	97,499	2.3	-0.8	529
TD Securities Inc	15	16	82,910	2.0	0.2	358
Mizuho Financial Group	16	17	76,264	1.8	0.1	410
UniCredit	17	15	76,130	1.8	-0.1	290
Nomura	18	20	70,818	1.7	0.3	209
NatWest Markets	19	19	60,577	1.4	-0.1	242
Mitsubishi UFJ Financial Group	20	18	56,944	1.4	-0.3	337
Commerzbank AG	21	24	50,750	1.2	0.0	248
Santander Corp & Invest Bkg	22	22	50,707	1.2	-0.1	217
Natixis	23	23	50,289	1.2	-0.1	216
Standard Chartered PLC	24	25	47,265	1.1	-0.1	263
UBS	25	21	37,906	0.9	-0.5	262
Industry Total			**4,223,408**	**100.0**		**5,006**

All Bonds In Euros (N01) — YoY Change ($) 27% — QoQ Change ($) -53%

Bookrunner	Rank 2020	Rank 2019	Proceeds €mil	Market Share	Mkt. Sh Chg	# of Deals
BNP Paribas SA	1	1	104,784	8.1	0.9	409
JP Morgan	2	4	91,498	7.0	1.0	343
Deutsche Bank	3	3	82,026	6.3	0.2	308
Credit Agricole CIB	4	6	81,399	6.3	0.6	296
Barclays	5	7	78,904	6.1	0.4	298
HSBC Holdings PLC	6	5	78,603	6.0	0.2	327
UniCredit	7	8	65,688	5.1	0.2	272
Societe Generale	8	2	65,262	5.0	-1.1	248
Citi	9	9	60,900	4.7	0.3	230
BofA Securities Inc	10	11	59,933	4.6	0.7	229
Goldman Sachs & Co	11	10	46,866	3.6	-0.7	172
Natixis	12	12	40,079	3.1	0.1	175
Commerzbank AG	13	13	38,502	3.0	0.1	210
Morgan Stanley	14	14	30,988	2.4	-0.2	122
NatWest Markets	15	15	29,378	2.3	-0.1	120
Santander Corp & Invest Bkg	16	16	28,447	2.2	-0.2	126
ING	17	17	24,720	1.9	-0.3	133
IMI - Intesa Sanpaolo	18	22	20,344	1.6	0.4	75
Nomura	19	26	18,364	1.4	0.6	44
Credit Suisse	20	20	16,441	1.3	-0.2	92
BBVA	21	19	16,347	1.3	-0.3	78
DZ Bank	22	23	16,167	1.2	0.0	102
Mizuho Financial Group	23	32	12,333	1.0	0.4	58
Landesbank Baden-Wurttemberg	24	18	12,052	0.9	-0.9	79
Danske Bank	25	34	11,523	0.9	0.3	59
Industry Total			**1,300,617**	**100.0**		**1,554**

International Bonds - Issue Type Composition (US$bil)



All Global ESG Bonds (GESG1) — YoY Change ($) 112% — QoQ Change ($) 13%

Bookrunner	Rank 2020	Rank 2019	Proceeds €mil	Market Share	Mkt. Sh Chg	# of Deals
HSBC Holdings PLC	1	1	22,491	6.8	0.4	105
JP Morgan	2	5	21,825	6.6	2.3	92
Citi	3	6	18,420	5.6	1.4	71
Credit Agricole CIB	4	3	18,111	5.5	-0.3	78
BofA Securities Inc	5	4	17,798	5.4	0.3	77
Barclays	6	9	17,114	5.2	2.3	58
BNP Paribas SA	7	2	16,573	5.0	-0.9	75
Societe Generale	8	7	14,355	4.4	0.6	50
Morgan Stanley	9	10	13,930	4.2	1.6	72
Deutsche Bank	10	15	11,440	3.5	1.3	53
TD Securities Inc	11	23	9,124	2.8	1.4	28
Goldman Sachs & Co	12	17	9,117	2.8	0.8	38
Natixis	13	19	9,001	2.7	1.0	27
Nomura	14	16	7,579	2.3	0.2	35
NatWest Markets	15	20	7,576	2.3	0.7	29
ING	16	8	7,383	2.2	-1.5	47
Mizuho Financial Group	17	11	6,666	2.0	-0.4	57
Commerzbank AG	18	28	6,215	1.9	0.9	20
UniCredit	19	14	6,089	1.8	-0.5	31
RBC Capital Markets	20	18	5,756	1.7	0.0	23
BMO Capital Markets	21	34	5,555	1.7	1.1	16
SEB	22	13	5,307	1.6	-0.7	41
Santander Corp & Invest Bkg	23	25	4,557	1.4	0.1	28
Danske Bank	24	12	3,853	1.2	-1.1	32
Credit Suisse	25	41	3,395	1.0	0.5	26
Industry Total			**330,261**	**100.0**		**555**

