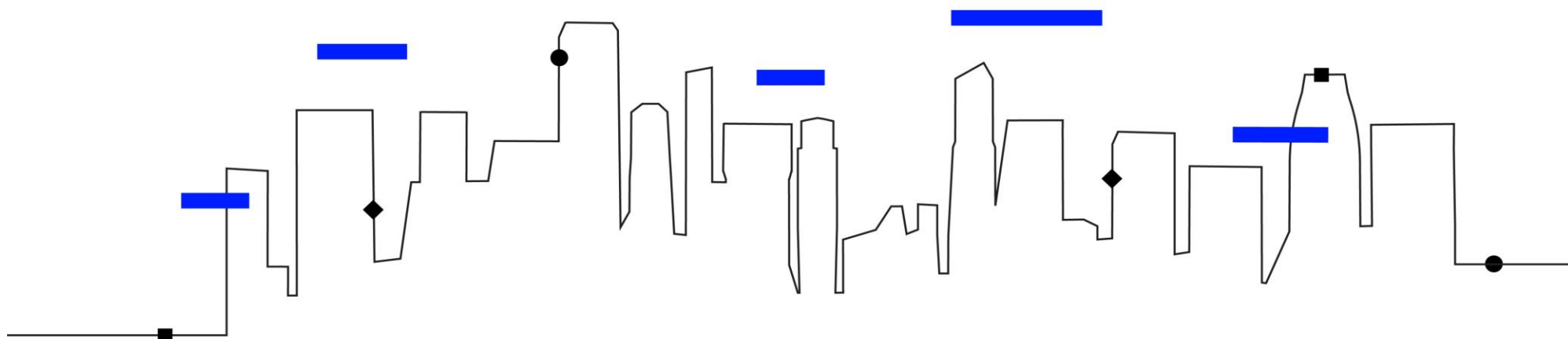


# Global Debt Capital Markets Review

FULL YEAR 2020 | MANAGING UNDERWRITERS



# Global Debt Capital Markets Review

Full Year 2020 | Managing Underwriters

## Global Deals Intelligence

### GLOBAL DEBT CAPITAL MARKETS ACTIVITY SURPASSES US\$10.0 TRILLION FOR FIRST TIME

Overall global debt capital markets activity totaled US\$10.2 trillion during full year of 2020, a 31% increase compared to full year 2019 and the strongest annual period for global debt capital markets activity since records began in 1980. The number of new offerings brought to market during full year 2020 surpassed 25,000 for the first time on record. The first three quarters of 2020 rank as the largest quarters for global debt issuance, by proceeds and by number of offerings, on record.

### INVESTMENT GRADE CORPORATE DEBT MARKETS BREAK ALL-TIME RECORDS

Global investment grade corporate debt offerings targeted totaled US\$4.8 trillion during full year 2020, a 22% increase compared to 2019 levels and the strongest annual period for global high-grade issuance since records began in 1980. Five out of the top ten all-time months for global investment grade debt offerings took place during 2020, powered by the US dollar marketplace, which saw a record US\$1.9 trillion in annual issuance, a 62% increase compared to a year ago.

### GLOBAL HIGH YIELD DEBT PUSHES PAST US\$500 BILLION

With four consecutive quarters surpassing \$US100 billion in issuance, global high yield debt activity during full year 2020 reached US\$547.4 billion, an increase of 34% compared to 2019 levels and the strongest annual period for global high yield issuance on record. High yield offerings from issuers in the United States increased 69% compared to full year 2019 and accounted for two thirds of overall 2020 activity, up from 52% a year ago.

### GREEN BONDS HIT ALL-TIME RECORD; AGENCY & SOVEREIGN DEBT ISSUANCE UP 54%

According to figures compiled by Refinitiv and The Climate Bonds Initiative, green bond issuance totaled US\$222.2 billion during full year 2020, a 26% increase compared to year ago levels and an all-time record. Bolstered by the emergence of sustainability and social bonds, annual debt issuance from agency, sovereign and supranational issuers totaled a record US\$2.9 trillion, up 55% from a year ago.

### ALL INDUSTRIES REGISTER ANNUAL GAINS; RETAIL, CONSUMER & TECH OFFERINGS LEAD

DCM activity from Retail, Consumer Staples and Technology issuers saw strong year-over-year gains during full year 2020, as all 13 industry sectors saw year-over-year percentage increases compared to a year ago.

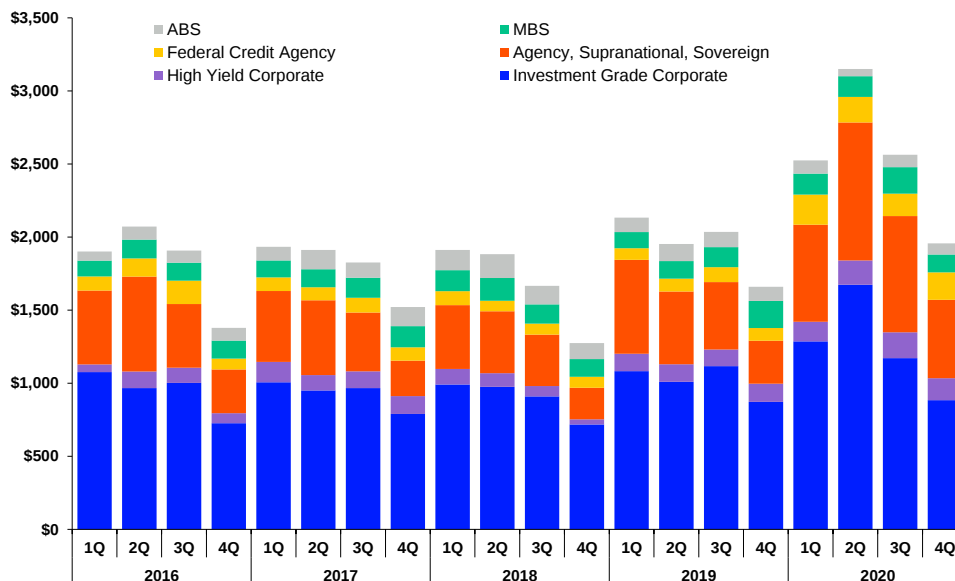
### INTERNATIONAL BONDS INCREASE 29%; RECORD YEAR FOR EMERGING MARKETS DEBT

International bond offerings totaled a record US\$5.2 trillion during full year 2020, a 29% 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, on par with a year ago. Debt from emerging market corporate issuers totaled US\$367.4 billion during full year 2020, up 6% compared to a year ago and an all-time high. Corporate debt issuers from India, Brazil, Russia and Mexico accounted for 45% of activity.

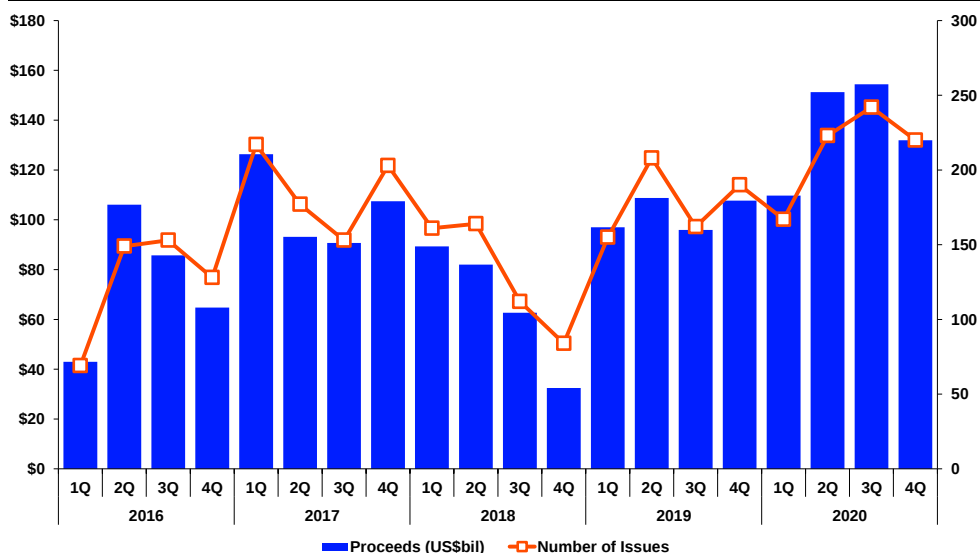
### ASIA LOCAL CURRENCY DEBT UP 24%; JAPANESE YEN DEBT OFFERINGS UP 1%

Asia local currency bond offerings totaled US\$2.7 trillion during full year 2020, a 24% increase compared to a year ago and the strongest full year period for issuance on record. China Yuan offerings have increased 29% compared to a year ago. Japanese Yen offerings have increased 1% compared to full year 2019, totaling JPY28.1 trillion and an all-time high.

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



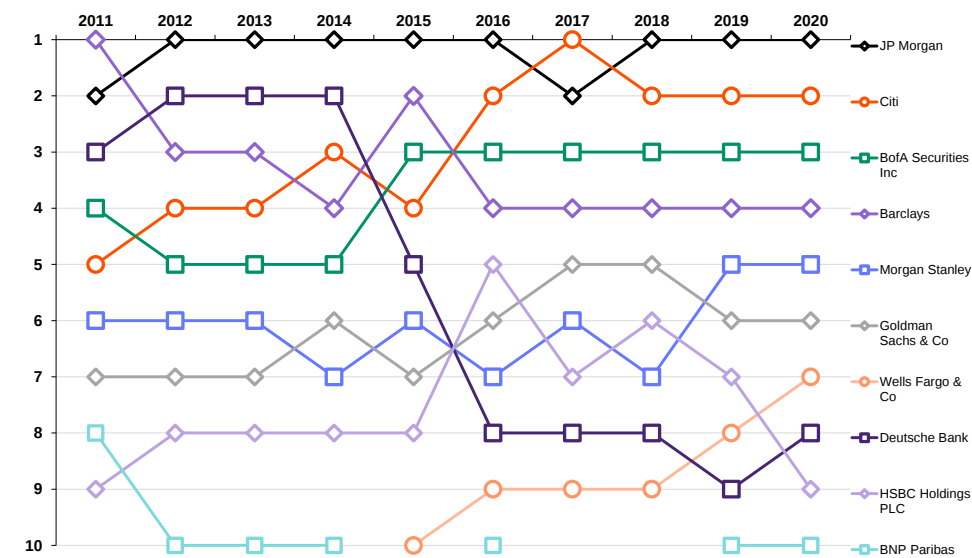
## Global High Yield Corporate Debt - Quarterly Issuance



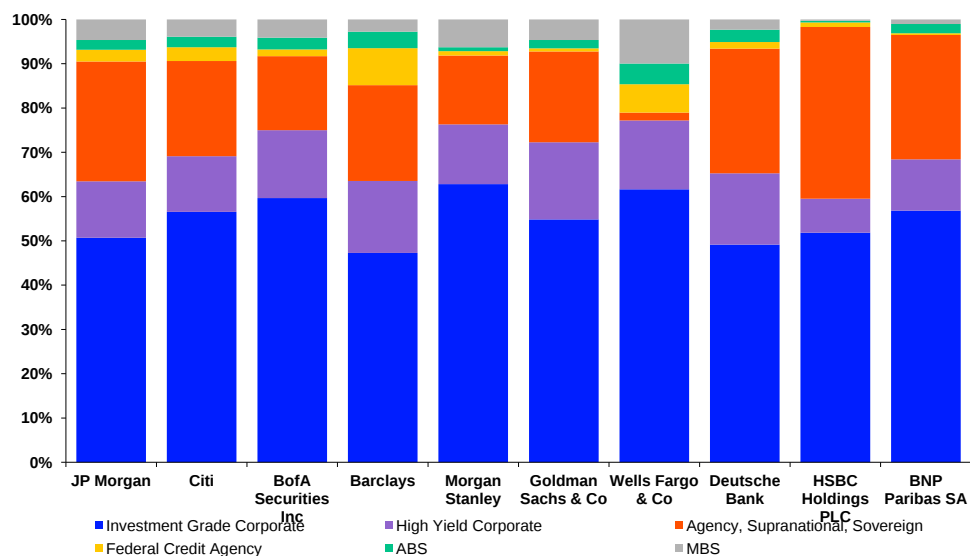
# Global Insights

Full Year 2020 | Debt Capital Markets | Managing Underwriters

## Global Debt Rankings by Proceeds



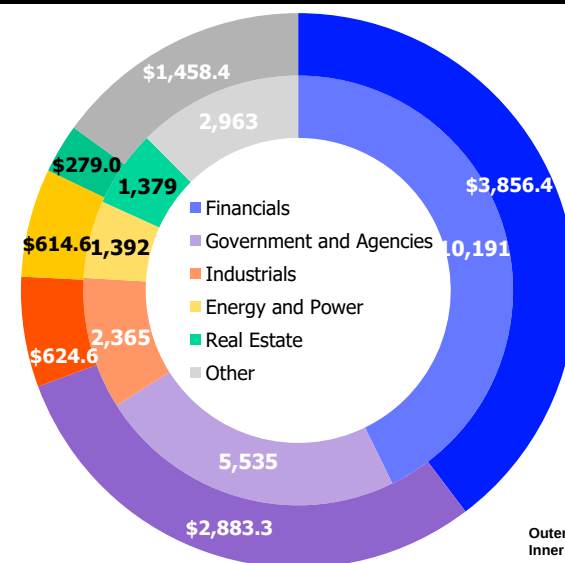
## Top 10 Global Debt Bookrunners by Proceeds - Issue Type Composition



## Global Scorecard

|                                                | 1/1/2020 - 12/31/2020 |               | 1/1/2019 - 12/31/2019 |               | YoY % Chg. (\$) |
|------------------------------------------------|-----------------------|---------------|-----------------------|---------------|-----------------|
|                                                | Proceeds (\$mil)      | # of Deals    | Proceeds (\$mil)      | # of Deals    |                 |
| <b>All Global Debt (B1)</b>                    | <b>10,237,470</b>     | <b>27,665</b> | <b>7,835,329</b>      | <b>23,708</b> | <b>31% ▲</b>    |
| Global Long-term Debt (B2)                     | 9,716,298             | 23,824        | 7,483,951             | 21,063        | 30% ▲           |
| Global Long-term Debt ex MBS, ABS & Munis (B3) | 8,774,399             | 22,098        | 6,511,517             | 19,081        | 35% ▲           |
| Global High Yield Corporate Debt (B4)          | 547,396               | 852           | 409,438               | 715           | 34% ▲           |
| Global Investment Grade Corporate Debt (B7)    | 4,814,984             | 14,052        | 3,944,118             | 12,912        | 22% ▲           |
| US Federal Credit Agency Debt (B8)             | 391,421               | 1,332         | 173,583               | 917           | 125% ▲          |
| Global Agency, Sovereign & Supranational (B9)  | 2,884,932             | 5,660         | 1,862,333             | 4,313         | 55% ▲           |
| Global Mortgage-backed Securities (B10)        | 655,294               | 1,065         | 555,127               | 1,049         | 18% ▲           |
| Global Asset-backed Securities (B11)           | 286,606               | 661           | 417,306               | 933           | -31% ▼          |
| Global Short-term Debt (B14)                   | 567,797               | 4,091         | 389,662               | 2,879         | 46% ▲           |
| Global Emerging Markets Corporate Debt (B15)   | 367,405               | 1,341         | 346,514               | 1,411         | 6% ▲            |
| <b>All US Debt (F1)</b>                        | <b>3,999,303</b>      | <b>6,299</b>  | <b>2,764,862</b>      | <b>4,977</b>  | <b>45% ▲</b>    |
| US Long-term Debt (F2)                         | 3,668,622             | 4,156         | 2,542,529             | 3,560         | 44% ▲           |
| US Long-term Straight ex MBS, ABS & Munis (F3) | 3,197,603             | 5,051         | 1,969,793             | 3,516         | 62% ▲           |
| US Federal Credit Agency Debt (F7)             | 375,846               | 1,299         | 161,444               | 875           | 133% ▲          |
| US High Yield Corporate Debt (F8)              | 400,457               | 555           | 263,217               | 379           | 52% ▲           |
| US Investment Grade (F9)                       | 1,864,185             | 1,532         | 1,152,466             | 1,073         | 62% ▲           |
| Agency, Sovereign & Supranational Debt (F10)   | 481,416               | 1,559         | 322,259               | 1,087         | 49% ▲           |
| US Mortgage-backed Securities (F11)            | 580,543               | 848           | 468,640               | 846           | 24% ▲           |
| US Asset-backed Securities (F14)               | 221,157               | 400           | 326,429               | 615           | -32% ▼          |
| US Taxable Municipal Debt (F15)                | 85,734                | 1,342         | 50,046                | 890           | 71% ▲           |
| US Short-term Debt - including MBS, ABS (F16)  | 330,680               | 2,143         | 222,333               | 1,417         | 49% ▲           |