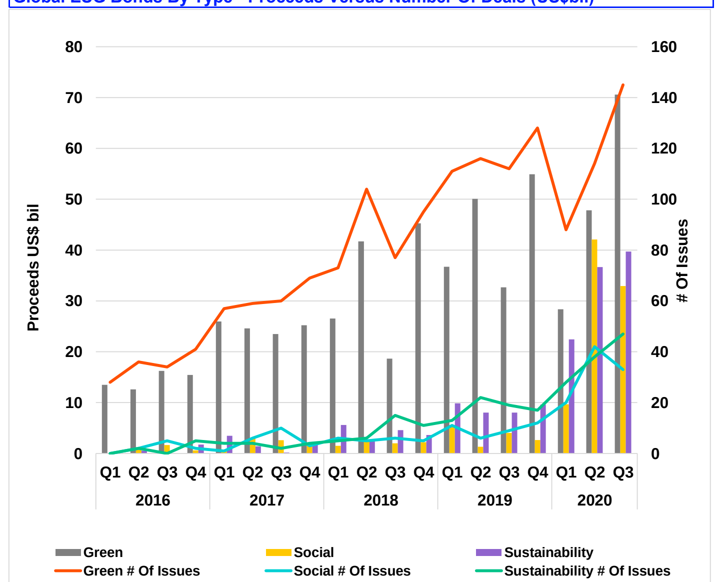
*Indicates a Tie

All Global Green Bonds (GR01)** — YoY Change ($) 23% — QoQ Change ($) 48%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
JP Morgan	1	5	10,556	7.2	2.6	58
Credit Agricole CIB	2	1	7,648	5.2	-0.8	36
Citi	3	6	6,803	4.6	0.0	37
BNP Paribas SA	4	3	6,759	4.6	-1.3	40
BofA Securities Inc	5	4	6,736	4.6	-0.3	46
Barclays	6	8	6,668	4.5	1.4	31
Deutsche Bank	7	13	6,207	4.2	1.6	33
HSBC Holdings PLC	8	2	5,681	3.9	-2.1	46
ING	9	11	5,436	3.7	0.8	34
Societe Generale	10	7	5,417	3.7	0.6	22
Morgan Stanley	11	14	4,787	3.3	0.8	43
UniCredit	12	12	4,408	3.0	0.3	20
Commerzbank AG	13	24	4,287	2.9	1.6	15
NatWest Markets	14	16	4,020	2.7	0.7	18
SEB	15	10	3,316	2.3	-0.7	34
Goldman Sachs & Co	16	15	3,241	2.2	-0.2	23
Danske Bank	17	9	2,872	2.0	-1.0	29
Credit Suisse	18	39	2,683	1.8	1.2	21
BBVA	19	19	2,647	1.8	0.1	20
Santander Corp & Invest Bkg	20	25	2,612	1.8	0.5	17
Mizuho Financial Group	21	18	2,601	1.8	0.1	25
Nomura	22	27	2,199	1.5	0.3	21
Swedbank	23	29	2,168	1.5	0.3	15
Nordea	24	17	1,811	1.2	-0.7	17
ABN AMRO Bank	25	31	1,776	1.2	0.3	15
Industry Total			**146,771**	**100.0**		**347**

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

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



REFINITIV™

DATA IS JUST THE BEGINNING

High Yield Corporate Debt Rankings

First Nine Months 2020 | Debt Capital Markets | Managing Underwriters

Global High Yield Debt (B4) YoY Change ($) 37% QoQ Change ($) 2%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
JP Morgan	1	1	41,013	9.9	1.2	320
BofA Securities Inc	2	4	35,466	8.5	2.5	304
Citi	3	2	29,097	7.0	-0.2	238
Goldman Sachs & Co	4	3	28,042	6.8	0.1	239
Barclays	5	8	27,290	6.6	1.5	232
Morgan Stanley	6	6	22,684	5.5	-0.3	167
Deutsche Bank	7	5	21,245	5.1	-0.7	205
Wells Fargo & Co	8	9	19,345	4.7	1.2	171
Credit Suisse	9	7	18,824	4.5	-1.0	183
RBC Capital Markets	10	10	13,242	3.2	0.0	116
BNP Paribas SA	11	11	11,858	2.9	-0.1	127
HSBC Holdings PLC	12	12	9,686	2.3	-0.4	112
Credit Agricole CIB	13	13	7,524	1.8	-0.4	66
Mitsubishi UFJ Financial Group	14	20	7,429	1.8	0.5	83
Truist Financial Corp	15	18	7,179	1.7	0.3	79
Mizuho Financial Group	16	19	6,994	1.7	0.3	71
UBS	17	14	6,608	1.6	-0.5	84
BMO Capital Markets	18	16	5,454	1.3	-0.2	65
Societe Generale	19	22	4,832	1.2	0.1	43
TD Securities Inc	20	29	4,731	1.1	0.5	47
Jefferies LLC	21	15	4,290	1.0	-0.7	30
Scotiabank	22	23	4,144	1.0	-0.1	54
PNC Financial Services Group	23	47	4,024	1.0	0.7	42
US Bancorp	24	42	3,922	0.9	0.5	38
Sumitomo Mitsui Finl Grp Inc	25	30	3,516	0.9	0.3	38
Industry Total			**415,151**	**100.0**		**632**

Global High Yield Debt USD Denominated (B5) YoY Change ($) 42% QoQ Change ($) -4%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
JP Morgan	1	1	36,044	10.3	1.5	286
BofA Securities Inc	2	3	33,009	9.4	2.7	288
Citi	3	2	25,489	7.3	0.0	211
Goldman Sachs & Co	4	5	24,084	6.9	0.6	211
Barclays	5	8	23,188	6.6	1.6	206
Morgan Stanley	6	4	21,113	6.0	-0.4	149
Wells Fargo & Co	7	9	18,989	5.4	1.3	170
Deutsche Bank	8	7	16,673	4.8	-0.4	178
Credit Suisse	9	6	15,669	4.5	-1.5	160
RBC Capital Markets	10	10	11,844	3.4	-0.4	112
Mitsubishi UFJ Financial Group	11	20	7,315	2.1	0.6	80
Truist Financial Corp	12	16	7,134	2.0	0.3	78
BNP Paribas SA	13	12	6,858	2.0	-0.2	91
HSBC Holdings PLC	14	11	6,781	1.9	-0.4	83
Mizuho Financial Group	15	18	6,044	1.7	0.1	65
UBS	16	13	5,646	1.6	-0.4	78
BMO Capital Markets	17	17	5,380	1.5	-0.1	64
TD Securities Inc	18	27	4,731	1.4	0.6	47
Jefferies LLC	19	14	4,236	1.2	-0.8	28
Credit Agricole CIB	20	19	4,169	1.2	-0.3	47
PNC Financial Services Group	21	41	3,959	1.1	0.7	41
Scotiabank	22	22	3,931	1.1	-0.2	51
US Bancorp	23	37	3,922	1.1	0.6	38
Sumitomo Mitsui Finl Grp Inc	24	26	3,237	0.9	0.1	36
Fifth Third Bancorp	25	28	2,714	0.8	0.0	35
Industry Total			**350,290**	**100.0**		**539**

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
6/30/20	Fiat Chrysler Automobiles NV	United Kingdom	3,930.9	3.375	Industrials
9/10/20	VMED O2 UK Financing I PLC	United Kingdom	3,240.4	4.250	Financials
1/8/20	Altice Financing SA	Luxembourg	3,087.5	3.000	Media and Entertainment
8/12/20	Occidental Petroleum Corp	United States	3,000.0	6.625	Energy and Power
5/29/20	WESCO Distribution Inc	United States	2,815.0	7.125	High Technology
8/3/20	CSC Holdings LLC	United States	2,755.3	4.625	Media and Entertainment
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

Global High Yield Debt Non-USD Denominated (B6) YoY Change ($) 16% QoQ Change ($) 36%

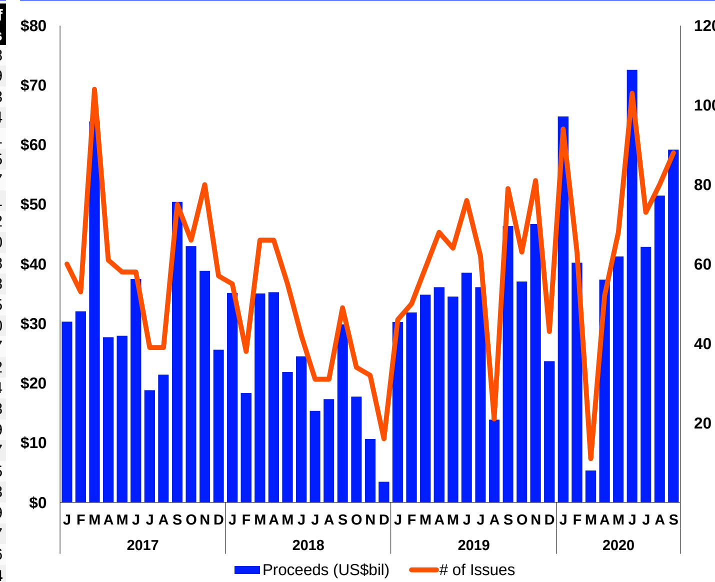
Bookrunner	Rank 2020	Rank 2019	Proceeds €mil	Market Share	Mkt. Sh Chg	# of Deals
JP Morgan	1	3	4,400	7.7	-0.4	44
BNP Paribas SA	2	5	4,386	7.6	1.2	43
Deutsche Bank	3	1	4,063	7.1	-1.5	37
Barclays	4	6	3,658	6.4	0.7	34
Goldman Sachs & Co	5	2	3,498	6.1	-2.3	38
Citi	6	4	3,227	5.6	-1.0	35
Credit Agricole CIB	7	7	2,946	5.1	-0.3	25
Credit Suisse	8	10	2,810	4.9	1.7	27
UniCredit	9	14	2,751	4.8	2.1	25
HSBC Holdings PLC	10	8	2,592	4.5	-0.1	35
BofA Securities Inc	11	12	2,212	3.8	0.9	23
Societe Generale	12	9	1,903	3.3	-0.2	21
ING	13	11	1,618	2.8	-0.1	17
Morgan Stanley	14	13	1,401	2.4	-0.5	22
RBC Capital Markets	15	28	1,248	2.2	1.4	9
NatWest Markets	16	16	1,228	2.1	-0.1	16
Commerzbank AG	17	19	1,135	2.0	0.5	14
IMI - Intesa Sanpaolo	18	21	882	1.5	0.3	11
UBS	19	15	857	1.5	-1.0	8
Mizuho Financial Group	20	33	828	1.4	0.9	8
Natixis	21	17	743	1.3	-0.7	6
Santander Corp & Invest Bkg	22	20	715	1.2	-0.2	10
KKR & Co Inc	23	34	622	1.1	0.6	3
Lloyds Bank	24	29	617	1.1	0.4	7
Nordea	25	22	583	1.0	-0.2	11
Industry Total			**57,548**	**100.0**		**108**

*Indicates a Tie

Global High Yield Debt EURO Denominated (B06b) YoY Change ($) 9% QoQ Change ($) 19%

Bookrunner	Rank 2020	Rank 2019	Proceeds €mil	Market Share	Mkt. Sh Chg	# of Deals
BNP Paribas SA	1	5	4,048	8.2	1.5	38
JP Morgan	2	2	3,820	7.8	-0.7	39
Deutsche Bank	3	1	3,574	7.3	-2.0	33
Goldman Sachs & Co	4	3	3,043	6.2	-2.1	34
Citi	5	4	2,946	6.0	-1.2	31
UniCredit	6	13	2,751	5.6	2.6	25
Barclays	7	8	2,731	5.6	1.4	27
Credit Agricole CIB	8	6	2,694	5.5	-0.5	21
Credit Suisse	9	10	2,519	5.1	2.0	22
BofA Securities Inc	10	14	2,059	4.2	1.2	20
HSBC Holdings PLC	11	7	1,796	3.7	-0.7	28
Societe Generale	12	9	1,731	3.5	-0.3	18
ING	13	12	1,498	3.0	0.0	15
Morgan Stanley	14	11	1,253	2.6	-0.5	20
RBC Capital Markets	15	34	1,082	2.2	1.7	7
Commerzbank AG	16	17	1,002	2.0	0.3	12
NatWest Markets	17	18	906	1.8	0.2	14
UBS	18	15	857	1.7	-1.1	8
IMI - Intesa Sanpaolo	19	20	763	1.6	0.3	9
Mizuho Financial Group	20	31	725	1.5	1.0	7
Natixis	21	16	703	1.4	-0.8	5
KKR & Co Inc	22	32	622	1.3	0.8	3
Santander Corp & Invest Bkg	23	19	566	1.2	-0.3	9
Mediobanca	24	28	502	1.0	0.4	7
Nordea	25	25	458	0.9	-0.1	6
Industry Total			**49,207**	**100.0**		**84**

Global High Yield Corporate Debt Issuance



REFINITIV™
DATA IS JUST THE BEGINNING

Emerging Markets Rankings

First Nine Months 2020 | Debt Capital Markets | Managing Underwriters

All International Emerging Market Bonds (L1)

YoY Change ($) 8% QoQ Change ($) -18%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Citi	1	1	52,426	8.9	0.5	217
HSBC Holdings PLC	2	2	45,282	7.7	-0.1	297
JP Morgan	3	3	44,411	7.5	0.0	213
Standard Chartered PLC	4	4	33,175	5.6	0.3	201
Goldman Sachs & Co	5	6	29,752	5.1	1.4	112
Deutsche Bank	6	8	26,659	4.5	1.3	111
BNP Paribas SA	7	5	25,874	4.4	0.5	137
BofA Securities Inc	8	7	24,649	4.2	0.9	128
Morgan Stanley	9	9	15,687	2.7	-0.3	90
Credit Agricole CIB	10	10	15,488	2.6	-0.3	110
Barclays	11	13	15,099	2.6	0.4	98
Credit Suisse	12	11	14,184	2.4	-0.1	112
UBS	13	12	13,674	2.3	0.0	132
Bank of China Ltd	14	14	12,906	2.2	0.0	171
Societe Generale	15	18	11,617	2.0	0.6	58
Mizuho Financial Group	16	15	9,849	1.7	-0.3	92
Industrial & Comm Bank China	17	20	8,535	1.5	0.2	105
CITIC	18	17	7,931	1.4	0.0	134
Mitsubishi UFJ Financial Group	19	21	7,927	1.4	0.1	56
DBS Group Holdings	20	19	7,920	1.4	0.1	93
Industry Total			**588,653**	**100.0**		**956**

EMEA Emerging Market Bonds (L2)