## Global Debt Capital Markets - Macro Industry Composition



# Global Rankings

Full Year 2020 | Debt Capital Markets | Managing Underwriters

| Global Debt (B1)              |           |           |                  |              |              |            | YoY Change (\$) | 31% | QoQ Change (\$) | -24% |
|-------------------------------|-----------|-----------|------------------|--------------|--------------|------------|-----------------|-----|-----------------|------|
| Bookrunner                    | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Mkt. Sh. Chg | # of Deals |                 |     |                 |      |
| JP Morgan                     | 1         | 1         | 685,466          | 6.7          | 0.9          | 2,568      |                 |     |                 |      |
| Citi                          | 2         | 2         | 529,673          | 5.2          | 0.2          | 1,914      |                 |     |                 |      |
| BofA Securities Inc           | 3         | 3         | 522,473          | 5.1          | 0.6          | 1,940      |                 |     |                 |      |
| Barclays                      | 4         | 4         | 438,055          | 4.3          | 0.2          | 1,567      |                 |     |                 |      |
| Morgan Stanley                | 5         | 5         | 386,456          | 3.8          | 0.1          | 1,648      |                 |     |                 |      |
| Goldman Sachs & Co            | 6         | 6         | 365,881          | 3.6          | 0.4          | 1,345      |                 |     |                 |      |
| Wells Fargo & Co              | 7         | 8         | 336,880          | 3.3          | 0.4          | 1,444      |                 |     |                 |      |
| Deutsche Bank                 | 8         | 9         | 297,283          | 2.9          | 0.1          | 1,367      |                 |     |                 |      |
| HSBC Holdings PLC             | 9         | 7         | 285,144          | 2.8          | -0.4         | 1,387      |                 |     |                 |      |
| BNP Paribas SA                | 10        | 10        | 257,487          | 2.5          | 0.0          | 1,108      |                 |     |                 |      |
| Credit Suisse                 | 11        | 11        | 217,055          | 2.1          | -0.3         | 969        |                 |     |                 |      |
| Nomura                        | 12        | 16        | 213,158          | 2.1          | 0.3          | 789        |                 |     |                 |      |
| RBC Capital Markets           | 13        | 14        | 202,909          | 2.0          | 0.1          | 1,270      |                 |     |                 |      |
| Mizuho Financial Group        | 14        | 15        | 189,180          | 1.9          | 0.0          | 1,267      |                 |     |                 |      |
| Bank of China Ltd             | 15        | 12        | 178,675          | 1.8          | -0.4         | 2,345      |                 |     |                 |      |
| Credit Agricole CIB           | 16        | 18        | 173,599          | 1.7          | 0.1          | 855        |                 |     |                 |      |
| TD Securities Inc             | 17        | 20        | 173,415          | 1.7          | 0.2          | 835        |                 |     |                 |      |
| Industrial & Comm Bank China  | 18        | 13        | 167,430          | 1.6          | -0.3         | 2,146      |                 |     |                 |      |
| CITIC                         | 19        | 19        | 165,531          | 1.6          | 0.1          | 2,169      |                 |     |                 |      |
| China Construction Bank       | 20        | 17        | 144,657          | 1.4          | -0.3         | 2,181      |                 |     |                 |      |
| Societe Generale              | 21        | 22        | 130,413          | 1.3          | -0.2         | 511        |                 |     |                 |      |
| Bank of Communications Co Ltd | 22        | 21        | 126,796          | 1.2          | -0.3         | 1,850      |                 |     |                 |      |
| Agricultural Bank of China    | 23        | 23        | 119,959          | 1.2          | 0.0          | 1,751      |                 |     |                 |      |
| UniCredit                     | 24        | 26        | 103,317          | 1.0          | 0.0          | 405        |                 |     |                 |      |
| Sumitomo Mitsui Finl Grp Inc  | 25        | 25        | 101,337          | 1.0          | -0.1         | 675        |                 |     |                 |      |
| Industry Total                |           |           | 10,237,470       | 100.0        |              | 27,665     |                 |     |                 |      |

| Global Investment Grade Corporate Debt (B7) |           |           |                  |              |              |            | YoY Change (\$) | 22% | QoQ Change (\$) | -26% |
|---------------------------------------------|-----------|-----------|------------------|--------------|--------------|------------|-----------------|-----|-----------------|------|
| Bookrunner                                  | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Mkt. Sh. Chg | # of Deals |                 |     |                 |      |
| JP Morgan                                   | 1         | 1         | 292,900          | 6.1          | 1.6          | 1,102      |                 |     |                 |      |
| BofA Securities Inc                         | 2         | 2         | 258,284          | 5.4          | 1.2          | 933        |                 |     |                 |      |
| Citi                                        | 3         | 3         | 223,640          | 4.6          | 0.6          | 878        |                 |     |                 |      |
| Morgan Stanley                              | 4         | 4         | 193,323          | 4.0          | 0.3          | 756        |                 |     |                 |      |
| Goldman Sachs & Co                          | 5         | 7         | 163,784          | 3.4          | 0.5          | 585        |                 |     |                 |      |
| HSBC Holdings PLC                           | 6         | 5         | 149,937          | 3.1          | -0.3         | 781        |                 |     |                 |      |
| Barclays                                    | 7         | 6         | 140,186          | 2.9          | -0.4         | 567        |                 |     |                 |      |
| Wells Fargo & Co                            | 8         | 12        | 129,959          | 2.7          | 0.6          | 464        |                 |     |                 |      |
| Mizuho Financial Group                      | 9         | 10        | 128,227          | 2.7          | 0.3          | 687        |                 |     |                 |      |
| BNP Paribas SA                              | 10        | 8         | 124,573          | 2.6          | -0.1         | 589        |                 |     |                 |      |
| Deutsche Bank                               | 11        | 9         | 122,372          | 2.5          | 0.0          | 514        |                 |     |                 |      |
| CITIC                                       | 12        | 11        | 106,821          | 2.2          | 0.1          | 1,071      |                 |     |                 |      |
| RBC Capital Markets                         | 13        | 20        | 84,443           | 1.8          | 0.2          | 431        |                 |     |                 |      |
| Credit Suisse                               | 14        | 14        | 83,508           | 1.7          | 0.0          | 397        |                 |     |                 |      |
| Credit Agricole CIB                         | 15        | 17        | 78,849           | 1.6          | -0.1         | 454        |                 |     |                 |      |
| Bank of China Ltd                           | 16        | 13        | 74,149           | 1.5          | -0.5         | 626        |                 |     |                 |      |
| CSC Financial Co Ltd                        | 17        | 15        | 73,215           | 1.5          | -0.2         | 741        |                 |     |                 |      |
| Societe Generale                            | 18        | 16        | 69,910           | 1.5          | -0.2         | 320        |                 |     |                 |      |
| Sumitomo Mitsui Finl Grp Inc                | 19        | 21        | 69,310           | 1.4          | -0.1         | 419        |                 |     |                 |      |
| Mitsubishi UFJ Financial Group              | 20        | 18        | 66,001           | 1.4          | -0.3         | 393        |                 |     |                 |      |
| Industrial & Comm Bank China                | 21        | 19        | 61,073           | 1.3          | -0.3         | 463        |                 |     |                 |      |
| Guotai Junan Securities                     | 22        | 23        | 56,829           | 1.2          | 0.1          | 549        |                 |     |                 |      |
| TD Securities Inc                           | 23        | 29        | 52,257           | 1.1          | 0.1          | 280        |                 |     |                 |      |
| China International Capital Co              | 24        | 24        | 51,194           | 1.1          | 0.0          | 461        |                 |     |                 |      |
| China Merchants Bank                        | 25        | 31        | 46,820           | 1.0          | 0.1          | 471        |                 |     |                 |      |
| Industry Total                              |           |           | 4,814,984        | 100.0        |              | 14,052     |                 |     |                 |      |

| Global Agency, Sovereign Corporate Debt (B9) |           |           |                  |              |              |            | YoY Change (\$) | 55% | QoQ Change (\$) | -34% |
|----------------------------------------------|-----------|-----------|------------------|--------------|--------------|------------|-----------------|-----|-----------------|------|
| Bookrunner                                   | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Mkt. Sh. Chg | # of Deals |                 |     |                 |      |
| JP Morgan                                    | 1         | 1         | 150,205          | 5.2          | 0.1          | 425        |                 |     |                 |      |
| Citi                                         | 2         | 6         | 124,741          | 4.3          | 0.3          | 260        |                 |     |                 |      |
| BofA Securities Inc                          | 3         | 8         | 101,361          | 3.5          | 0.3          | 270        |                 |     |                 |      |
| Industrial & Comm Bank China                 | 4         | 4         | 100,334          | 3.5          | -1.0         | 1,616      |                 |     |                 |      |
| China Construction Bank                      | 5         | 3         | 99,619           | 3.5          | -1.0         | 1,630      |                 |     |                 |      |
| HSBC Holdings PLC                            | 6         | 7         | 98,979           | 3.4          | -0.3         | 276        |                 |     |                 |      |
| Bank of China Ltd                            | 7         | 2         | 97,903           | 3.4          | -1.2         | 1,600      |                 |     |                 |      |
| Bank of Communications Co Ltd                | 8         | 5         | 91,640           | 3.2          | -1.1         | 1,432      |                 |     |                 |      |
| Barclays                                     | 9         | 10        | 91,430           | 3.2          | 0.3          | 238        |                 |     |                 |      |
| Deutsche Bank                                | 10        | 11        | 90,873           | 3.2          | 0.7          | 294        |                 |     |                 |      |
| BNP Paribas SA                               | 11        | 12        | 88,771           | 3.1          | 0.6          | 194        |                 |     |                 |      |
| Goldman Sachs & Co                           | 12        | 13        | 86,158           | 3.0          | 0.5          | 179        |                 |     |                 |      |
| Agricultural Bank of China                   | 13        | 9         | 80,871           | 2.8          | -0.3         | 1,356      |                 |     |                 |      |
| RBC Capital Markets                          | 14        | 15        | 70,375           | 2.4          | 0.2          | 355        |                 |     |                 |      |
| Morgan Stanley                               | 15        | 16        | 67,500           | 2.3          | 0.1          | 269        |                 |     |                 |      |
| TD Securities Inc                            | 16        | 14        | 66,948           | 2.3          | 0.0          | 291        |                 |     |                 |      |
| Credit Agricole CIB                          | 17        | 17        | 63,985           | 2.2          | 0.1          | 151        |                 |     |                 |      |
| Nomura                                       | 18        | 19        | 58,325           | 2.0          | 0.2          | 225        |                 |     |                 |      |
| UniCredit                                    | 19        | 20        | 57,489           | 2.0          | 0.4          | 122        |                 |     |                 |      |
| CITIC                                        | 20        | 23        | 46,471           | 1.6          | 0.2          | 898        |                 |     |                 |      |
| Societe Generale                             | 21        | 22        | 42,045           | 1.5          | 0.1          | 80         |                 |     |                 |      |
| Industrial Bank Co Ltd                       | 22        | 18        | 41,962           | 1.5          | -0.4         | 753        |                 |     |                 |      |
| National Bank of Canada Finl                 | 23        | 24        | 36,295           | 1.3          | 0.0          | 232        |                 |     |                 |      |
| BMO Capital Markets                          | 24        | 26        | 35,290           | 1.2          | 0.1          | 159        |                 |     |                 |      |
| NatWest Markets                              | 25        | 25        | 34,654           | 1.2          | 0.0          | 86         |                 |     |                 |      |
| Industry Total                               |           |           | 2,884,932        | 100.0        |              | 5,660      |                 |     |                 |      |

| Global MBS (B10)               |           |           |                  |              |              |            | YoY Change (\$) | 18% | QoQ Change (\$) | 3% |
|--------------------------------|-----------|-----------|------------------|--------------|--------------|------------|-----------------|-----|-----------------|----|
| Bookrunner                     | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Mkt. Sh. Chg | # of Deals |                 |     |                 |    |
| JP Morgan                      | 1         | 1         | 95,278           | 14.5         | 1.2          | 162        |                 |     |                 |    |
| Wells Fargo & Co               | 2         | 5         | 81,930           | 12.5         | 2.2          | 119        |                 |     |                 |    |
| Credit Suisse                  | 3         | 2         | 78,802           | 12.0         | 0.9          | 158        |                 |     |                 |    |
| Morgan Stanley                 | 4         | 6         | 68,386           | 10.4         | 0.4          | 105        |                 |     |                 |    |
| BofA Securities Inc            | 5         | 4         | 57,827           | 8.8          | -1.7         | 123        |                 |     |                 |    |
| Citi                           | 6         | 3         | 54,966           | 8.4          | -2.3         | 131        |                 |     |                 |    |
| Goldman Sachs & Co             | 7         | 7         | 46,634           | 7.1          | 1.4          | 136        |                 |     |                 |    |
| Nomura                         | 8         | 8         | 37,534           | 5.7          | 1.3          | 106        |                 |     |                 |    |
| Barclays                       | 9         | 9         | 19,327           | 3.0          | -0.8         | 77         |                 |     |                 |    |
| Deutsche Bank                  | 10        | 10        | 11,836           | 1.8          | -0.6         | 58         |                 |     |                 |    |
| Amherst Securities             | 11        | 19        | 10,627           | 1.6          | 0.9          | 31         |                 |     |                 |    |
| Mizuho Financial Group         | 12        | 14        | 9,678            | 1.5          | 0.5          | 64         |                 |     |                 |    |
| Cantor Fitzgerald LP           | 13        | 11        | 9,160            | 1.4          | 0.0          | 28         |                 |     |                 |    |
| BNP Paribas SA                 | 14        | 12        | 6,819            | 1.0          | -0.1         | 30         |                 |     |                 |    |
| Sumitomo Mitsui Finl Grp Inc   | 15        | 13        | 6,245            | 1.0          | 0.0          | 26         |                 |     |                 |    |
| BMO Capital Markets            | 16        | 34        | 5,292            | 0.8          | 0.6          | 19         |                 |     |                 |    |
| National Australia Bank        | 17        | 15        | 5,040            | 0.8          | -0.2         | 33         |                 |     |                 |    |
| Daiwa Securities Group Inc     | 18        | 26        | 4,762            | 0.7          | 0.3          | 4          |                 |     |                 |    |
| Westpac Banking                | 19        | 16        | 4,250            | 0.7          | -0.3         | 20         |                 |     |                 |    |
| Jefferies LLC                  | 20        | 22        | 3,444            | 0.5          | 0.0          | 23         |                 |     |                 |    |
| Commonwealth Bank of Australia | 21        | 20        | 2,998            | 0.5          | -0.1         | 19         |                 |     |                 |    |
| Mitsubishi UFJ Financial Group | 22        | 30        | 2,252            | 0.3          | 0.0          | 18         |                 |     |                 |    |
| PNC Financial Services Group   | 23        | 29        | 2,229            | 0.3          | -0.1         | 7          |                 |     |                 |    |
| Standard Chartered PLC         | 24        | 35        | 2,156            | 0.3          | 0.1          | 15         |                 |     |                 |    |
| Lloyds Bank                    | 25        | 17        | 2,117            | 0.3          | -0.5         | 10         |                 |     |                 |    |
| Industry Total                 |           |           | 655,294          | 100.0        |              | 1,065      |                 |     |                 |    |

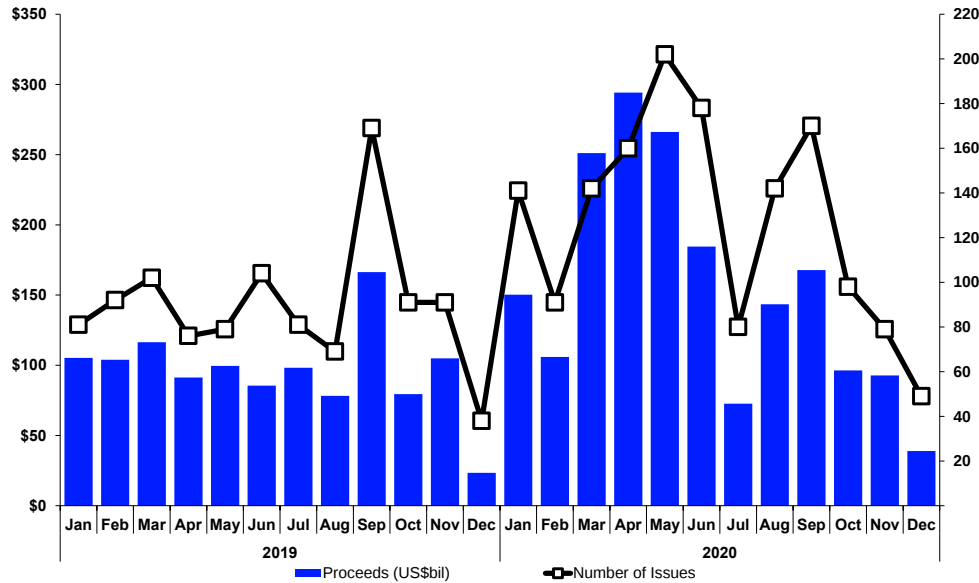
| Global ABS (B11)               |           |           |                  |              |              |            | YoY Change (\$) | -31% | QoQ Change (\$) | -26% |
|--------------------------------|-----------|-----------|------------------|--------------|--------------|------------|-----------------|------|-----------------|------|
| Bookrunner                     | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Mkt. Sh. Chg | # of Deals |                 |      |                 |      |
| Barclays                       | 1         | 3         | 25,039           | 8.7          | 0.9          | 104        |                 |      |                 |      |
| JP Morgan                      | 2         | 2         | 23,906           | 8.3          | 0.3          | 96         |                 |      |                 |      |
| Citi                           | 3         | 1         | 20,807           | 7.3          | -1.7         | 92         |                 |      |                 |      |
| BofA Securities Inc            | 4         | 5         | 18,945           | 6.6          | 0.1          | 80         |                 |      |                 |      |
| Mizuho Financial Group         | 5         | 8         | 18,279           | 6.4          | 1.7          | 137        |                 |      |                 |      |
| Goldman Sachs & Co             | 6         | 10        | 17,142           | 6.0          | 2.2          | 61         |                 |      |                 |      |
| Wells Fargo & Co               | 7         | 4         | 16,073           | 5.6          | -0.9         | 74         |                 |      |                 |      |
| RBC Capital Markets            | 8         | 9         | 15,174           | 5.3          | 0.8          | 69         |                 |      |                 |      |
| Deutsche Bank                  | 9         | 7         | 15,026           | 5.2          | -0.4         | 81         |                 |      |                 |      |
| Credit Suisse                  | 10        | 6         | 13,647           | 4.8          | -1.2         | 73         |                 |      |                 |      |
| Mitsubishi UFJ Financial Group | 11        | 13        | 12,346           | 4.3          | 0.8          | 52         |                 |      |                 |      |
| BNP Paribas SA                 | 12        | 11        | 10,582           | 3.7          | -0.1         | 41         |                 |      |                 |      |
| TD Securities Inc              | 13        | 17        | 7,657            | 2.7          | 1.1          | 31         |                 |      |                 |      |
| Societe Generale               | 14        | 14        | 7,655            | 2.7          | 0.2          | 25         |                 |      |                 |      |
| Morgan Stanley                 | 15        | 12        | 6,710            | 2.3          | -1.2         | 29         |                 |      |                 |      |
| Sumitomo Mitsui Finl Grp Inc   | 16        | 20        | 5,956            | 2.1          | 0.8          | 23         |                 |      |                 |      |
| BMO Capital Markets            | 17        | 22        | 5,460            | 1.9          | 0.7          | 30         |                 |      |                 |      |
| Santander Corp & Invest Bkg    | 18        | 25        | 5,208            | 1.8          | 0.9          | 14         |                 |      |                 |      |
| Credit Agricole CIB            | 19        | 15        | 5,010            | 1.8          | -0.1         | 19         |                 |      |                 |      |
| Lloyds Bank                    | 20        | 18        | 3,515            | 1.2          | -0.3         | 15         |                 |      |                 |      |
| Natixis                        | 21        | 16        | 2,884            | 1.0          | -0.8         | 8          |                 |      |                 |      |
| Truist Financial Corp          | 22        | 29        | 2,745            | 1.0          | 0.5          | 18         |                 |      |                 |      |
| Guggenheim Securities LLC      | 23        | 19        | 2,393            | 0.8          | -0.6         | 14         |                 |      |                 |      |
| Daiwa Securities Group Inc     | 24        | 26        | 1,820            | 0.6          | 0.0          | 5          |                 |      |                 |      |
| Sumitomo Mitsui Trust Holdings | 25        | 24        | 1,647            | 0.6          | -0.5         | 9          |                 |      |                 |      |
| Industry Total                 |           |           | 286,606          | 100.0        |              | 661        |                 |      |                 |      |

| Global Debt and Loans Islamic Finance |           |           |                  |              |              |            | YoY Change (\$) | -6% | QoQ Change (\$) | 8% |
|---------------------------------------|-----------|-----------|------------------|--------------|--------------|------------|-----------------|-----|-----------------|----|
| Bookrunner                            | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Mkt. Sh. Chg | # of Deals |                 |     |                 |    |
| Standard Chartered PLC                | 1         | 1         | 6,053            | 13.0         | 2.5          | 35         |                 |     |                 |    |
| CIMB Group Holdings Bhd               | 2         | 3         | 4,881            | 10.5         | 3.3          | 39         |                 |     |                 |    |
| HSBC Holdings PLC                     | 3         | 4         | 4,243            | 9.1          | 3.5          | 36         |                 |     |                 |    |
| Malayan Banking Bhd                   | 4         | 2         | 3,786            | 8.2          | 0.4          | 43         |                 |     |                 |    |
| RHB                                   | 5         | 6         | 2,350            | 5.1          | 0.4          | 34         |                 |     |                 |    |
| Dubai Islamic Bank PJSC               | 6         | 5         | 2,061            | 4.4          | -1.0         | 16         |                 |     |                 |    |
| First Abu Dhabi Bank PJSC             | 7         | 10        | 2,054            | 4.4          | 0.5          | 16         |                 |     |                 |    |
| Intl Islamic Trade Finance            | 8         | 9         | 1,716            | 3.7          | -0.5         | 11         |                 |     |                 |    |
| AMMB Holdings Bhd                     | 9         | 12        | 1,607            | 3.5          | 0.0          | 25         |                 |     |                 |    |
| JP Morgan                             | 10        | 7         | 1,374            | 3.0          | -1.5         | 6          |                 |     |                 |    |
| Citi                                  | 11        | 11        | 1,361            | 2.9          | -0.9         | 11         |                 |     |                 |    |
| Emirates NBD PJSC                     | 12        | 8         | 1,317            | 2.8          | -1.7         | 15         |                 |     |                 |    |
| K&N Kenanga Holdings Berhad           | 13        | 23        | 1,068            | 2.3          | 1.4          | 19         |                 |     |                 |    |
| Islamic Development Bank              | 14        | 53        | 893              | 1.9          | 1.6          | 9          |                 |     |                 |    |
| Natixis                               | 15        | 30        | 839              | 1.8          | 1.1          | 4          |                 |     |                 |    |
| Arab Banking Corporation              | 16        | 17        | 663              | 1.4          | -0.1         | 6          |                 |     |                 |    |
| Gulf International Bank               | 17        | 14        | 650              | 1.4          | -0.6         | 6          |                 |     |                 |    |
| Credit Agricole CIB                   | 18        | 31        | 556              | 1.2          | 0.6          | 5          |                 |     |                 |    |
| Sharjah Islamic Bank PJSC             | 19        | 18        | 528              | 1.1          | -0.3         | 5          |                 |     |                 |    |
| BNP Paribas SA                        | 20        | 20        | 500              | 1.1          | -0.2         | 1          |                 |     |                 |    |
| Affin Holdings Bhd                    | 21        | 25        | 473              | 1.0          | 0.2          | 12         |                 |     |                 |    |
| Kuwait Finance House                  | 22        | 13        | 452              | 1.0          | -2.0         | 7          |                 |     |                 |    |
| Bank Islam Malaysia                   | 23        | 19        | 409              | 0.9          | -0.4         | 4          |                 |     |                 |    |
| Hong Leong Financial Group Bhd        | 24        | 71        | 395              | 0.9          | 0.8          | 7          |                 |     |                 |    |
| Sumitomo Mitsui Finl Grp Inc          | 25        | -         | 373              | 0.8          | -            | 3          |                 |     |                 |    |
| Industry Total                        |           |           | 46,410           | 100.0        |              | 168        |                 |     |                 |    |

# United States Insights

Full Year 2020 | Debt Capital Markets | Managing Underwriters

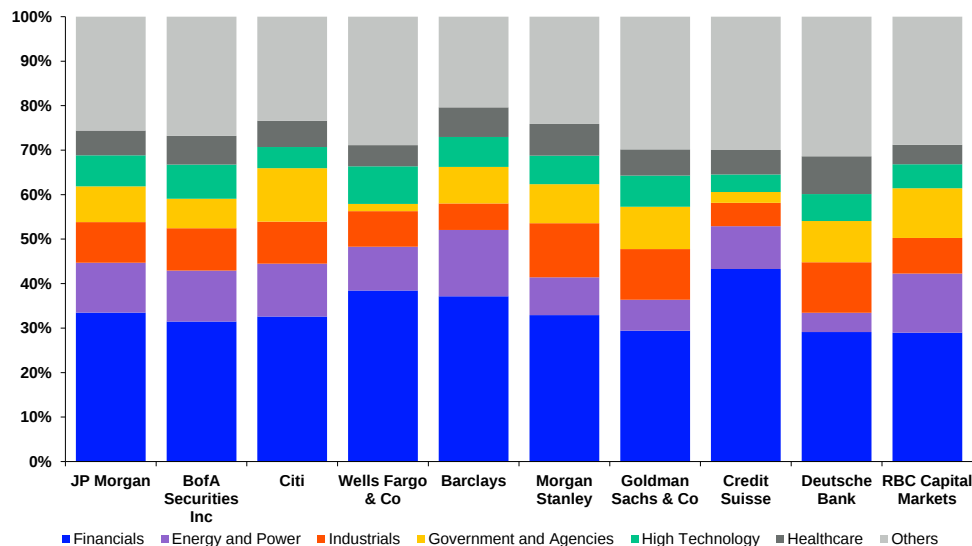
## United States Marketed Monthly High Yield Volume



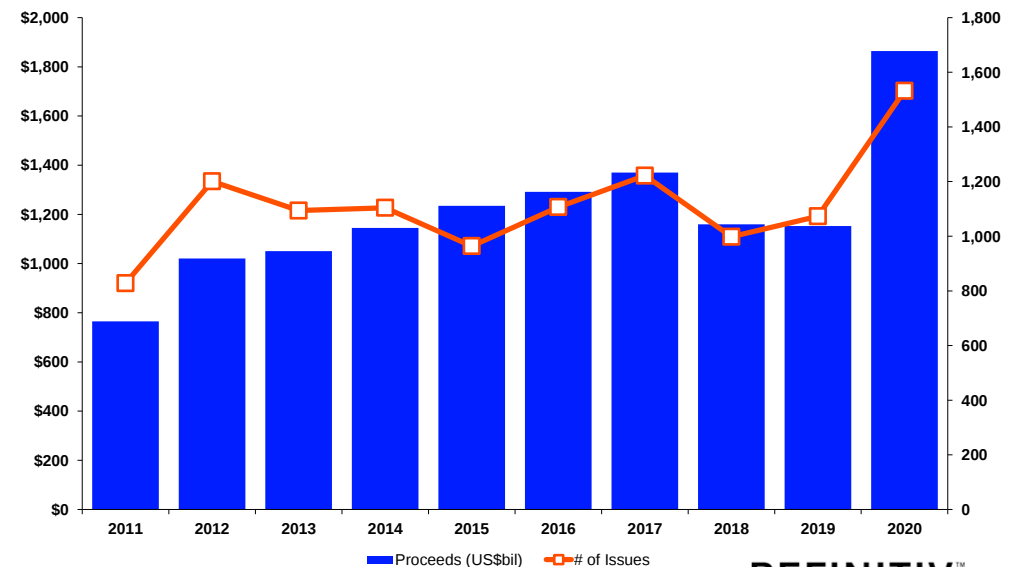
## Top United States Investment Grade Corporate Deals

| 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      |
| 11/10/20   | Verizon Communications Inc | United States   | 11,962              | 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        |

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



## United States Investment Grade - Proceeds



# United States Rankings

Full Year 2020 | Debt Capital Markets | Managing Underwriters

| U.S. Debt (F1)                 |           |           |                  |              |         |                 |  | YoY Change (\$) |  | 45% | QoQ Change (\$) |  | -27% |
|--------------------------------|-----------|-----------|------------------|--------------|---------|-----------------|--|-----------------|--|-----|-----------------|--|------|
| Bookrunner                     | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Sh. Chg | Mkt. # of Deals |  |                 |  |     |                 |  |      |
| JP Morgan                      | 1         | 1         | 482,118          | 12.1         | 1.0     | 1,618           |  |                 |  |     |                 |  |      |
| BofA Securities Inc            | 2         | 3         | 379,757          | 9.5          | 0.3     | 1,434           |  |                 |  |     |                 |  |      |
| Citi                           | 3         | 2         | 365,634          | 9.1          | -1.0    | 1,259           |  |                 |  |     |                 |  |      |
| Wells Fargo & Co               | 4         | 4         | 298,678          | 7.5          | 0.3     | 1,155           |  |                 |  |     |                 |  |      |
| Morgan Stanley                 | 5         | 5         | 272,152          | 6.8          | 0.1     | 955             |  |                 |  |     |                 |  |      |
| Goldman Sachs & Co             | 6         | 7         | 264,443          | 6.6          | 0.7     | 982             |  |                 |  |     |                 |  |      |
| Barclays                       | 7         | 6         | 263,852          | 6.6          | 0.2     | 894             |  |                 |  |     |                 |  |      |
| Credit Suisse                  | 8         | 8         | 164,338          | 4.1          | -0.7    | 568             |  |                 |  |     |                 |  |      |
| Deutsche Bank                  | 9         | 9         | 129,961          | 3.3          | -0.1    | 576             |  |                 |  |     |                 |  |      |
| RBC Capital Markets            | 10        | 10        | 114,953          | 2.9          | -0.1    | 697             |  |                 |  |     |                 |  |      |
| Nomura                         | 11        | 16        | 103,939          | 2.6          | 1.0     | 249             |  |                 |  |     |                 |  |      |
| HSBC Holdings PLC              | 12        | 11        | 102,796          | 2.6          | -0.4    | 339             |  |                 |  |     |                 |  |      |
| TD Securities Inc              | 13        | 15        | 92,952           | 2.3          | 0.2     | 382             |  |                 |  |     |                 |  |      |
| Mizuho Financial Group         | 14        | 14        | 92,039           | 2.3          | 0.2     | 472             |  |                 |  |     |                 |  |      |
| BNP Paribas SA                 | 15        | 12        | 79,738           | 2.0          | -0.4    | 351             |  |                 |  |     |                 |  |      |
| Mitsubishi UFJ Financial Group | 16        | 13        | 67,067           | 1.7          | -0.6    | 391             |  |                 |  |     |                 |  |      |
| Sumitomo Mitsui Finl Grp Inc   | 17        | 17        | 43,330           | 1.1          | 0.0     | 231             |  |                 |  |     |                 |  |      |
| US Bancorp                     | 18        | 24        | 42,255           | 1.1          | 0.3     | 266             |  |                 |  |     |                 |  |      |
| BMO Capital Markets            | 19        | 20        | 39,334           | 1.0          | 0.1     | 213             |  |                 |  |     |                 |  |      |
| Credit Agricole CIB            | 20        | 23        | 36,386           | 0.9          | 0.0     | 171             |  |                 |  |     |                 |  |      |
| <b>Industry Total</b>          |           |           | <b>3,999,303</b> | <b>100.0</b> |         | <b>6,299</b>    |  |                 |  |     |                 |  |      |