YoY Change ($) 9% QoQ Change ($) -52%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	2	14,424	15.4	2.2	43
Citi	2	1	12,136	13.0	-1.4	33
BNP Paribas SA	3	4	8,877	9.5	3.2	25
Deutsche Bank	4	8	5,079	5.4	1.4	13
Societe Generale	5	7	4,937	5.3	1.1	17
UniCredit	6	16	4,439	4.8	2.9	13
HSBC Holdings PLC	7	9	4,254	4.6	1.0	16
Barclays	8	27	4,219	4.5	3.8	15
ING	9	12	3,606	3.9	1.0	11
Erste Group	10	11	2,982	3.2	0.1	6
Goldman Sachs & Co	11	10	2,552	2.7	-0.6	10
Gazprombank	12	5	2,139	2.3	-2.8	9
IMI - Intesa Sanpaolo	13	17	2,124	2.3	0.7	7
VTB Capital	14	3	1,988	2.1	-4.2	8
Standard Chartered PLC	15	6	1,929	2.1	-2.7	7
Raiffeisen Bank International	16	35	1,895	2.0	1.5	7
Morgan Stanley	17	23	1,889	2.0	1.1	4
BofA Securities Inc	18	14	1,546	1.7	-0.2	8
Credit Agricole CIB	19	19	1,427	1.5	0.2	4
Raiffeisen Schweiz Genossensch	20	-	1,420	1.5	1.5	4
Industry Total			**93,445**	**100.0**		**93**

Latin America Emerging Market Bonds (L3)

YoY Change ($) 5% QoQ Change ($) -8%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	1	13,088	13.7	0.4	47
Citi	2	2	10,323	10.8	-0.8	29
BofA Securities Inc	3	3	7,778	8.1	-1.9	38
Goldman Sachs & Co	4	5	7,433	7.8	1.7	30
Deutsche Bank	5	14	7,216	7.6	4.9	11
Itau Unibanco	6	9	5,820	6.1	1.9	21
Scotiabank	7	7	5,700	6.0	0.7	20
BNP Paribas SA	8	11	5,056	5.3	2.3	15
Santander Corp & Invest Bkg	9	6	4,838	5.1	-0.5	24
HSBC Holdings PLC	10	4	4,583	4.8	-1.3	14
Credit Suisse	11	13	3,746	3.9	1.2	12
Morgan Stanley	12	8	3,277	3.4	-1.2	17
BBVA	13	16	3,082	3.2	0.9	12
Credit Agricole CIB	14	18	1,739	1.8	0.0	5
Sumitomo Mitsui Finl Grp Inc	15	20	1,571	1.6	0.3	5
Barclays	16	12	1,376	1.4	-1.5	4
Mitsubishi UFJ Financial Group	17	25	1,226	1.3	0.7	5
Banco Bradesco SA	18	10	1,044	1.1	-1.9	10
Banco BTG Pactual SA	19	23	913	1.0	0.0	8
Societe Generale	20	26	741	0.8	0.4	2
Industry Total			**95,613**	**100.0**		**105**

Asia Pacific Emerging Market Bonds (L4)

YoY Change ($) 5% QoQ Change ($) 20%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
HSBC Holdings PLC	1	1	24,635	8.2	-0.8	228
Citi	2	2	17,843	5.9	0.4	128
Standard Chartered PLC	3	3	16,042	5.3	-0.1	148
JP Morgan	4	5	12,981	4.3	0.7	107
Bank of China Ltd	5	4	12,616	4.2	0.1	167
UBS	6	6	12,043	4.0	0.5	121
Goldman Sachs & Co	7	16	11,039	3.7	1.2	62
BofA Securities Inc	8	17	10,995	3.7	1.3	73
Credit Suisse	9	8	9,437	3.1	-0.1	96
BNP Paribas SA	10	13	8,924	3.0	0.4	90
Industry Total			**301,088**	**100.0**		**651**

Middle East Emerging Market Bonds (L5)

YoY Change ($) 29% QoQ Change ($) -58%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Standard Chartered PLC	1	1	15,039	15.0	4.2	44
Citi	2	3	12,275	12.2	3.0	28
HSBC Holdings PLC	3	2	11,777	11.7	1.7	38
Goldman Sachs & Co	4	6	9,722	9.7	3.6	11
Deutsche Bank	5	7	6,887	6.9	1.7	12
First Abu Dhabi Bank PJSC	6	8	5,443	5.4	0.5	18
JP Morgan	7	4	4,880	4.9	-3.8	16
BofA Securities Inc	8	35	4,172	4.2	4.0	7
Credit Agricole CIB	9	9	3,979	4.0	-0.8	15
Morgan Stanley	10	11	3,358	3.4	-0.3	8
Industry Total			**100,287**	**100.0**		**107**

All Global Debt, by Brazilian Issuers (BR1)

YoY Change ($) 7% QoQ Change ($) -33%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
Deutsche Bank	1	29	6,178	20.3	19.9	6
Itau Unibanco	2	3	4,364	14.3	2.9	27
BofA Securities Inc	3	7	2,744	9.0	4.8	11
JP Morgan	4	6	2,722	8.9	4.4	13
Santander Corp & Invest Bkg	5	2	1,911	6.3	-6.1	16
BNP Paribas SA	6	9	1,814	6.0	2.4	5
Banco Bradesco SA	7	1	1,512	5.0	-11.6	15
Banco BTG Pactual SA	8	5	1,492	4.9	-1.1	14
Goldman Sachs & Co	9	11	981	3.2	-0.1	7
Sumitomo Mitsui Finl Grp Inc	10	20	946	3.1	2.1	4
Industry Total			**30,499**	**100.0**		**62**

Domestic Brazilian Debt, in Reals (BR2)

YoY Change ($) -48% QoQ Change ($) -62%

Bookrunner	Rank 2020	Rank 2019	Proceeds R$mil	Market Share	Mkt. Sh. Chg	# of Deals
Itau Unibanco	1	2	5,404	18.9	-2.4	14
Banco Bradesco SA	2	3	4,178	14.6	-4.7	10
Banco BTG Pactual SA	3	5	3,905	13.7	6.8	8
BNP Paribas SA	4	-	3,840	13.4	13.4	2
Banco do Brasil SA	5	4	3,401	11.9	-6.4	11
Santander Corp & Invest Bkg	6	1	2,083	7.3	-14.4	10
XP Investimentos	7	6	1,487	5.2	2.1	3
Banco Safra SA	8	-	1,342	4.7	4.7	3
Banco Votorantim	9	9	1,323	4.6	3.5	5
Citi	10	8	605	2.1	0.6	6
Industry Total			**28,608**	**100.0**		**54**

*Indicates a Tie

Global Debt, Mexican Issuers (MX1)

YoY Change ($) 0% QoQ Change ($) -13%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
JP Morgan	1	2	6,646	16.4	6.8	18
Citi	2	1	4,494	11.1	1.0	18
Santander Corp & Invest Bkg	3	5	4,353	10.8	2.7	26
BBVA	4	6	4,246	10.5	2.6	34
Goldman Sachs & Co	5	3	4,044	10.0	1.2	9
BofA Securities Inc	6	4	2,877	7.1	-1.4	13
Morgan Stanley	7	8	2,641	6.5	0.6	10
BNP Paribas SA	8	23	2,211	5.5	4.9	8
Barclays	9	9	1,376	3.4	-1.4	4
Credit Suisse	10	12	1,047	2.6	-1.2	2
Industry Total			**40,442**	**100.0**		**60**