| U.S. High Yield Corporate Debt (F8) |           |           |                  |              |         |                 |  | YoY Change (\$) |  | 52% | QoQ Change (\$) |  | -23% |
|-------------------------------------|-----------|-----------|------------------|--------------|---------|-----------------|--|-----------------|--|-----|-----------------|--|------|
| Bookrunner                          | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Sh. Chg | Mkt. # of Deals |  |                 |  |     |                 |  |      |
| JP Morgan                           | 1         | 1         | 45,170           | 11.3         | 1.1     | 350             |  |                 |  |     |                 |  |      |
| BofA Securities Inc                 | 2         | 2         | 40,753           | 10.2         | 1.7     | 350             |  |                 |  |     |                 |  |      |
| Citi                                | 3         | 3         | 29,320           | 7.3          | -0.9    | 253             |  |                 |  |     |                 |  |      |
| Goldman Sachs & Co                  | 4         | 4         | 28,834           | 7.2          | 0.1     | 245             |  |                 |  |     |                 |  |      |
| Barclays                            | 5         | 6         | 28,566           | 7.1          | 1.2     | 234             |  |                 |  |     |                 |  |      |
| Wells Fargo & Co                    | 6         | 8         | 23,974           | 6.0          | 0.4     | 212             |  |                 |  |     |                 |  |      |
| Morgan Stanley                      | 7         | 5         | 22,555           | 5.6          | -1.2    | 160             |  |                 |  |     |                 |  |      |
| Deutsche Bank                       | 8         | 7         | 19,326           | 4.8          | -0.9    | 177             |  |                 |  |     |                 |  |      |
| Credit Suisse                       | 9         | 9         | 16,865           | 4.2          | -0.7    | 157             |  |                 |  |     |                 |  |      |
| RBC Capital Markets                 | 10        | 10        | 15,705           | 3.9          | -0.9    | 150             |  |                 |  |     |                 |  |      |
| Truist Financial Corp               | 11        | 15        | 9,737            | 2.4          | 0.4     | 106             |  |                 |  |     |                 |  |      |
| Mitsubishi UFJ Financial Group      | 12        | 16        | 9,521            | 2.4          | 0.5     | 109             |  |                 |  |     |                 |  |      |
| Mizuho Financial Group              | 13        | 13        | 7,895            | 2.0          | -0.2    | 89              |  |                 |  |     |                 |  |      |
| BNP Paribas SA                      | 14        | 11        | 7,452            | 1.9          | -0.7    | 92              |  |                 |  |     |                 |  |      |
| BMO Capital Markets                 | 15        | 14        | 6,698            | 1.7          | -0.3    | 81              |  |                 |  |     |                 |  |      |
| Jefferies LLC                       | 16        | 12        | 6,521            | 1.6          | -0.9    | 38              |  |                 |  |     |                 |  |      |
| HSBC Holdings PLC                   | 17        | 17        | 6,476            | 1.6          | -0.2    | 61              |  |                 |  |     |                 |  |      |
| TD Securities Inc                   | 18        | 20        | 6,158            | 1.5          | 0.5     | 65              |  |                 |  |     |                 |  |      |
| Scotiabank                          | 19        | 19        | 5,255            | 1.3          | -0.3    | 67              |  |                 |  |     |                 |  |      |
| US Bancorp                          | 20        | 27        | 5,023            | 1.3          | 0.7     | 52              |  |                 |  |     |                 |  |      |
| <b>Industry Total</b>               |           |           | <b>400,457</b>   | <b>100.0</b> |         | <b>555</b>      |  |                 |  |     |                 |  |      |

| U.S. Investment Grade Debt (F9) |           |           |                  |              |         |                 |  | YoY Change (\$) |  | 62% | QoQ Change (\$) |  | -41% |
|---------------------------------|-----------|-----------|------------------|--------------|---------|-----------------|--|-----------------|--|-----|-----------------|--|------|
| Bookrunner                      | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Sh. Chg | Mkt. # of Deals |  |                 |  |     |                 |  |      |
| JP Morgan                       | 1         | 2         | 237,411          | 12.7         | 2.3     | 766             |  |                 |  |     |                 |  |      |
| BofA Securities Inc             | 2         | 1         | 217,971          | 11.7         | 0.9     | 729             |  |                 |  |     |                 |  |      |
| Citi                            | 3         | 3         | 174,949          | 9.4          | -0.1    | 574             |  |                 |  |     |                 |  |      |
| Morgan Stanley                  | 4         | 4         | 140,237          | 7.5          | 0.0     | 457             |  |                 |  |     |                 |  |      |
| Goldman Sachs & Co              | 5         | 5         | 136,577          | 7.3          | 0.8     | 432             |  |                 |  |     |                 |  |      |
| Wells Fargo & Co                | 6         | 6         | 126,250          | 6.8          | 0.4     | 444             |  |                 |  |     |                 |  |      |
| Barclays                        | 7         | 7         | 82,062           | 4.4          | -1.4    | 296             |  |                 |  |     |                 |  |      |
| Mizuho Financial Group          | 8         | 10        | 61,700           | 3.3          | 0.0     | 262             |  |                 |  |     |                 |  |      |
| HSBC Holdings PLC               | 9         | 9         | 60,262           | 3.2          | -0.6    | 181             |  |                 |  |     |                 |  |      |
| Deutsche Bank                   | 10        | 11        | 59,038           | 3.2          | -0.1    | 207             |  |                 |  |     |                 |  |      |
| RBC Capital Markets             | 11        | 12        | 53,769           | 2.9          | 0.1     | 240             |  |                 |  |     |                 |  |      |
| Mitsubishi UFJ Financial Group  | 12        | 8         | 48,053           | 2.6          | -1.4    | 240             |  |                 |  |     |                 |  |      |
| BNP Paribas SA                  | 13        | 14        | 47,782           | 2.6          | 0.1     | 182             |  |                 |  |     |                 |  |      |
| Credit Suisse                   | 14        | 13        | 45,985           | 2.5          | -0.2    | 162             |  |                 |  |     |                 |  |      |
| US Bancorp                      | 15        | 16        | 36,879           | 2.0          | 0.2     | 211             |  |                 |  |     |                 |  |      |
| TD Securities Inc               | 16        | 17        | 34,609           | 1.9          | 0.2     | 156             |  |                 |  |     |                 |  |      |
| Sumitomo Mitsui Finl Grp Inc    | 17        | 15        | 32,876           | 1.8          | -0.2    | 156             |  |                 |  |     |                 |  |      |
| Scotiabank                      | 18        | 20        | 21,710           | 1.2          | 0.0     | 128             |  |                 |  |     |                 |  |      |
| Truist Financial Corp           | 19        | 19        | 21,263           | 1.1          | -0.1    | 145             |  |                 |  |     |                 |  |      |
| Societe Generale                | 20        | 18        | 20,837           | 1.1          | -0.2    | 84              |  |                 |  |     |                 |  |      |
| <b>Industry Total</b>           |           |           | <b>1,864,185</b> | <b>100.0</b> |         | <b>1,532</b>    |  |                 |  |     |                 |  |      |

| U.S. MBS (F11)        |           |           |                  |              |         |                 |  | YoY Change (\$) |  | 24% | QoQ Change (\$) |  | 8% |
|-----------------------|-----------|-----------|------------------|--------------|---------|-----------------|--|-----------------|--|-----|-----------------|--|----|
| Bookrunner            | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Sh. Chg | Mkt. # of Deals |  |                 |  |     |                 |  |    |
| JP Morgan             | 1         | 1         | 93,211           | 16.1         | 0.5     | 153             |  |                 |  |     |                 |  |    |
| Wells Fargo & Co      | 2         | 3         | 81,552           | 14.1         | 2.0     | 117             |  |                 |  |     |                 |  |    |
| Credit Suisse         | 3         | 2         | 78,377           | 13.5         | 0.6     | 154             |  |                 |  |     |                 |  |    |
| Morgan Stanley        | 4         | 6         | 66,073           | 11.4         | 1.2     | 101             |  |                 |  |     |                 |  |    |
| BofA Securities Inc   | 5         | 5         | 52,261           | 9.0          | -2.0    | 107             |  |                 |  |     |                 |  |    |
| Citi                  | 6         | 4         | 51,954           | 9.0          | -2.8    | 116             |  |                 |  |     |                 |  |    |
| Goldman Sachs & Co    | 7         | 7         | 42,693           | 7.4          | 0.8     | 131             |  |                 |  |     |                 |  |    |
| Nomura                | 8         | 8         | 35,493           | 6.1          | 1.6     | 105             |  |                 |  |     |                 |  |    |
| Barclays              | 9         | 9         | 16,335           | 2.8          | -1.1    | 65              |  |                 |  |     |                 |  |    |
| Amherst Securities    | 10        | 13        | 10,627           | 1.8          | 1.0     | 31              |  |                 |  |     |                 |  |    |
| <b>Industry Total</b> |           |           | <b>580,543</b>   | <b>100.0</b> |         | <b>848</b>      |  |                 |  |     |                 |  |    |

| U.S. ABS (F14)         |           |           |                  |              |         |                 |  | YoY Change (\$) |  | -32% | QoQ Change (\$) |  | -44% |
|------------------------|-----------|-----------|------------------|--------------|---------|-----------------|--|-----------------|--|------|-----------------|--|------|
| Bookrunner             | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Sh. Chg | Mkt. # of Deals |  |                 |  |      |                 |  |      |
| JP Morgan              | 1         | 2         | 22,505           | 10.2         | 0.3     | 90              |  |                 |  |      |                 |  |      |
| Barclays               | 2         | 3         | 21,214           | 9.6          | 0.2     | 90              |  |                 |  |      |                 |  |      |
| Citi                   | 3         | 1         | 17,403           | 7.9          | -2.7    | 79              |  |                 |  |      |                 |  |      |
| Wells Fargo & Co       | 4         | 4         | 15,815           | 7.2          | -1.1    | 73              |  |                 |  |      |                 |  |      |
| BofA Securities Inc    | 5         | 5         | 15,451           | 7.0          | -0.2    | 65              |  |                 |  |      |                 |  |      |
| Goldman Sachs & Co     | 6         | 9         | 14,232           | 6.4          | 2.3     | 54              |  |                 |  |      |                 |  |      |
| RBC Capital Markets    | 7         | 8         | 14,009           | 6.3          | 1.0     | 60              |  |                 |  |      |                 |  |      |
| Deutsche Bank          | 8         | 7         | 12,704           | 5.7          | 0.3     | 73              |  |                 |  |      |                 |  |      |
| Credit Suisse          | 9         | 6         | 11,727           | 5.3          | -1.6    | 64              |  |                 |  |      |                 |  |      |
| Mizuho Financial Group | 10        | 11        | 9,849            | 4.5          | 1.4     | 37              |  |                 |  |      |                 |  |      |
| <b>Industry Total</b>  |           |           | <b>221,157</b>   | <b>100.0</b> |         | <b>400</b>      |  |                 |  |      |                 |  |      |

| U.S. ABS ex Self & CDOs (F14b) |           |           |                  |              |         |                 |  | YoY Change (\$) |  | -19% | QoQ Change (\$) |  | -45% |
|--------------------------------|-----------|-----------|------------------|--------------|---------|-----------------|--|-----------------|--|------|-----------------|--|------|
| Bookrunner                     | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Sh. Chg | Mkt. # of Deals |  |                 |  |      |                 |  |      |
| Barclays                       | 1         | 2         | 17,123           | 8.9          | -0.2    | 80              |  |                 |  |      |                 |  |      |
| JP Morgan                      | 2         | 3         | 17,031           | 8.8          | 0.0     | 83              |  |                 |  |      |                 |  |      |
| Wells Fargo & Co               | 3         | 5         | 15,103           | 7.8          | 0.2     | 71              |  |                 |  |      |                 |  |      |
| BofA Securities Inc            | 4         | 4         | 13,890           | 7.2          | -0.8    | 61              |  |                 |  |      |                 |  |      |
| RBC Capital Markets            | 5         | 7         | 13,570           | 7.0          | 0.6     | 59              |  |                 |  |      |                 |  |      |
| Goldman Sachs & Co             | 6         | 11        | 12,601           | 6.5          | 2.7     | 49              |  |                 |  |      |                 |  |      |
| Citi                           | 7         | 1         | 12,477           | 6.5          | -3.2    | 67              |  |                 |  |      |                 |  |      |
| Deutsche Bank                  | 8         | 8         | 11,659           | 6.1          | -0.2    | 68              |  |                 |  |      |                 |  |      |
| Credit Suisse                  | 9         | 6         | 10,457           | 5.4          | -1.7    | 61              |  |                 |  |      |                 |  |      |
| Mizuho Financial Group         | 10        | 10        | 9,409            | 4.9          | 1.0     | 36              |  |                 |  |      |                 |  |      |
| <b>Industry Total</b>          |           |           | <b>192,865</b>   | <b>100.0</b> |         | <b>340</b>      |  |                 |  |      |                 |  |      |

| U.S. Securitizations (ex CMBS, Agency, CMO, Self-Funded & CDOs (F20a) |           |           |                  |              |         |                 |  | YoY Change (\$) |  | -24% | QoQ Change (\$) |  | -35% |
|-----------------------------------------------------------------------|-----------|-----------|------------------|--------------|---------|-----------------|--|-----------------|--|------|-----------------|--|------|
| Bookrunner                                                            | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Sh. Chg | Mkt. # of Deals |  |                 |  |      |                 |  |      |
| Credit Suisse                                                         | 1         | 1         | 23,217           | 9.1          | -1.8    | 136             |  |                 |  |      |                 |  |      |
| BofA Securities Inc                                                   | 2         | 3         | 21,962           | 8.6          | -0.9    | 92              |  |                 |  |      |                 |  |      |
| JP Morgan                                                             | 3         | 4         | 21,196           | 8.3          | -0.5    | 110             |  |                 |  |      |                 |  |      |
| Barclays                                                              | 4         | 5         | 21,146           | 8.3          | 0.1     | 109             |  |                 |  |      |                 |  |      |
| Goldman Sachs & Co                                                    | 5         | 9         | 18,861           | 7.4          | 3.2     | 86              |  |                 |  |      |                 |  |      |
| Wells Fargo & Co                                                      | 6         | 6         | 17,800           | 7.0          | -0.5    | 82              |  |                 |  |      |                 |  |      |
| Citi                                                                  | 7         | 2         | 16,273           | 6.4          | -3.9    | 89              |  |                 |  |      |                 |  |      |
| RBC Capital Markets                                                   | 8         | 8         | 13,782           | 5.4          | 0.9     | 61              |  |                 |  |      |                 |  |      |
| Deutsche Bank                                                         | 9         | 7         | 13,198           | 5.2          | -0.2    | 82              |  |                 |  |      |                 |  |      |
| Mizuho Financial Group                                                | 10        | 12        | 9,409            | 3.7          | 0.8     | 36              |  |                 |  |      |                 |  |      |
| <b>Industry Total</b>                                                 |           |           | <b>256,022</b>   | <b>100.0</b> |         | <b>514</b>      |  |                 |  |      |                 |  |      |

| US Residential MBS (F13b) |           |           | YoY Change (\$)  |              | -32%    | QoQ Change (\$) |  | -9% |
|---------------------------|-----------|-----------|------------------|--------------|---------|-----------------|--|-----|
| Bookrunner                | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Sh. Chg | Mkt. # of Deals |  |     |
| Credit Suisse             | 1         | 1         | 13,104           | 17.1         | -1.0    | 77              |  |     |
| JP Morgan                 | 2         | 2         | 10,783           | 14.1         | -0.2    | 41              |  |     |
| Goldman Sachs & Co        | 3         | 7         | 9,213            | 12.0         | 6.8     | 45              |  |     |
| Nomura                    | 4         | 4         | 8,607            | 11.2         | 0.2     | 59              |  |     |
| BofA Securities Inc       | 5         | 3         | 8,072            | 10.5         | -1.2    | 31              |  |     |
| Wells Fargo & Co          | 6         | 6         | 5,142            | 6.7          | -1.7    | 17              |  |     |
| Morgan Stanley            | 7         | 9         | 4,485            | 5.9          | 1.8     | 20              |  |     |
| Barclays                  | 8         | 8         | 4,023            | 5.3          | 0.5     | 29              |  |     |
| Citi                      | 9         | 5         | 3,796            | 5.0          | -5.2    | 22              |  |     |
| Deutsche Bank             | 10        | 10        | 1,540            | 2.0          | -0.5    | 14              |  |     |
| Industry Total            |           |           | 76,554           | 100.0        |         | 206             |  |     |

# International Debt & ESG Bonds Rankings

Full Year 2020 | Debt Capital Markets | Managing Underwriters

| All International Bonds (J01)  |           |           |                  |              |             |              | YoY Change (\$) | 29% | QoQ Change (\$) | -23% |
|--------------------------------|-----------|-----------|------------------|--------------|-------------|--------------|-----------------|-----|-----------------|------|
| Bookrunner                     | Rank 2020 | Rank 2019 | Proceeds US\$m   | Market Share | Mkt. Sh Chg | # of Deals   |                 |     |                 |      |
| JP Morgan                      | 1         | 1         | 453,336          | 8.8          | 0.8         | 1,826        |                 |     |                 |      |
| Citi                           | 2         | 2         | 370,546          | 7.2          | 0.3         | 1,387        |                 |     |                 |      |
| BofA Securities Inc            | 3         | 4         | 354,449          | 6.9          | 0.8         | 1,442        |                 |     |                 |      |
| Barclays                       | 4         | 3         | 327,885          | 6.4          | 0.3         | 1,220        |                 |     |                 |      |
| Goldman Sachs & Co             | 5         | 6         | 275,091          | 5.3          | 0.4         | 1,012        |                 |     |                 |      |
| HSBC Holdings PLC              | 6         | 5         | 251,607          | 4.9          | -0.5        | 1,113        |                 |     |                 |      |
| Deutsche Bank                  | 7         | 7         | 241,977          | 4.7          | 0.2         | 1,005        |                 |     |                 |      |
| BNP Paribas SA                 | 8         | 8         | 240,454          | 4.7          | 0.3         | 985          |                 |     |                 |      |
| Morgan Stanley                 | 9         | 9         | 215,780          | 4.2          | 0.1         | 821          |                 |     |                 |      |
| Credit Agricole CIB            | 10        | 11        | 158,982          | 3.1          | 0.1         | 696          |                 |     |                 |      |
| Wells Fargo & Co               | 11        | 13        | 142,516          | 2.8          | 0.4         | 633          |                 |     |                 |      |
| Societe Generale               | 12        | 12        | 120,981          | 2.3          | -0.3        | 458          |                 |     |                 |      |
| Credit Suisse                  | 13        | 10        | 120,253          | 2.3          | -0.8        | 701          |                 |     |                 |      |
| RBC Capital Markets            | 14        | 14        | 118,804          | 2.3          | 0.1         | 520          |                 |     |                 |      |
| UniCredit                      | 15        | 15        | 102,314          | 2.0          | 0.0         | 396          |                 |     |                 |      |
| Nomura                         | 16        | 20        | 99,338           | 1.9          | 0.5         | 294          |                 |     |                 |      |
| TD Securities Inc              | 17        | 18        | 99,102           | 1.9          | 0.2         | 428          |                 |     |                 |      |
| Mizuho Financial Group         | 18        | 17        | 92,525           | 1.8          | 0.1         | 528          |                 |     |                 |      |
| NatWest Markets                | 19        | 19        | 74,466           | 1.4          | -0.1        | 313          |                 |     |                 |      |
| Mitsubishi UFJ Financial Group | 20        | 16        | 68,869           | 1.3          | -0.5        | 431          |                 |     |                 |      |
| Santander Corp & Invest Bkg    | 21        | 23        | 65,610           | 1.3          | 0.0         | 282          |                 |     |                 |      |
| Commerzbank AG                 | 22        | 25        | 62,213           | 1.2          | 0.0         | 295          |                 |     |                 |      |
| Standard Chartered PLC         | 23        | 24        | 60,711           | 1.2          | 0.0         | 371          |                 |     |                 |      |
| Natixis                        | 24        | 21        | 60,637           | 1.2          | -0.1        | 284          |                 |     |                 |      |
| UBS                            | 25        | 22        | 46,612           | 0.9          | -0.4        | 331          |                 |     |                 |      |
| <b>Industry Total</b>          |           |           | <b>5,159,124</b> | <b>100.0</b> |             | <b>6,456</b> |                 |     |                 |      |

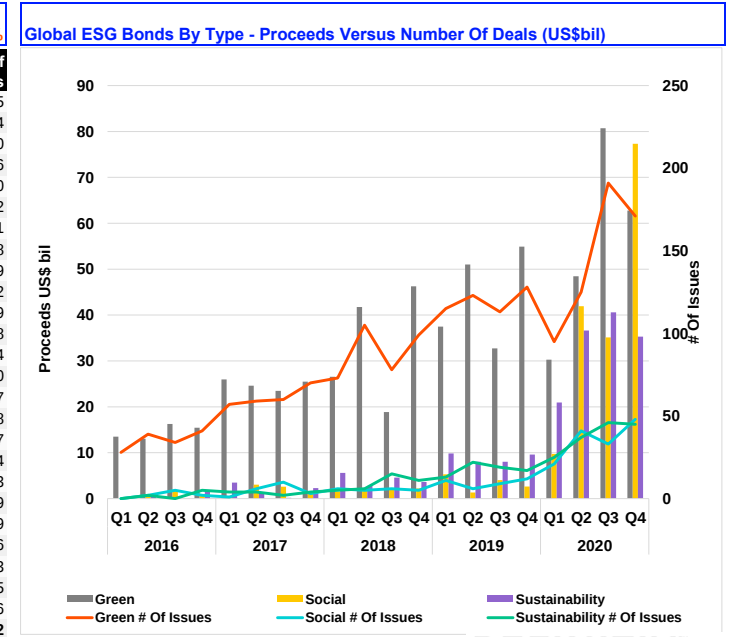
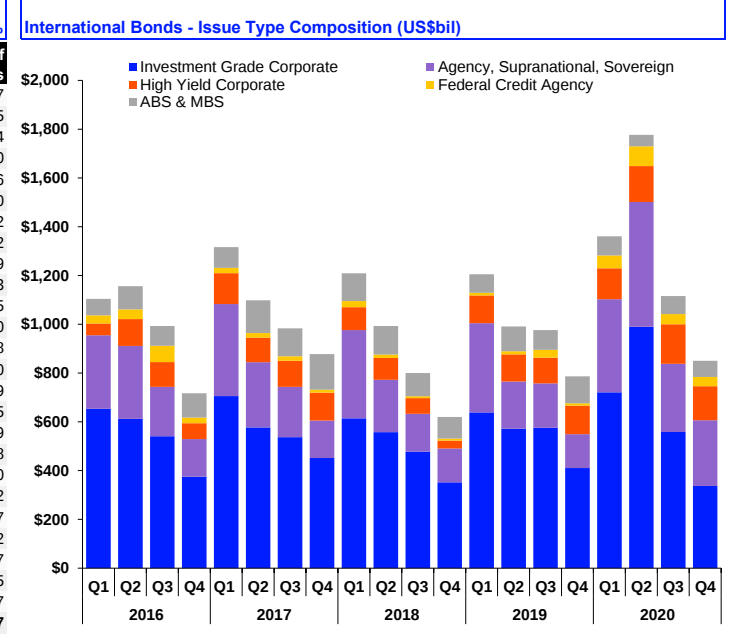
| All Global ESG Bonds (GESG1) |           |           |                |              |             |            | YoY Change (\$) | 132% | QoQ Change (\$) | 12% |
|------------------------------|-----------|-----------|----------------|--------------|-------------|------------|-----------------|------|-----------------|-----|
| Bookrunner                   | Rank 2020 | Rank 2019 | Proceeds US\$m | Market Share | Mkt. Sh Chg | # of Deals |                 |      |                 |     |
| JP Morgan                    | 1         | 5         | 34,658         | 6.7          | 2.4         | 130        |                 |      |                 |     |
| BNP Paribas SA               | 2         | 2         | 31,430         | 6.1          | 0.2         | 114        |                 |      |                 |     |
| Credit Agricole CIB          | 3         | 4         | 31,022         | 6.0          | 0.4         | 107        |                 |      |                 |     |
| HSBC Holdings PLC            | 4         | 1         | 29,961         | 5.8          | -0.2        | 138        |                 |      |                 |     |
| Citi                         | 5         | 6         | 29,201         | 5.6          | 1.5         | 105        |                 |      |                 |     |
| Barclays                     | 6         | 9         | 26,666         | 5.1          | 2.2         | 83         |                 |      |                 |     |
| BofA Securities Inc          | 7         | 3         | 24,476         | 4.7          | -1.1        | 102        |                 |      |                 |     |
| Deutsche Bank                | 8         | 15        | 20,625         | 4.0          | 1.9         | 79         |                 |      |                 |     |
| Societe Generale             | 9         | 7         | 19,471         | 3.8          | 0.3         | 63         |                 |      |                 |     |
| Morgan Stanley               | 10        | 10        | 19,413         | 3.7          | 0.9         | 100        |                 |      |                 |     |
| TD Securities Inc            | 11        | 19        | 17,364         | 3.3          | 1.8         | 45         |                 |      |                 |     |
| Nomura                       | 12        | 14        | 16,923         | 3.3          | 1.1         | 55         |                 |      |                 |     |
| Goldman Sachs & Co           | 13        | 11        | 12,986         | 2.5          | 0.0         | 54         |                 |      |                 |     |
| UniCredit                    | 14        | 16        | 12,939         | 2.5          | 0.4         | 46         |                 |      |                 |     |
| Natixis                      | 15        | 18        | 12,244         | 2.4          | 0.5         | 39         |                 |      |                 |     |
| NatWest Markets              | 16        | 23        | 10,793         | 2.1          | 0.7         | 40         |                 |      |                 |     |
| Commerzbank AG               | 17        | 31        | 10,631         | 2.1          | 1.2         | 25         |                 |      |                 |     |
| Mizuho Financial Group       | 18        | 13        | 9,717          | 1.9          | -0.3        | 81         |                 |      |                 |     |
| RBC Capital Markets          | 19        | 21        | 9,685          | 1.9          | 0.4         | 40         |                 |      |                 |     |
| ING                          | 20        | 8         | 8,674          | 1.7          | -1.3        | 56         |                 |      |                 |     |
| SEB                          | 21        | 12        | 6,683          | 1.3          | -1.1        | 56         |                 |      |                 |     |
| DZ Bank                      | 22        | 37        | 6,604          | 1.3          | 0.7         | 15         |                 |      |                 |     |
| BMO Capital Markets          | 23        | 38        | 6,287          | 1.2          | 0.6         | 23         |                 |      |                 |     |
| Santander Corp & Invest Bkg  | 24        | 24        | 6,137          | 1.2          | -0.1        | 38         |                 |      |                 |     |
| Danske Bank                  | 25        | 17        | 5,179          | 1.0          | -1.1        | 47         |                 |      |                 |     |
| <b>Industry Total</b>        |           |           | <b>519,779</b> | <b>100.0</b> |             | <b>878</b> |                 |      |                 |     |

\*Indicates a Tie

| All Bonds In Euros (N01)      |           |           |                  |              |             |              | YoY Change (\$) | 25% | QoQ Change (\$) | 13% |
|-------------------------------|-----------|-----------|------------------|--------------|-------------|--------------|-----------------|-----|-----------------|-----|
| Bookrunner                    | Rank 2020 | Rank 2019 | Proceeds €mil    | Market Share | Mkt. Sh Chg | # of Deals   |                 |     |                 |     |
| BNP Paribas SA                | 1         | 1         | 135,801          | 8.4          | 1.1         | 547          |                 |     |                 |     |
| JP Morgan                     | 2         | 2         | 111,795          | 6.9          | 0.7         | 435          |                 |     |                 |     |
| Credit Agricole CIB           | 3         | 4         | 100,666          | 6.2          | 0.4         | 384          |                 |     |                 |     |
| Deutsche Bank                 | 4         | 3         | 100,063          | 6.2          | 0.4         | 390          |                 |     |                 |     |
| HSBC Holdings PLC             | 5         | 6         | 93,937           | 5.8          | 0.1         | 406          |                 |     |                 |     |
| Barclays                      | 6         | 7         | 92,823           | 5.8          | 0.4         | 360          |                 |     |                 |     |
| UniCredit                     | 7         | 8         | 87,323           | 5.4          | 0.1         | 372          |                 |     |                 |     |
| Societe Generale              | 8         | 5         | 79,617           | 4.9          | -0.8        | 312          |                 |     |                 |     |
| Citi                          | 9         | 10        | 73,618           | 4.6          | 0.4         | 289          |                 |     |                 |     |
| BofA Securities Inc           | 10        | 11        | 71,699           | 4.5          | 0.4         | 283          |                 |     |                 |     |
| Goldman Sachs & Co            | 11        | 9         | 58,316           | 3.6          | -0.7        | 225          |                 |     |                 |     |
| Commerzbank AG                | 12        | 14        | 46,795           | 2.9          | 0.2         | 250          |                 |     |                 |     |
| Natixis                       | 13        | 12        | 46,780           | 2.9          | -0.1        | 218          |                 |     |                 |     |
| Morgan Stanley                | 14        | 13        | 36,494           | 2.3          | -0.6        | 160          |                 |     |                 |     |
| NatWest Markets               | 15        | 15        | 35,505           | 2.2          | -0.2        | 159          |                 |     |                 |     |
| Santander Corp & Invest Bkg   | 16        | 16        | 33,644           | 2.1          | -0.2        | 165          |                 |     |                 |     |
| ING                           | 17        | 17        | 28,505           | 1.8          | -0.3        | 159          |                 |     |                 |     |
| IMI - Intesa Sanpaolo         | 18        | 19        | 26,641           | 1.7          | 0.0         | 108          |                 |     |                 |     |
| Nomura                        | 19        | 25        | 26,477           | 1.6          | 0.8         | 60           |                 |     |                 |     |
| DZ Bank                       | 20        | 23        | 23,839           | 1.5          | 0.3         | 132          |                 |     |                 |     |
| Credit Suisse                 | 21        | 20        | 19,112           | 1.2          | -0.4        | 117          |                 |     |                 |     |
| Landesbank Baden-Wuerttemberg | 22        | 18        | 18,202           | 1.1          | -0.6        | 112          |                 |     |                 |     |
| BBVA                          | 23        | 21        | 18,173           | 1.1          | -0.4        | 97           |                 |     |                 |     |
| Mizuho Financial Group        | 24        | 33        | 13,984           | 0.9          | 0.3         | 75           |                 |     |                 |     |
| Danske Bank                   | 25        | 30        | 13,700           | 0.9          | 0.3         | 77           |                 |     |                 |     |
| <b>Industry Total</b>         |           |           | <b>1,612,816</b> | <b>100.0</b> |             | <b>2,057</b> |                 |     |                 |     |