Domestic Mexican Debt (MX3)

YoY Change ($) 11% QoQ Change ($) 283%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh. Chg	# of Deals
BBVA	1	2	2,169	32.8	12.1	32
Santander Corp & Invest Bkg	2	1	1,784	27.0	-1.1	22
JP Morgan	3	-	1,265	19.2	19.2	2
Casas de Bolsa Bital, S.A.	4	3	454	6.9	-10.0	16
Casa de Bolsa Inverlat	5	10	370	5.6	3.5	11
Citi	6	7	301	4.6	-0.5	8
Scotiabank	7	11	132	2.0	0.7	2
Corporacion Actinver Sab de CV	8	9	50	0.8	-1.3	5
Inversora Bursatil SA de CV	9	4	41	0.6	-9.0	1
Industry Total			**6,608**	**100.0**		**38**

Asia-Pacific Rankings

First Nine Months 2020 | Debt Capital Markets | Managing Underwriters

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

YoY Change ($) 11% QoQ Change ($) 21%

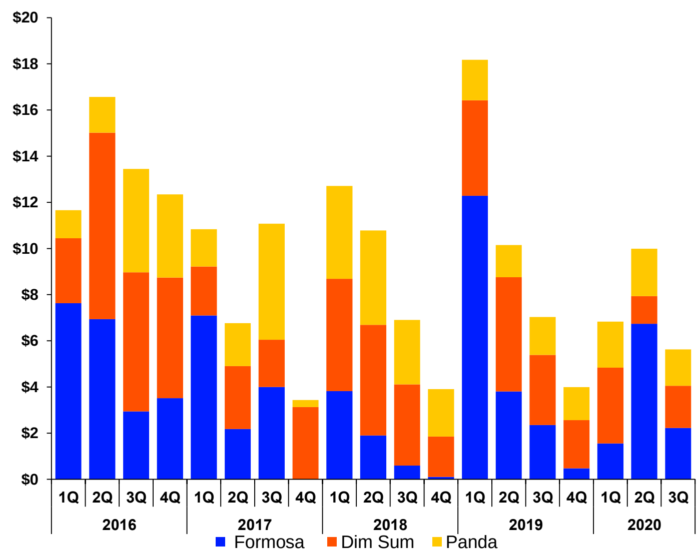
Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
HSBC Holdings PLC	1	1	22,988	7.6	-0.9	188
Citi	2	2	20,121	6.6	1.0	123
Standard Chartered PLC	3	3	15,385	5.1	-0.2	137
JP Morgan	4	5	13,670	4.5	0.6	99
Goldman Sachs & Co	5	11	12,966	4.3	1.3	63
BofA Securities Inc	6	15	12,790	4.2	1.5	72
Bank of China Ltd	7	4	11,993	4.0	-0.1	158
UBS	8	8	10,877	3.6	0.4	114
Morgan Stanley	9	10	9,977	3.3	0.3	60
BNP Paribas SA	10	13	9,751	3.2	0.4	88
Credit Suisse	11	7	8,785	2.9	-0.3	91
Credit Agricole CIB	12	6	8,418	2.8	-0.6	68
Deutsche Bank	13	17	7,864	2.6	0.2	71
CITIC	14	14	7,455	2.5	-0.2	126
DBS Group Holdings	15	16	7,376	2.4	0.0	83
Industrial & Comm Bank China	16	18	7,311	2.4	0.3	91
Barclays	17	19	6,692	2.2	0.2	64
Mizuho Financial Group	18	12	6,576	2.2	-0.7	65
Guotai Junan Securities	19	20	4,880	1.6	-0.2	119
Haitong Securities Co Ltd	20	9	4,872	1.6	-1.4	124
Mitsubishi UFJ Financial Group	21	27	4,868	1.6	0.4	36
Bank of Communications Co Ltd	22	21	4,845	1.6	-0.1	80
China Construction Bank	23	22	4,582	1.5	-0.1	88
Nomura	24	32	4,169	1.4	0.4	22
China Merchants Bank	25	24	4,081	1.3	-0.1	99
Industry Total			**303,513**	**100.0**		**529**

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

YoY Change ($) -27% QoQ Change ($) 53%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
Credit Suisse	1	1	3,960	8.6	0.0	55
UBS	2	6	3,562	7.8	2.7	54
Haitong Securities Co Ltd	3	2	2,511	5.5	-1.3	71
Deutsche Bank	4	7	2,374	5.2	0.5	48
CITIC	5	4	2,336	5.1	-0.4	45
Guotai Junan Securities	6	9	2,219	4.8	0.9	58
HSBC Holdings PLC	7	3	1,935	4.2	-2.4	42
Morgan Stanley	8	8	1,926	4.2	-0.1	26
Standard Chartered PLC	9	10	1,921	4.2	0.3	26
BofA Securities Inc	10	17	1,777	3.9	2.0	17
Barclays	11	14	1,764	3.9	1.3	34
Bank of China Ltd	12	12	1,482	3.2	0.1	27
Tianfeng Securities Co Ltd	13	50	1,390	3.0	2.8	6
Goldman Sachs & Co	14	11	1,343	2.9	-0.5	16
BNP Paribas SA	15	19	1,319	2.9	1.1	26
JP Morgan	16	5	1,072	2.3	-2.8	20
China Construction Bank	17	24	974	2.1	0.9	25
China Merchants Bank	18	18	860	1.9	0.1	29
Bank of Communications Co Ltd	19	26	645	1.4	0.6	11
Orient Securities Co Ltd	20	16	604	1.3	-1.0	17
Kaisa Securities Ltd	21	62	511	1.1	1.0	10
Citi	22	20	498	1.1	-0.6	10
HeungKong Group Ltd	23	23	493	1.1	-0.2	15
Industrial & Comm Bank China	24	21	449	1.0	-0.4	6
DBS Group Holdings	25	25	430	0.9	-0.2	10
Industry Total			**45,817**	**100.0**		**129**

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



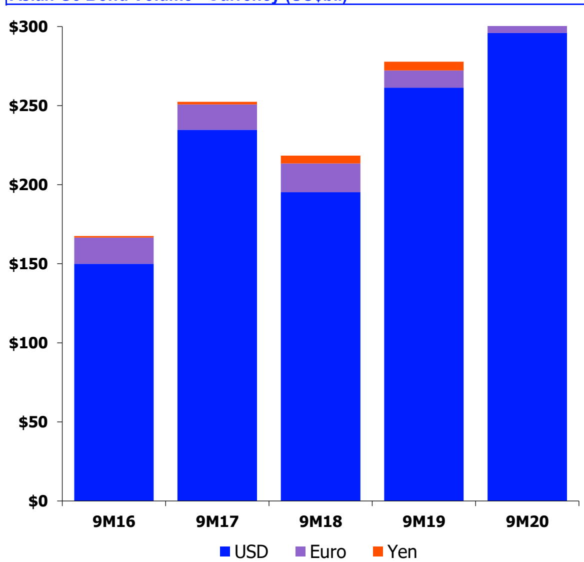
All Asian Currencies (ex Japan & Australia) (AS1)

YoY Change ($) 18% QoQ Change ($) 7%

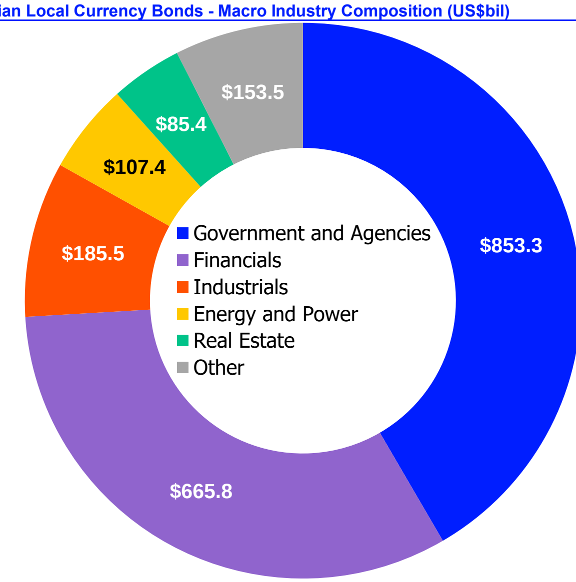
Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
Bank of China Ltd	1	1	132,241	6.5	-1.4	1,772
Industrial & Comm Bank China	2	2	128,276	6.3	-0.6	1,694
CITIC	3	5	121,139	5.9	0.9	1,576
China Construction Bank	4	3	114,521	5.6	-0.6	1,754
Bank of Communications Co Ltd	5	4	97,578	4.8	-0.8	1,461
Agricultural Bank of China	6	6	95,704	4.7	0.0	1,419
CSC Financial Co Ltd	7	7	84,284	4.1	0.6	1,077
Industrial Bank Co Ltd	8	8	65,733	3.2	0.2	1,043
Guotai Junan Securities	9	10	52,644	2.6	0.4	725
China Merchants Bank	10	9	48,533	2.4	0.1	653
Huatai Securities Co Ltd	11	18	47,797	2.3	1.0	581
China Minsheng Banking Corp	12	12	42,444	2.1	0.1	645
China International Capital Co	13	11	42,269	2.1	0.1	368
Haitong Securities Co Ltd	14	14	41,021	2.0	0.3	439
Shanghai Pudong Development Bk	15	13	38,372	1.9	0.0	528
Postal Savings Bank Of China	16	15	35,895	1.8	0.3	543
Everbright Securities Co Ltd	17	22	25,270	1.2	0.2	393
China Everbright Bank	18	21	24,840	1.2	0.1	342
China Merchants Securities Co	19	20	21,508	1.1	0.0	222
NH Investment & Securities Co	20	23	21,049	1.0	0.1	399
KB Financial Group Inc	21	19	20,299	1.0	-0.2	476
Shenwan Hongyuan Securities Co	22	28	18,738	0.9	0.2	182
Orient Securities Co Ltd	23	38	16,065	0.8	0.3	272
Agricultural Dev Bank of China	24	16	15,841	0.8	-0.6	228
Ping An Securities Ltd	25	27	15,806	0.8	0.1	216
Industry Total			**2,050,895**	**100.0**		**9,629**

*Indicates a Tie

Asian G3 Bond Volume - Currency (US$bil)



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



REFINITIV™
DATA IS JUST THE BEGINNING

Australia & China Rankings

First Nine Months 2020 | Debt Capital Markets | Managing Underwriters

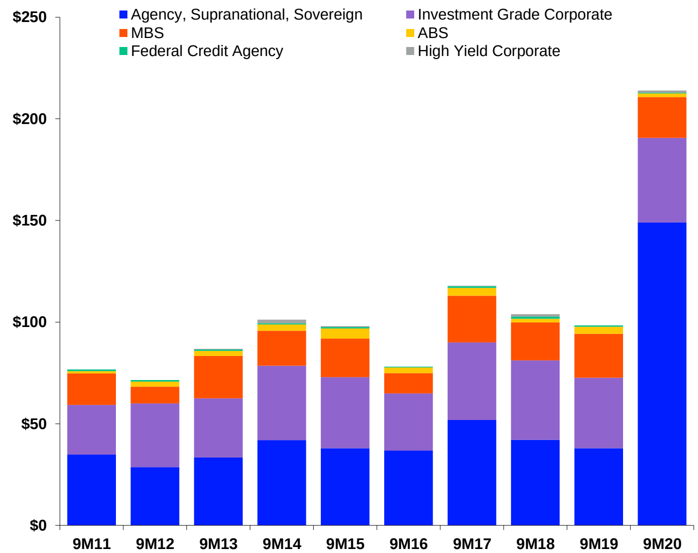
All Australian Debt (ex self-funded) (AJ3a) — YoY Change ($) 111% QoQ Change ($) 54%

Bookrunner	Rank 2020	Rank 2019	Proceeds AU$mil	Market Share	Mkt. Sh Chg	# of Deals
UBS	1	8	29,851	14.0	9.3	31
ANZ Banking Group	2	1	29,419	13.8	-3.4	61
Commonwealth Bank of Australia	3	4	27,457	12.9	2.8	56
Westpac Banking	4	2	27,367	12.9	-3.3	60
Citi	5	14	16,320	7.7	5.8	26
JP Morgan	6	11	16,233	7.6	4.9	19
Deutsche Bank	7	5	15,870	7.5	2.4	19
National Australia Bank	8	3	15,354	7.2	-6.6	80
BofA Securities Inc	9	18	12,647	5.9	5.1	10
TD Securities Inc	10	6	3,699	1.7	-3.3	38
Macquarie Group	11	9	2,695	1.3	-1.6	15
Nomura	12	7	2,636	1.2	-3.5	19
RBC Capital Markets	13	10	2,052	1.0	-1.8	12
HSBC Holdings PLC	14	12	1,761	0.8	-1.4	12
Mitsubishi UFJ Financial Group	15	15	1,552	0.7	-0.5	9
Standard Chartered PLC	16	16	1,365	0.6	-0.4	8
Sumitomo Mitsui Finl Grp Inc	17	24	1,071	0.5	0.2	5
Mizuho Financial Group	18	13	959	0.5	-1.6	12
Natixis	19	26	634	0.3	0.0	6
Credit Suisse	20	38	620	0.3	0.2	3
Industry Total			**212,981**	**100.0**		**219**