| All Global Green Bonds (GR01)** |           |           |                |              |             |            | YoY Change (\$) | 26% | QoQ Change (\$) | -22% |
|---------------------------------|-----------|-----------|----------------|--------------|-------------|------------|-----------------|-----|-----------------|------|
| Bookrunner                      | Rank 2020 | Rank 2019 | Proceeds US\$m | Market Share | Mkt. Sh Chg | # of Deals |                 |     |                 |      |
| JP Morgan                       | 1         | 5         | 13,753         | 6.2          | 1.7         | 75         |                 |     |                 |      |
| BNP Paribas SA                  | 2         | 1         | 12,674         | 5.7          | -0.3        | 64         |                 |     |                 |      |
| Credit Agricole CIB             | 3         | 2         | 10,868         | 4.9          | -1.1        | 50         |                 |     |                 |      |
| Barclays                        | 4         | 7         | 10,762         | 4.8          | 1.7         | 46         |                 |     |                 |      |
| Deutsche Bank                   | 5         | 14        | 10,368         | 4.7          | 2.3         | 50         |                 |     |                 |      |
| Citi                            | 6         | 6         | 10,039         | 4.5          | 0.0         | 52         |                 |     |                 |      |
| Morgan Stanley                  | 7         | 11        | 9,101          | 4.1          | 1.4         | 61         |                 |     |                 |      |
| HSBC Holdings PLC               | 8         | 4         | 8,730          | 3.9          | -1.7        | 68         |                 |     |                 |      |
| BofA Securities Inc             | 9         | 3         | 8,377          | 3.8          | -2.0        | 59         |                 |     |                 |      |
| Societe Generale                | 10        | 8         | 7,241          | 3.3          | 0.3         | 32         |                 |     |                 |      |
| ING                             | 11        | 13        | 6,342          | 2.9          | 0.4         | 39         |                 |     |                 |      |
| UniCredit                       | 12        | 15        | 6,275          | 2.8          | 0.4         | 28         |                 |     |                 |      |
| NatWest Markets                 | 13        | 20        | 5,347          | 2.4          | 0.8         | 24         |                 |     |                 |      |
| Goldman Sachs & Co              | 14        | 10        | 5,072          | 2.3          | -0.5        | 30         |                 |     |                 |      |
| RBC Capital Markets             | 15        | 22        | 4,933          | 2.2          | 0.7         | 27         |                 |     |                 |      |
| Commerzbank AG                  | 16        | 27        | 4,776          | 2.2          | 1.1         | 18         |                 |     |                 |      |
| SEB                             | 17        | 9         | 4,403          | 2.0          | -0.9        | 47         |                 |     |                 |      |
| Danske Bank                     | 18        | 12        | 4,198          | 1.9          | -0.8        | 44         |                 |     |                 |      |
| Mizuho Financial Group          | 19        | 17        | 3,719          | 1.7          | 0.0         | 33         |                 |     |                 |      |
| Credit Suisse                   | 20        | 31        | 3,676          | 1.7          | 0.7         | 29         |                 |     |                 |      |
| Nomura                          | 21        | 24        | 3,342          | 1.5          | 0.2         | 29         |                 |     |                 |      |
| BBVA                            | 22        | 23        | 3,235          | 1.5          | 0.2         | 26         |                 |     |                 |      |
| Sumitomo Mitsui Finl Grp Inc    | 23        | 21        | 3,178          | 1.4          | -0.1        | 43         |                 |     |                 |      |
| Swedbank                        | 24        | 30        | 3,119          | 1.4          | 0.3         | 25         |                 |     |                 |      |
| Nordea                          | 25        | 18        | 3,111          | 1.4          | -0.3        | 36         |                 |     |                 |      |
| <b>Industry Total</b>           |           |           | <b>222,180</b> | <b>100.0</b> |             | <b>582</b> |                 |     |                 |      |

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



# High Yield Corporate Debt Rankings

Full Year 2020 | Debt Capital Markets | Managing Underwriters

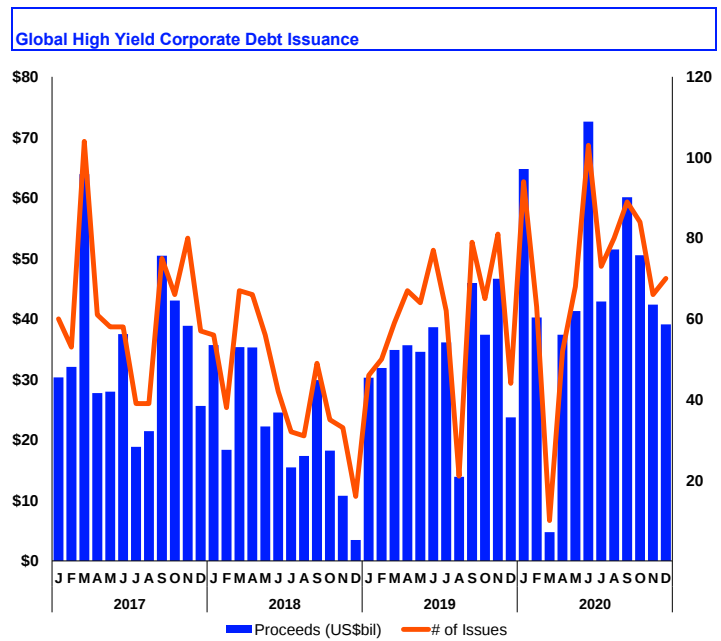
| Global High Yield Debt (B4)    |           |           |                |              |             |            |
|--------------------------------|-----------|-----------|----------------|--------------|-------------|------------|
|                                | Rank 2020 | Rank 2019 | Proceeds US\$m | Market Share | Mkt. Sh Chg | # of Deals |
| Bookrunner                     |           |           |                |              |             |            |
| JP Morgan                      | 1         | 1         | 53,082         | 9.7          | 0.9         | 416        |
| BofA Securities Inc            | 2         | 4         | 47,089         | 8.6          | 2.0         | 405        |
| Goldman Sachs & Co             | 3         | 2         | 35,553         | 6.5          | -0.4        | 302        |
| Barclays                       | 4         | 8         | 35,446         | 6.5          | 1.5         | 306        |
| Citi                           | 5         | 3         | 35,034         | 6.4          | -0.3        | 302        |
| Deutsche Bank                  | 6         | 5         | 28,319         | 5.2          | -0.7        | 280        |
| Morgan Stanley                 | 7         | 6         | 26,495         | 4.8          | -0.8        | 216        |
| Credit Suisse                  | 8         | 7         | 25,320         | 4.6          | -0.6        | 262        |
| Wells Fargo & Co               | 9         | 9         | 24,680         | 4.5          | 0.7         | 216        |
| BNP Paribas SA                 | 10        | 12        | 17,418         | 3.2          | 0.0         | 181        |
| RBC Capital Markets            | 11        | 11        | 17,394         | 3.2          | -0.1        | 159        |
| HSBC Holdings PLC              | 12        | 10        | 13,763         | 2.5          | -0.8        | 153        |
| Mitsubishi UFJ Financial Group | 13        | 20        | 10,383         | 1.9          | 0.6         | 119        |
| Truist Financial Corp          | 14        | 19        | 9,960          | 1.8          | 0.5         | 110        |
| Credit Agricole CIB            | 15        | 13        | 9,513          | 1.7          | -0.4        | 87         |
| Mizuho Financial Group         | 16        | 16        | 9,476          | 1.7          | 0.1         | 100        |
| UBS                            | 17        | 14        | 8,502          | 1.6          | -0.2        | 112        |
| BMO Capital Markets            | 18        | 17        | 6,933          | 1.3          | -0.2        | 84         |
| Jefferies LLC                  | 19        | 15        | 6,658          | 1.2          | -0.5        | 41         |
| Societe Generale               | 20        | 21        | 6,348          | 1.2          | 0.1         | 55         |
| TD Securities Inc              | 21        | 29        | 6,311          | 1.2          | 0.5         | 66         |
| Scotiabank                     | 22        | 22        | 5,752          | 1.1          | 0.0         | 72         |
| Sumitomo Mitsui Finl Grp Inc   | 23        | 28        | 5,105          | 0.9          | 0.2         | 53         |
| US Bancorp                     | 24        | 42        | 5,023          | 0.9          | 0.5         | 52         |
| PNC Financial Services Group   | 25        | 43        | 4,682          | 0.9          | 0.5         | 52         |
| <b>Industry Total</b>          |           |           | <b>547,396</b> | <b>100.0</b> |             | <b>852</b> |

| Global High Yield Debt USD Denominated (B5) |           |           |                |              |             |            |
|---------------------------------------------|-----------|-----------|----------------|--------------|-------------|------------|
|                                             | Rank 2020 | Rank 2019 | Proceeds US\$m | Market Share | Mkt. Sh Chg | # of Deals |
| Bookrunner                                  |           |           |                |              |             |            |
| JP Morgan                                   | 1         | 1         | 46,162         | 10.2         | 1.3         | 369        |
| BofA Securities Inc                         | 2         | 2         | 43,031         | 9.5          | 2.2         | 376        |
| Goldman Sachs & Co                          | 3         | 4         | 30,444         | 6.7          | 0.2         | 266        |
| Citi                                        | 4         | 3         | 30,113         | 6.7          | -0.1        | 268        |
| Barclays                                    | 5         | 8         | 30,074         | 6.7          | 1.6         | 271        |
| Morgan Stanley                              | 6         | 5         | 24,124         | 5.3          | -1.0        | 190        |
| Wells Fargo & Co                            | 7         | 9         | 24,029         | 5.3          | 0.7         | 213        |
| Deutsche Bank                               | 8         | 7         | 21,629         | 4.8          | -0.5        | 238        |
| Credit Suisse                               | 9         | 6         | 21,203         | 4.7          | -1.0        | 229        |
| RBC Capital Markets                         | 10        | 10        | 15,705         | 3.5          | -0.4        | 150        |
| Truist Financial Corp                       | 11        | 18        | 9,737          | 2.2          | 0.6         | 106        |
| Mitsubishi UFJ Financial Group              | 12        | 19        | 9,651          | 2.1          | 0.6         | 110        |
| BNP Paribas SA                              | 13        | 12        | 8,896          | 2.0          | -0.3        | 123        |
| HSBC Holdings PLC                           | 14        | 11        | 8,825          | 2.0          | -0.7        | 112        |
| Mizuho Financial Group                      | 15        | 14        | 8,176          | 1.8          | 0.0         | 92         |
| UBS                                         | 16        | 15        | 7,540          | 1.7          | 0.0         | 106        |
| BMO Capital Markets                         | 17        | 16        | 6,828          | 1.5          | -0.2        | 82         |
| Jefferies LLC                               | 18        | 13        | 6,521          | 1.4          | -0.6        | 38         |
| TD Securities Inc                           | 19        | 25        | 6,158          | 1.4          | 0.6         | 65         |
| Scotiabank                                  | 20        | 21        | 5,385          | 1.2          | -0.1        | 68         |
| US Bancorp                                  | 21        | 35        | 5,023          | 1.1          | 0.6         | 52         |
| Credit Agricole CIB                         | 22        | 20        | 4,851          | 1.1          | -0.3        | 57         |
| PNC Financial Services Group                | 23        | 36        | 4,617          | 1.0          | 0.5         | 51         |
| Sumitomo Mitsui Finl Grp Inc                | 24        | 26        | 4,399          | 1.0          | 0.2         | 48         |
| Fifth Third Bancorp                         | 25        | 27        | 3,596          | 0.8          | 0.0         | 47         |
| <b>Industry Total</b>                       |           |           | <b>451,510</b> | <b>100.0</b> |             | <b>713</b> |

| Top High Yield Corporate Deals |                              |                 |                |          |                         |
|--------------------------------|------------------------------|-----------------|----------------|----------|-------------------------|
| Issue Date                     | Issuer                       | Domicile Nation | Proceeds US\$m | 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             |
| 10/16/20                       | Ligado Networks LLC          | United States   | 3,600.0        | 15.500   | Telecommunications      |
| 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              |
| 10/14/20                       | Rolls-Royce PLC              | United Kingdom  | 2,590.1        | 5.750    | Industrials             |
| 3/4/20                         | CCO Holdings, LLC            | United States   | 2,527.5        | 4.500    | Media and Entertainment |

| Global High Yield Debt Non-USD Denominated (B6) |           |           |               |              |             |            |
|-------------------------------------------------|-----------|-----------|---------------|--------------|-------------|------------|
|                                                 | Rank 2020 | Rank 2019 | Proceeds €mil | Market Share | Mkt. Sh Chg | # of Deals |
| Bookrunner                                      |           |           |               |              |             |            |
| BNP Paribas SA                                  | 1         | 5         | 7,357         | 8.8          | 2.4         | 68         |
| JP Morgan                                       | 2         | 2         | 6,044         | 7.2          | -1.0        | 59         |
| Deutsche Bank                                   | 3         | 3         | 5,854         | 7.0          | -1.1        | 53         |
| Barclays                                        | 4         | 8         | 4,728         | 5.7          | 1.0         | 45         |
| Goldman Sachs & Co                              | 5         | 1         | 4,459         | 5.3          | -3.3        | 48         |
| Citi                                            | 6         | 4         | 4,333         | 5.2          | -1.3        | 45         |
| HSBC Holdings PLC                               | 7         | 6         | 4,309         | 5.2          | -0.4        | 51         |
| Credit Agricole CIB                             | 8         | 7         | 4,045         | 4.8          | 0.0         | 37         |
| UniCredit                                       | 9         | 12        | 3,730         | 4.5          | 1.3         | 34         |
| Credit Suisse                                   | 10        | 10        | 3,624         | 4.3          | 0.9         | 38         |
| BofA Securities Inc                             | 11        | 9         | 3,563         | 4.3          | 0.5         | 38         |
| Societe Generale                                | 12        | 11        | 2,654         | 3.2          | -0.2        | 27         |
| ING                                             | 13        | 15        | 2,403         | 2.9          | 0.5         | 26         |
| NatWest Markets                                 | 14        | 17        | 2,181         | 2.6          | 0.8         | 26         |
| Morgan Stanley                                  | 15        | 13        | 2,068         | 2.5          | -0.6        | 30         |
| IMI - Intesa Sanpaolo                           | 16        | 19        | 1,502         | 1.8          | 0.4         | 18         |
| RBC Capital Markets                             | 17        | 26        | 1,494         | 1.8          | 0.9         | 14         |
| Natixis                                         | 18        | 14        | 1,352         | 1.6          | -0.8        | 11         |
| Commerzbank AG                                  | 19        | 18        | 1,308         | 1.6          | 0.1         | 16         |
| Lloyds Bank                                     | 20        | 34        | 1,152         | 1.4          | 0.8         | 13         |
| Santander Corp & Invest Bkg                     | 21        | 20        | 1,123         | 1.3          | 0.0         | 17         |
| Mizuho Financial Group                          | 22        | 24        | 1,121         | 1.3          | 0.3         | 12         |
| Mediobanca                                      | 23        | 33        | 1,017         | 1.2          | 0.6         | 11         |
| UBS                                             | 24        | 16        | 857           | 1.0          | -1.1        | 8          |
| Nordea                                          | 25        | 23        | 781           | 0.9          | -0.1        | 13         |
| <b>Industry Total</b>                           |           |           | <b>83,649</b> | <b>100.0</b> |             | <b>158</b> |

| Global High Yield Debt EURO Denominated (B06b) |           |           |               |              |             |            |
|------------------------------------------------|-----------|-----------|---------------|--------------|-------------|------------|
|                                                | Rank 2020 | Rank 2019 | Proceeds €mil | Market Share | Mkt. Sh Chg | # of Deals |
| Bookrunner                                     |           |           |               |              |             |            |
| BNP Paribas SA                                 | 1         | 5         | 6,787         | 9.4          | 2.6         | 62         |
| JP Morgan                                      | 2         | 3         | 5,477         | 7.6          | -1.0        | 55         |
| Deutsche Bank                                  | 3         | 1         | 5,432         | 7.5          | -1.2        | 50         |
| Citi                                           | 4         | 4         | 4,020         | 5.6          | -1.4        | 42         |
| Credit Agricole CIB                            | 5         | 7         | 3,900         | 5.4          | 0.2         | 35         |
| UniCredit                                      | 6         | 11        | 3,730         | 5.2          | 1.8         | 34         |
| Goldman Sachs & Co                             | 7         | 2         | 3,673         | 5.1          | -3.6        | 43         |
| Barclays                                       | 8         | 10        | 3,431         | 4.8          | 1.2         | 36         |
| BofA Securities Inc                            | 9         | 8         | 3,352         | 4.6          | 0.8         | 34         |
| Credit Suisse                                  | 10        | 12        | 3,303         | 4.6          | 1.4         | 33         |
| HSBC Holdings PLC                              | 11        | 6         | 3,269         | 4.5          | -1.1        | 42         |
| Societe Generale                               | 12        | 9         | 2,526         | 3.5          | -0.2        | 26         |
| ING                                            | 13        | 15        | 2,214         | 3.1          | 0.7         | 23         |
| Morgan Stanley                                 | 14        | 13        | 1,942         | 2.7          | -0.5        | 27         |
| IMI - Intesa Sanpaolo                          | 15        | 19        | 1,383         | 1.9          | 0.5         | 16         |
| Natixis                                        | 16        | 14        | 1,352         | 1.9          | -0.7        | 11         |
| NatWest Markets                                | 17        | 20        | 1,311         | 1.8          | 0.4         | 19         |
| RBC Capital Markets                            | 18        | 28        | 1,252         | 1.7          | 1.0         | 10         |
| Commerzbank AG                                 | 19        | 17        | 1,175         | 1.6          | 0.0         | 14         |
| Mizuho Financial Group                         | 20        | 22        | 1,085         | 1.5          | 0.4         | 12         |
| Santander Corp & Invest Bkg                    | 21        | 18        | 948           | 1.3          | -0.1        | 15         |
| Mediobanca                                     | 22        | 31        | 947           | 1.3          | 0.8         | 10         |
| UBS                                            | 23        | 16        | 857           | 1.2          | -1.1        | 8          |
| KKR & Co Inc                                   | 24        | 36        | 662           | 0.9          | 0.5         | 4          |
| Nordea                                         | 25        | 24        | 619           | 0.9          | 0.1         | 8          |
| <b>Industry Total</b>                          |           |           | <b>72,165</b> | <b>100.0</b> |             | <b>124</b> |