All Australian International Bonds (AJ7) — YoY Change ($) -7% QoQ Change ($) -10%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
Citi	1	1	4,568	13.5	-0.2	17
HSBC Holdings PLC	2	2	3,933	11.6	0.5	18
BofA Securities Inc	3	4	2,968	8.8	2.0	15
JP Morgan	4	3	2,686	7.9	-1.3	13
ANZ Banking Group	5	17	2,038	6.0	4.2	7
RBC Capital Markets	6	13	1,810	5.4	1.9	6
Commonwealth Bank of Australia	7	8	1,628	4.8	0.0	5
TD Securities Inc	8	20	1,428	4.2	2.8	5
BNP Paribas SA	9	7	1,379	4.1	-1.1	7
Westpac Banking	10	9	1,299	3.8	-1.0	4
UBS	11	5	1,230	3.6	-2.4	5
Goldman Sachs & Co	12	6	1,228	3.6	-1.9	7
National Australia Bank	13	10	1,141	3.4	-0.8	4
Deutsche Bank	14	15	1,060	3.1	0.6	5
Mitsubishi UFJ Financial Group	15	18	895	2.7	1.0	4
Barclays	16	14	852	2.5	-0.2	4
Morgan Stanley	17	11	648	1.9	-1.9	3
Macquarie Group	18	-	512	1.5	1.5	3
Credit Suisse	19	12	495	1.5	-2.1	3
NatWest Markets	20	22	308	0.9	0.1	2
Industry Total			**33,815**	**100.0**		**46**

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



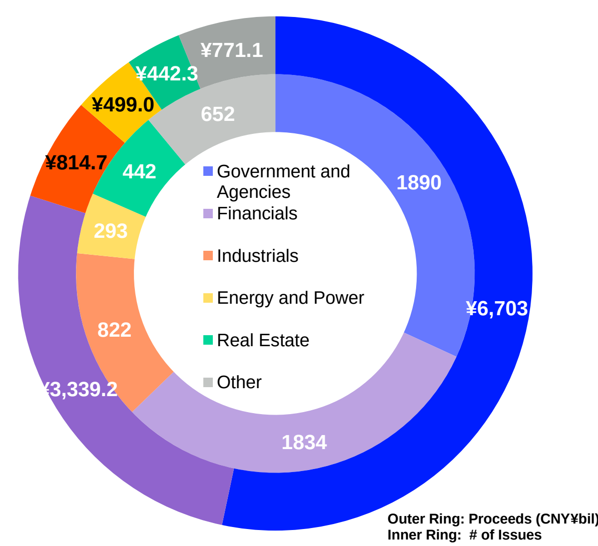
China G3 Currency Bonds (AR5) — YoY Change ($) -4% QoQ Change ($) 40%

Bookrunner	Rank 2020	Rank 2019	Proceeds US$mil	Market Share	Mkt. Sh Chg	# of Deals
Bank of China Ltd	1	1	7,784	6.1	0.0	106
HSBC Holdings PLC	2	3	6,364	5.0	0.3	76
Industrial & Comm Bank China	3	8	5,651	4.4	1.0	64
CITIC	4	4	5,258	4.1	-0.3	98
Goldman Sachs & Co	5	9	5,190	4.1	0.8	34
JP Morgan	6	23	4,941	3.9	2.1	42
Standard Chartered PLC	7	11	4,689	3.7	0.7	60
Citi	8	21	4,576	3.6	1.7	36
UBS	9	6	4,426	3.5	-0.1	63
Haitong Securities Co Ltd	10	2	4,198	3.3	-1.8	105
Credit Agricole CIB	11	7	3,955	3.1	-0.4	28
Credit Suisse	12	5	3,951	3.1	-1.1	56
BofA Securities Inc	13	22	3,738	2.9	1.0	28
Guotai Junan Securities	14	10	3,693	2.9	-0.4	93
China Construction Bank	15	14	3,398	2.7	0.3	62
Deutsche Bank	16	26	3,132	2.5	0.9	49
BNP Paribas SA	17	19	3,125	2.5	0.5	36
Barclays	18	20	3,075	2.4	0.5	42
Shanghai Pudong Development Bk	19	28	2,804	2.2	0.7	55
China International Capital Co	20	18	2,732	2.1	0.0	58
Industry Total			**127,424**	**100.0**		**266**

Chinese Yuan Bonds (ex-Self Funded) (AS24) — YoY Change ($) 26% QoQ Change ($) 6%

Bookrunner	Rank 2020	Rank 2019	Proceeds CN¥mil	Market Share	Mkt. Sh Chg	# of Deals
Bank of China Ltd	1	1	922,010	7.3	-2.0	1,765
Industrial & Comm Bank China	2	2	896,140	7.1	-1.1	1,691
CITIC	3	5	846,279	6.7	0.7	1,575
China Construction Bank	4	3	800,714	6.4	-0.9	1,753
Bank of Communications Co Ltd	5	4	678,279	5.4	-1.0	1,456
Agricultural Bank of China	6	6	667,688	5.3	-0.3	1,416
CSC Financial Co Ltd	7	7	588,015	4.7	0.5	1,077
Industrial Bank Co Ltd	8	8	459,347	3.7	0.1	1,043
Guotai Junan Securities	9	10	366,986	2.9	0.2	724
China Merchants Bank	10	9	339,413	2.7	-0.1	653
Huatai Securities Co Ltd	11	18	333,606	2.7	1.1	581
China Minsheng Banking Corp	12	12	297,132	2.4	0.0	643
China International Capital Co	13	11	294,592	2.3	-0.1	367
Haitong Securities Co Ltd	14	14	286,718	2.3	0.3	439
Shanghai Pudong Development Bk	15	13	268,308	2.1	-0.1	527
Postal Savings Bank Of China	16	15	250,797	2.0	0.2	543
Everbright Securities Co Ltd	17	21	175,899	1.4	0.2	392
China Everbright Bank	18	20	173,942	1.4	0.1	342
China Merchants Securities Co	19	19	150,363	1.2	-0.1	222
Shenwan Hongyuan Securities Co	20	24	130,732	1.0	0.2	182
Industry Total			**12,569,350**	**100.0**		**5,933**

Chinese Yuan Bonds - Macro Industry Composition



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

*Indicates a Tie

REFINITIV™
DATA IS JUST THE BEGINNING

Japan Rankings

First Nine Months 2020 | Debt Capital Markets | Managing Underwriters

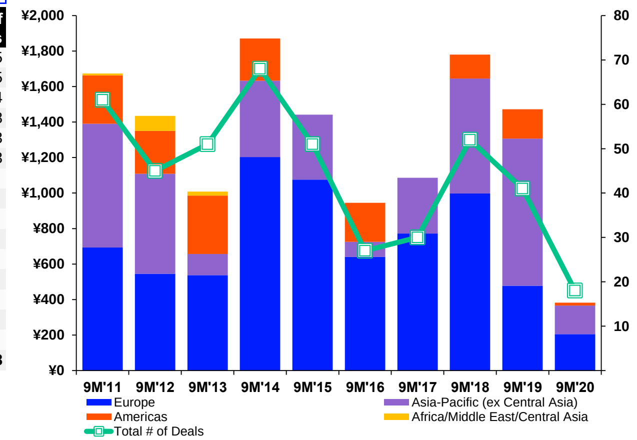
All Bonds in Yen (AP05) YoY Change (¥) -4% QoQ Change (¥) 14%