# Emerging Markets Rankings

Full Year 2020 | Debt Capital Markets | Managing Underwriters

| All International Emerging Market Bonds (L1) |           |           |                  |              |         |              |            | YoY Change (\$) |  | 8% | QoQ Change (\$) |  | -15% |
|----------------------------------------------|-----------|-----------|------------------|--------------|---------|--------------|------------|-----------------|--|----|-----------------|--|------|
| Bookrunner                                   | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Sh. Chg | Mkt. Sh. Chg | # of Deals |                 |  |    |                 |  |      |
| Citi                                         | 1         | 1         | 65,321           | 8.8          | 0.7     | 279          |            |                 |  |    |                 |  |      |
| JP Morgan                                    | 2         | 3         | 54,702           | 7.3          | -0.1    | 271          |            |                 |  |    |                 |  |      |
| HSBC Holdings PLC                            | 3         | 2         | 54,564           | 7.3          | -0.6    | 364          |            |                 |  |    |                 |  |      |
| Standard Chartered PLC                       | 4         | 4         | 43,275           | 5.8          | 0.6     | 288          |            |                 |  |    |                 |  |      |
| Goldman Sachs & Co                           | 5         | 5         | 36,660           | 4.9          | 0.4     | 142          |            |                 |  |    |                 |  |      |
| Deutsche Bank                                | 6         | 8         | 34,621           | 4.6          | 1.3     | 154          |            |                 |  |    |                 |  |      |
| BNP Paribas SA                               | 7         | 6         | 32,658           | 4.4          | 0.3     | 180          |            |                 |  |    |                 |  |      |
| BofA Securities Inc                          | 8         | 7         | 30,226           | 4.1          | 0.8     | 158          |            |                 |  |    |                 |  |      |
| Credit Agricole CIB                          | 9         | 10        | 19,912           | 2.7          | -0.1    | 139          |            |                 |  |    |                 |  |      |
| Morgan Stanley                               | 10        | 9         | 19,807           | 2.7          | -0.1    | 110          |            |                 |  |    |                 |  |      |
| Barclays                                     | 11        | 14        | 18,182           | 2.4          | 0.3     | 120          |            |                 |  |    |                 |  |      |
| UBS                                          | 12        | 13        | 17,188           | 2.3          | 0.1     | 168          |            |                 |  |    |                 |  |      |
| Bank of China Ltd                            | 13        | 12        | 17,057           | 2.3          | 0.0     | 220          |            |                 |  |    |                 |  |      |
| Credit Suisse                                | 14        | 11        | 17,002           | 2.3          | 0.0     | 149          |            |                 |  |    |                 |  |      |
| Societe Generale                             | 15        | 16        | 13,953           | 1.9          | 0.4     | 69           |            |                 |  |    |                 |  |      |
| Mizuho Financial Group                       | 16        | 15        | 13,727           | 1.8          | -0.1    | 122          |            |                 |  |    |                 |  |      |
| Industrial & Comm Bank China                 | 17        | 18        | 10,638           | 1.4          | 0.0     | 139          |            |                 |  |    |                 |  |      |
| DBS Group Holdings                           | 18        | 20        | 10,000           | 1.3          | 0.0     | 125          |            |                 |  |    |                 |  |      |
| CITIC                                        | 19        | 19        | 9,977            | 1.3          | -0.1    | 189          |            |                 |  |    |                 |  |      |
| Mitsubishi UFJ Financial Group               | 20        | 22        | 9,929            | 1.3          | 0.1     | 70           |            |                 |  |    |                 |  |      |
| <b>Industry Total</b>                        |           |           | <b>746,852</b>   | <b>100.0</b> |         | <b>1,233</b> |            |                 |  |    |                 |  |      |

| EMEA Emerging Market Bonds (L2) |           |           |                  |              |         |              |            | YoY Change (\$) |  | 18% | QoQ Change (\$) |  | 50% |
|---------------------------------|-----------|-----------|------------------|--------------|---------|--------------|------------|-----------------|--|-----|-----------------|--|-----|
| Bookrunner                      | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Sh. Chg | Mkt. Sh. Chg | # of Deals |                 |  |     |                 |  |     |
| JP Morgan                       | 1         | 1         | 19,445           | 15.0         | 1.2     | 61           |            |                 |  |     |                 |  |     |
| Citi                            | 2         | 2         | 16,047           | 12.4         | -1.1    | 45           |            |                 |  |     |                 |  |     |
| BNP Paribas SA                  | 3         | 3         | 12,163           | 9.4          | 2.8     | 35           |            |                 |  |     |                 |  |     |
| Deutsche Bank                   | 4         | 6         | 6,121            | 4.7          | 0.1     | 16           |            |                 |  |     |                 |  |     |
| UniCredit                       | 5         | 16        | 5,907            | 4.6          | 2.9     | 21           |            |                 |  |     |                 |  |     |
| HSBC Holdings PLC               | 6         | 7         | 5,587            | 4.3          | -0.2    | 20           |            |                 |  |     |                 |  |     |
| Societe Generale                | 7         | 9         | 5,565            | 4.3          | 0.4     | 22           |            |                 |  |     |                 |  |     |
| Barclays                        | 8         | 24        | 5,163            | 4.0          | 3.1     | 17           |            |                 |  |     |                 |  |     |
| ING                             | 9         | 12        | 5,153            | 4.0          | 1.4     | 16           |            |                 |  |     |                 |  |     |
| Erste Group                     | 10        | 11        | 4,662            | 3.6          | 1.0     | 11           |            |                 |  |     |                 |  |     |
| Goldman Sachs & Co              | 11        | 10        | 4,540            | 3.5          | 0.1     | 14           |            |                 |  |     |                 |  |     |
| Gazprombank                     | 12        | 8         | 4,097            | 3.2          | -1.2    | 17           |            |                 |  |     |                 |  |     |
| BofA Securities Inc             | 13        | 17        | 3,145            | 2.4          | 0.8     | 13           |            |                 |  |     |                 |  |     |
| Morgan Stanley                  | 14        | 14        | 2,636            | 2.0          | 0.3     | 5            |            |                 |  |     |                 |  |     |
| Standard Chartered PLC          | 15        | 5         | 2,530            | 2.0          | -3.2    | 10           |            |                 |  |     |                 |  |     |
| VTB Capital                     | 16        | 4         | 2,196            | 1.7          | -4.1    | 14           |            |                 |  |     |                 |  |     |
| Credit Agricole CIB             | 17        | 22        | 2,170            | 1.7          | 0.6     | 6            |            |                 |  |     |                 |  |     |
| Sberbank CIB                    | 18        | 19        | 2,147            | 1.7          | 0.6     | 9            |            |                 |  |     |                 |  |     |
| IMI - Intesa Sanpaolo           | 19        | 18        | 2,124            | 1.6          | 0.3     | 7            |            |                 |  |     |                 |  |     |
| Raiffeisen Bank International   | 20        | 32        | 1,895            | 1.5          | 1.0     | 7            |            |                 |  |     |                 |  |     |
| <b>Industry Total</b>           |           |           | <b>129,357</b>   | <b>100.0</b> |         | <b>129</b>   |            |                 |  |     |                 |  |     |

| Latin America Emerging Market Bonds (L3) |           |           |                  |              |         |              |            | YoY Change (\$) |  | 1% | QoQ Change (\$) |  | -11% |
|------------------------------------------|-----------|-----------|------------------|--------------|---------|--------------|------------|-----------------|--|----|-----------------|--|------|
| Bookrunner                               | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Sh. Chg | Mkt. Sh. Chg | # of Deals |                 |  |    |                 |  |      |
| JP Morgan                                | 1         | 2         | 13,925           | 12.2         | 0.2     | 55           |            |                 |  |    |                 |  |      |
| Citi                                     | 2         | 1         | 13,086           | 11.5         | -0.9    | 36           |            |                 |  |    |                 |  |      |
| Deutsche Bank                            | 3         | 13        | 10,746           | 9.4          | 7.2     | 12           |            |                 |  |    |                 |  |      |
| Goldman Sachs & Co                       | 4         | 3         | 8,770            | 7.7          | -2.8    | 35           |            |                 |  |    |                 |  |      |
| BofA Securities Inc                      | 5         | 4         | 8,341            | 7.3          | -1.9    | 42           |            |                 |  |    |                 |  |      |
| Scotiabank                               | 6         | 7         | 6,937            | 6.1          | 1.0     | 24           |            |                 |  |    |                 |  |      |
| Itau Unibanco                            | 7         | 9         | 6,699            | 5.9          | 1.6     | 24           |            |                 |  |    |                 |  |      |
| Santander Corp & Invest Bkg              | 8         | 6         | 6,671            | 5.8          | 0.3     | 30           |            |                 |  |    |                 |  |      |
| BNP Paribas SA                           | 9         | 10        | 5,188            | 4.5          | 1.0     | 17           |            |                 |  |    |                 |  |      |
| Morgan Stanley                           | 10        | 8         | 4,928            | 4.3          | 0.0     | 23           |            |                 |  |    |                 |  |      |
| HSBC Holdings PLC                        | 11        | 5         | 4,583            | 4.0          | -2.3    | 14           |            |                 |  |    |                 |  |      |
| Credit Suisse                            | 12        | 14        | 4,408            | 3.9          | 1.7     | 15           |            |                 |  |    |                 |  |      |
| BBVA                                     | 13        | 15        | 3,649            | 3.2          | 1.1     | 11           |            |                 |  |    |                 |  |      |
| Sumitomo Mitsui Finl Grp Inc             | 14        | 19        | 2,077            | 1.8          | 0.4     | 8            |            |                 |  |    |                 |  |      |
| Credit Agricole CIB                      | 15        | 18        | 1,772            | 1.6          | 0.2     | 6            |            |                 |  |    |                 |  |      |
| Barclays                                 | 16        | 12        | 1,519            | 1.3          | -1.1    | 5            |            |                 |  |    |                 |  |      |
| Banco Bradesco SA                        | 17        | 11        | 1,262            | 1.1          | -1.4    | 14           |            |                 |  |    |                 |  |      |
| Mitsubishi UFJ Financial Group           | 18        | 25        | 1,259            | 1.1          | 0.5     | 6            |            |                 |  |    |                 |  |      |
| Banco BTG Pactual SA                     | 19        | 21        | 1,028            | 0.9          | 0.0     | 10           |            |                 |  |    |                 |  |      |
| Mizuho Financial Group                   | 20        | 16        | 966              | 0.8          | -1.2    | 6            |            |                 |  |    |                 |  |      |
| <b>Industry Total</b>                    |           |           | <b>114,296</b>   | <b>100.0</b> |         | <b>126</b>   |            |                 |  |    |                 |  |      |

| Asia Pacific Emerging Market Bonds (L4) |           |           |                  |              |         |              |            | YoY Change (\$) |  | 1% | QoQ Change (\$) |  | -31% |
|-----------------------------------------|-----------|-----------|------------------|--------------|---------|--------------|------------|-----------------|--|----|-----------------|--|------|
| Bookrunner                              | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Sh. Chg | Mkt. Sh. Chg | # of Deals |                 |  |    |                 |  |      |
| HSBC Holdings PLC                       | 1         | 1         | 30,374           | 8.1          | -1.0    | 272          |            |                 |  |    |                 |  |      |
| Citi                                    | 2         | 2         | 20,947           | 5.6          | 0.3     | 160          |            |                 |  |    |                 |  |      |
| Standard Chartered PLC                  | 3         | 3         | 20,512           | 5.5          | 0.3     | 200          |            |                 |  |    |                 |  |      |
| Bank of China Ltd                       | 4         | 4         | 16,204           | 4.3          | 0.0     | 214          |            |                 |  |    |                 |  |      |
| JP Morgan                               | 5         | 5         | 16,140           | 4.3          | 0.8     | 129          |            |                 |  |    |                 |  |      |
| UBS                                     | 6         | 7         | 15,400           | 4.1          | 0.9     | 154          |            |                 |  |    |                 |  |      |
| BofA Securities Inc                     | 7         | 14        | 13,840           | 3.7          | 1.0     | 94           |            |                 |  |    |                 |  |      |
| Goldman Sachs & Co                      | 8         | 10        | 13,510           | 3.6          | 0.8     | 77           |            |                 |  |    |                 |  |      |
| Credit Suisse                           | 9         | 9         | 11,349           | 3.0          | 0.0     | 128          |            |                 |  |    |                 |  |      |
| BNP Paribas SA                          | 10        | 8         | 11,244           | 3.0          | -0.1    | 118          |            |                 |  |    |                 |  |      |
| <b>Industry Total</b>                   |           |           | <b>376,332</b>   | <b>100.0</b> |         | <b>813</b>   |            |                 |  |    |                 |  |      |

| Middle East Emerging Market Bonds (L5) |           |           |                  |              |         |              |            | YoY Change (\$) |  | 35% | QoQ Change (\$) |  | -11% |
|----------------------------------------|-----------|-----------|------------------|--------------|---------|--------------|------------|-----------------|--|-----|-----------------|--|------|
| Bookrunner                             | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Sh. Chg | Mkt. Sh. Chg | # of Deals |                 |  |     |                 |  |      |
| Standard Chartered PLC                 | 1         | 1         | 19,996           | 15.5         | 4.4     | 77           |            |                 |  |     |                 |  |      |
| Citi                                   | 2         | 4         | 15,598           | 12.1         | 3.5     | 39           |            |                 |  |     |                 |  |      |
| HSBC Holdings PLC                      | 3         | 2         | 14,228           | 11.0         | 1.2     | 57           |            |                 |  |     |                 |  |      |
| Goldman Sachs & Co                     | 4         | 6         | 10,835           | 8.4          | 3.0     | 17           |            |                 |  |     |                 |  |      |
| Deutsche Bank                          | 5         | 8         | 7,104            | 5.5          | 0.4     | 15           |            |                 |  |     |                 |  |      |
| First Abu Dhabi Bank PJSC              | 6         | 7         | 7,068            | 5.5          | 0.4     | 31           |            |                 |  |     |                 |  |      |
| JP Morgan                              | 7         | 3         | 6,252            | 4.9          | -4.7    | 25           |            |                 |  |     |                 |  |      |
| BofA Securities Inc                    | 8         | 27        | 5,215            | 4.1          | 3.6     | 9            |            |                 |  |     |                 |  |      |
| Credit Agricole CIB                    | 9         | 9         | 4,870            | 3.8          | -0.4    | 21           |            |                 |  |     |                 |  |      |
| BNP Paribas SA                         | 10        | 5         | 4,029            | 3.1          | -3.1    | 9            |            |                 |  |     |                 |  |      |
| <b>Industry Total</b>                  |           |           | <b>128,850</b>   | <b>100.0</b> |         | <b>164</b>   |            |                 |  |     |                 |  |      |