Lead Manager	Rank 2020	Rank 2019	Proceeds JPY¥bil	Market Share	Mkt. Sh. Chg	# of Deals
Mizuho Financial Group	1	1	4,469	22.4	-0.6	616
Sumitomo Mitsui Finl Grp Inc	2	2	3,485	17.5	1.0	529
Nomura	3	5	3,406	17.1	2.2	482
Daiwa Securities Group Inc	4	3	3,221	16.2	-0.3	453
Mitsubishi UFJ Morgan Stanley	5	4	3,213	16.1	0.5	443
Goldman Sachs & Co	6	8	466	2.3	0.7	40
Mitsubishi UFJ Financial Group	7	6	437	2.2	0.1	23
Sumitomo Mitsui Trust Holdings	8	7	234	1.2	-0.5	25
BofA Securities Inc	9	9	195	1.0	-0.2	19
Tokai Tokyo Financial Holdings	10	10	192	1.0	0.1	50
Shinkin Central Bank	11	13	133	0.7	0.1	34
Okasan Securities Group Inc	12	20	64	0.3	0.0	18
Barclays	13	14	63	0.3	-0.3	5
BNP Paribas SA	14	12	63	0.3	-0.4	9
Norinchukin Bank	15	16	54	0.3	-0.2	3
Industry Total			**19,945**	**100.0**		**1,023**

Samurai Bonds (AP01) YoY Change (¥) -74% QoQ Change (¥) 64%

Lead Manager	Rank 2020	Rank 2019	Proceeds JPY¥bil	Market Share	Mkt. Sh. Chg	# of Deals
Sumitomo Mitsui Finl Grp Inc	1	3	127	33.2	12.7	15
Daiwa Securities Group Inc	2	2	93	24.4	2.8	15
Nomura	3	4	76	19.9	5.7	14
Mitsubishi UFJ Morgan Stanley	4	5	45	11.8	4.8	8
Mizuho Financial Group	5*	1	20	5.3	-18.7	3
Credit Agricole CIB	5*	10	20	5.3	4.9	3
Industry Total			**383**	**100.0**		**18**

Samurai Bonds Issuance - Domicile Region (JP¥bil)



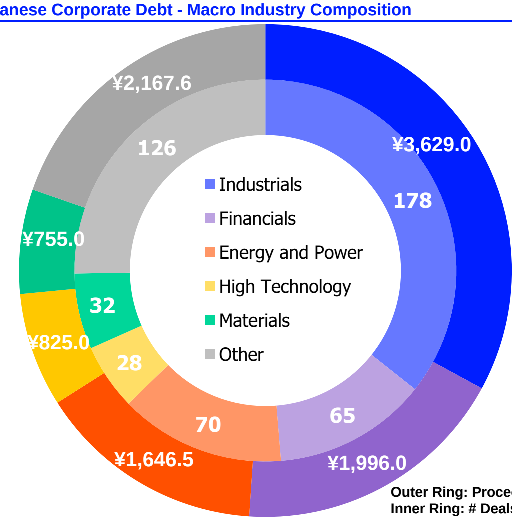
Japanese Securitizations (AP02) YoY Change (¥) -7% QoQ Change (¥) 32%

Lead Manager	Rank 2020	Rank 2019	Proceeds JPY¥bil	Market Share	Mkt. Sh. Chg	# of Deals
Mizuho Financial Group	1	1	1,013	28.5	-2.9	117
Sumitomo Mitsui Finl Grp Inc	2	2	512	14.4	2.2	24
Mitsubishi UFJ Financial Group	3	3	424	11.9	2.2	22
Daiwa Securities Group Inc	4	4	380	10.7	1.2	10
Nomura	5	7	307	8.6	3.5	8
Sumitomo Mitsui Trust Holdings	6	5	234	6.6	-2.5	25
Mitsubishi UFJ Morgan Stanley	7	6	223	6.3	-1.5	5
Goldman Sachs & Co	8	12	211	5.9	4.3	4
BofA Securities Inc	9	9	90	2.5	-0.7	3
Norinchukin Bank	10	10	54	1.5	-1.4	3
Barclays	11	11	52	1.5	-1.1	2
ORIX Corp	12	15	22	0.6	0.5	3
BNP Paribas SA	13	13	19	0.5	-0.4	1
Godo Kaisha Yu	14	-	10	0.3	0.3	1
SBI Holdings Inc	15	-	5	0.1	0.1	1
Industry Total			**3,558**	**100.0**		**199**

Japanese Corporate Debt (AP03) YoY Change (¥) 6% QoQ Change (¥) 17%

Lead Manager	Rank 2020	Rank 2019	Proceeds JPY¥bil	Market Share	Mkt. Sh. Chg	# of Deals
Mizuho Financial Group	1	1	2,507	22.8	0.1	353
Nomura	2	3	2,200	20.0	1.5	331
Mitsubishi UFJ Morgan Stanley	3	2	2,085	18.9	0.0	296
Sumitomo Mitsui Finl Grp Inc	4	5	1,972	17.9	0.2	351
Daiwa Securities Group Inc	5	4	1,864	16.9	-1.5	294
Shinkin Central Bank	6	7	117	1.1	0.1	29
Goldman Sachs & Co	7	9	77	0.7	0.0	17
Tokai Tokyo Financial Holdings	8	8	74	0.7	-0.1	26
BofA Securities Inc	9	12	38	0.3	0.2	13
Shinsei Bank	10	-	33	0.3	0.3	4
SBI Holdings Inc	11	6	28	0.3	-0.8	12
Okasan Securities Group Inc	12	10	13	0.1	-0.1	9
Aozora Bank Ltd	13	11	8	0.1	0.0	2
Citi	14	14	2	0.0	0.0	2
BNP Paribas SA	15	15	2	0.0	0.0	1
Industry Total			**11,019**	**100.0**		**499**

Japanese Corporate Debt - Macro Industry Composition



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

*Indicates a Tie

Debt Capital Markets Criteria

First Nine Months 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:

AMERICAS
Sam Boehle
Tel: +1 646 223 7378
sam.boehle@refinitiv.com

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

ASIA PACIFIC
Carina Causon-Israel
Tel: +632 459 1566
carina.causon@refinitiv.com

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

CHINA
Xiaoxue Yu
Tel: +8610 59803956
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 October 1, 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.

REFINITIV™
DATA IS JUST THE BEGINNING