| All Global Debt, by Brazilian Issuers (BR1) |           |           |                  |              |         |              |            | YoY Change (\$) |  | 7% | QoQ Change (\$) |  | 14% |
|---------------------------------------------|-----------|-----------|------------------|--------------|---------|--------------|------------|-----------------|--|----|-----------------|--|-----|
| Bookrunner                                  | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Sh. Chg | Mkt. Sh. Chg | # of Deals |                 |  |    |                 |  |     |
| Deutsche Bank                               | 1         | 22        | 9,864            | 22.4         | 21.9    | 8            |            |                 |  |    |                 |  |     |
| Itau Unibanco                               | 2         | 1         | 5,744            | 13.0         | -1.5    | 38           |            |                 |  |    |                 |  |     |
| Santander Corp & Invest Bkg                 | 3         | 3         | 3,407            | 7.7          | -3.7    | 26           |            |                 |  |    |                 |  |     |
| JP Morgan                                   | 4         | 9         | 3,200            | 7.3          | 3.8     | 19           |            |                 |  |    |                 |  |     |
| BofA Securities Inc                         | 5         | 11        | 2,996            | 6.8          | 3.9     | 14           |            |                 |  |    |                 |  |     |
| Banco BTG Pactual SA                        | 6         | 8         | 2,455            | 5.6          | 0.8     | 21           |            |                 |  |    |                 |  |     |
| Citi                                        | 7         | 5         | 2,148            | 4.9          | -2.2    | 16           |            |                 |  |    |                 |  |     |
| BNP Paribas SA                              | 8         | 7         | 2,123            | 4.8          | -0.2    | 7            |            |                 |  |    |                 |  |     |
| Banco Bradesco SA                           | 9         | 2         | 2,049            | 4.7          | -9.3    | 26           |            |                 |  |    |                 |  |     |
| Scotiabank                                  | 10        | 18*       | 1,700            | 3.9          | 2.9     | 6            |            |                 |  |    |                 |  |     |
| <b>Industry Total</b>                       |           |           | <b>44,107</b>    | <b>100.0</b> |         | <b>100</b>   |            |                 |  |    |                 |  |     |

| Domestic Brazilian Debt, in Reals (BR2) |           |           |                 |              |         |              |            | YoY Change (\$) |  | -37% | QoQ Change (\$) |  | -76% |
|-----------------------------------------|-----------|-----------|-----------------|--------------|---------|--------------|------------|-----------------|--|------|-----------------|--|------|
| Bookrunner                              | Rank 2020 | Rank 2019 | Proceeds R\$mil | Market Share | Sh. Chg | Mkt. Sh. Chg | # of Deals |                 |  |      |                 |  |      |
| Itau Unibanco                           | 1         | 1         | 12,901          | 25.6         | -0.8    | 27           |            |                 |  |      |                 |  |      |
| Banco BTG Pactual SA                    | 2         | 5         | 8,817           | 17.5         | 10.5    | 14           |            |                 |  |      |                 |  |      |
| Banco Bradesco SA                       | 3         | 2         | 6,459           | 12.8         | -5.9    | 19           |            |                 |  |      |                 |  |      |
| Santander Corp & Invest Bkg             | 4         | 3         | 5,127           | 10.2         | -7.0    | 20           |            |                 |  |      |                 |  |      |
| BNP Paribas SA                          | 5         | 10        | 3,840           | 7.6          | 6.9     | 2            |            |                 |  |      |                 |  |      |
| Banco do Brasil SA                      | 6         | 4         | 3,550           | 7.0          | -9.9    | 12           |            |                 |  |      |                 |  |      |
| Banco Safra SA                          | 7         | -         | 2,117           | 4.2          | 4.2     | 5            |            |                 |  |      |                 |  |      |
| XP Investimentos                        | 8         | 6         | 1,669           | 3.3          | -0.5    | 5            |            |                 |  |      |                 |  |      |
| Banco Votorantim                        | 9         | 9         | 1,323           | 2.6          | 1.8     | 5            |            |                 |  |      |                 |  |      |
| JP Morgan                               | 10        | 18        | 1,122           | 2.2          | 1.9     | 3            |            |                 |  |      |                 |  |      |
| <b>Industry Total</b>                   |           |           | <b>50,468</b>   | <b>100.0</b> |         | <b>91</b>    |            |                 |  |      |                 |  |      |

\*Indicates a Tie

| Global Debt, Mexican Issuers (MX1) |           |           |                  |              |              |            |  | YoY Change (\$) | 4% | QoQ Change (\$) | -20% |
|------------------------------------|-----------|-----------|------------------|--------------|--------------|------------|--|-----------------|----|-----------------|------|
| Bookrunner                         | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Mkt. Sh. Chg | # of Deals |  |                 |    |                 |      |
| JP Morgan                          | 1         | 3         | 6,646            | 13.3         | 4.7          | 18         |  |                 |    |                 |      |
| BBVA                               | 2         | 6         | 6,564            | 13.1         | 5.9          | 50         |  |                 |    |                 |      |
| Goldman Sachs & Co                 | 3         | 1         | 5,626            | 11.3         | -5.3         | 11         |  |                 |    |                 |      |
| Citi                               | 4         | 2         | 4,990            | 10.0         | 0.1          | 24         |  |                 |    |                 |      |
| Santander Corp & Invest Bkg        | 5         | 4         | 4,640            | 9.3          | 1.3          | 35         |  |                 |    |                 |      |
| BofA Securities Inc                | 6         | 5         | 3,250            | 6.5          | -1.3         | 14         |  |                 |    |                 |      |
| Morgan Stanley                     | 7         | 8         | 2,541            | 5.1          | 0.2          | 9          |  |                 |    |                 |      |
| BNP Paribas SA                     | 8         | 20        | 2,111            | 4.2          | 3.2          | 7          |  |                 |    |                 |      |
| Mizuho Financial Group             | 9         | 11        | 1,707            | 3.4          | 0.1          | 3          |  |                 |    |                 |      |
| Barclays                           | 10        | 9         | 1,519            | 3.0          | -1.0         | 5          |  |                 |    |                 |      |
| Industry Total                     |           |           | 49,944           | 100.0        |              | 99         |  |                 |    |                 |      |

# Asia-Pacific Rankings

Full Year 2020 | Debt Capital Markets | Managing Underwriters

## Asian G3 Bonds

(ex-Japan & Australia) (AR2)

|                                | Rank 2020 | Rank 2019 | Proceeds US\$m | Market Share | Mkt. Sh Chg | # of Deals |
|--------------------------------|-----------|-----------|----------------|--------------|-------------|------------|
| <b>Bookrunner</b>              |           |           |                |              |             |            |
| HSBC Holdings PLC              | 1         | 1         | 26,817         | 7.2          | -1.4        | 223        |
| Citi                           | 2         | 2         | 23,337         | 6.3          | 0.9         | 156        |
| Standard Chartered PLC         | 3         | 3         | 19,422         | 5.2          | 0.0         | 181        |
| JP Morgan                      | 4         | 5         | 16,825         | 4.5          | 0.8         | 121        |
| BofA Securities Inc            | 5         | 7         | 15,636         | 4.2          | 1.0         | 93         |
| Goldman Sachs & Co             | 6         | 9         | 15,437         | 4.1          | 1.0         | 78         |
| Bank of China Ltd              | 7         | 4         | 15,299         | 4.1          | -0.2        | 201        |
| UBS                            | 8         | 10        | 14,268         | 3.8          | 0.7         | 148        |
| BNP Paribas SA                 | 9         | 11        | 12,020         | 3.2          | 0.3         | 116        |
| Morgan Stanley                 | 10        | 15        | 11,295         | 3.0          | 0.5         | 73         |
| Deutsche Bank                  | 11        | 16        | 11,267         | 3.0          | 0.5         | 109        |
| Credit Agricole CIB            | 12        | 6         | 10,928         | 2.9          | -0.5        | 85         |
| Credit Suisse                  | 13        | 8         | 10,839         | 2.9          | -0.2        | 124        |
| CITIC                          | 14        | 14        | 9,476          | 2.5          | -0.1        | 180        |
| DBS Group Holdings             | 15        | 17        | 9,126          | 2.5          | 0.1         | 111        |
| Industrial & Comm Bank China   | 16        | 18        | 8,901          | 2.4          | 0.3         | 118        |
| Mizuho Financial Group         | 17        | 13        | 8,736          | 2.3          | -0.5        | 83         |
| Barclays                       | 18        | 19        | 7,795          | 2.1          | 0.1         | 79         |
| Bank of Communications Co Ltd  | 19        | 20        | 6,706          | 1.8          | -0.2        | 101        |
| Haitong Securities Co Ltd      | 20        | 12        | 6,256          | 1.7          | -1.2        | 170        |
| China Construction Bank        | 21        | 22        | 6,239          | 1.7          | -0.1        | 109        |
| Guotai Junan Securities        | 22        | 21        | 6,031          | 1.6          | -0.2        | 159        |
| China International Capital Co | 23        | 23        | 5,381          | 1.4          | -0.2        | 100        |
| Mitsubishi UFJ Financial Group | 24        | 27        | 5,374          | 1.4          | 0.2         | 42         |
| China Merchants Bank           | 25        | 24        | 5,033          | 1.4          | -0.1        | 122        |
| <b>Industry Total</b>          |           |           | <b>373,219</b> | <b>100.0</b> |             | <b>669</b> |

## All Asian Currencies

(ex Japan & Australia) (AS1)

|                                | Rank 2020 | Rank 2019 | Proceeds US\$m   | Market Share | Mkt. Sh Chg | # of Deals    |
|--------------------------------|-----------|-----------|------------------|--------------|-------------|---------------|
| <b>Bookrunner</b>              |           |           |                  |              |             |               |
| Bank of China Ltd              | 1         | 1         | 159,899          | 6.0          | -1.3        | 2,109         |
| CITIC                          | 2         | 4         | 155,676          | 5.9          | 0.8         | 1,976         |
| Industrial & Comm Bank China   | 3         | 2         | 152,589          | 5.8          | -0.7        | 1,983         |
| China Construction Bank        | 4         | 3         | 137,911          | 5.2          | -0.5        | 2,060         |
| Bank of Communications Co Ltd  | 5         | 5         | 119,509          | 4.5          | -0.5        | 1,738         |
| Agricultural Bank of China     | 6         | 6         | 115,746          | 4.4          | 0.0         | 1,673         |
| CSC Financial Co Ltd           | 7         | 7         | 97,601           | 3.7          | 0.0         | 1,218         |
| Industrial Bank Co Ltd         | 8         | 8         | 79,997           | 3.0          | 0.2         | 1,240         |
| Guotai Junan Securities        | 9         | 9         | 71,256           | 2.7          | 0.3         | 889           |
| Huatai Securities Co Ltd       | 10        | 16        | 64,916           | 2.5          | 1.1         | 749           |
| China Merchants Bank           | 11        | 10        | 63,121           | 2.4          | 0.1         | 791           |
| China International Capital Co | 12        | 11        | 57,992           | 2.2          | 0.1         | 506           |
| China Minsheng Banking Corp    | 13        | 12        | 52,111           | 2.0          | 0.0         | 748           |
| Haitong Securities Co Ltd      | 14        | 14        | 50,821           | 1.9          | 0.1         | 593           |
| Shanghai Pudong Development Bk | 15        | 13        | 48,702           | 1.8          | 0.0         | 633           |
| Postal Savings Bank Of China   | 16        | 15        | 43,515           | 1.6          | 0.2         | 615           |
| Everbright Securities Co Ltd   | 17        | 21        | 33,619           | 1.3          | 0.2         | 467           |
| China Everbright Bank          | 18        | 23        | 30,864           | 1.2          | 0.2         | 409           |
| China Merchants Securities Co  | 19        | 20        | 30,736           | 1.2          | 0.1         | 302           |
| Shenwan Hongyuan Securities Co | 20        | 27        | 27,509           | 1.0          | 0.2         | 249           |
| KB Financial Group Inc         | 21        | 19        | 25,879           | 1.0          | -0.2        | 608           |
| NH Investment & Securities Co  | 22        | 22        | 25,393           | 1.0          | 0.0         | 510           |
| Ping An Securities Ltd         | 23        | 26        | 24,033           | 0.9          | 0.1         | 296           |
| Orient Securities Co Ltd       | 24        | 43        | 20,778           | 0.8          | 0.3         | 344           |
| Guosen Securities Co Ltd       | 25        | 42        | 20,506           | 0.8          | 0.3         | 311           |
| <b>Industry Total</b>          |           |           | <b>2,653,464</b> | <b>100.0</b> |             | <b>12,625</b> |

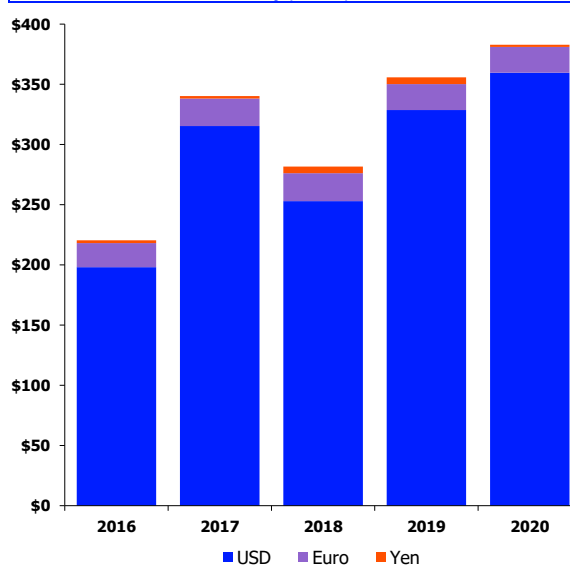
\*Indicates a Tie

## Asian G3 High Yield Bonds

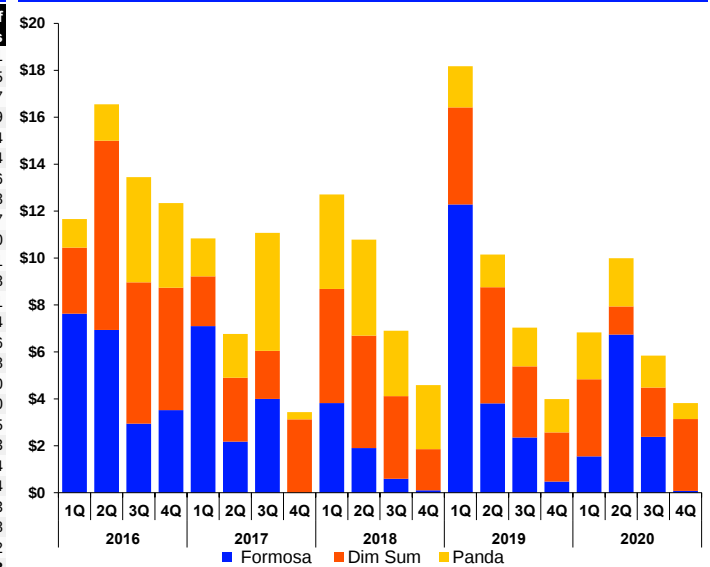
(ex Japan & Australia) (AR10)

|                               | Rank 2020 | Rank 2019 | Proceeds US\$m | Market Share | Mkt. Sh Chg | # of Deals |
|-------------------------------|-----------|-----------|----------------|--------------|-------------|------------|
| <b>Bookrunner</b>             |           |           |                |              |             |            |
| Credit Suisse                 | 1         | 1         | 4,301          | 8.3          | -0.6        | 71         |
| UBS                           | 2         | 5         | 3,509          | 6.7          | 1.6         | 65         |
| Haitong Securities Co Ltd     | 3         | 2         | 3,391          | 6.5          | -1.7        | 97         |
| CITIC                         | 4         | 4         | 3,193          | 6.1          | 0.3         | 69         |
| Guotai Junan Securities       | 5         | 7         | 2,991          | 5.7          | 1.1         | 84         |
| Deutsche Bank                 | 6         | 6         | 2,625          | 5.0          | 0.1         | 64         |
| BofA Securities Inc           | 7         | 17        | 2,162          | 4.2          | 2.1         | 26         |
| HSBC Holdings PLC             | 8         | 3         | 1,971          | 3.8          | -2.7        | 48         |
| Bank of China Ltd             | 9         | 9         | 1,831          | 3.5          | -0.5        | 37         |
| Standard Chartered PLC        | 10        | 12        | 1,788          | 3.4          | 0.6         | 30         |
| Morgan Stanley                | 11        | 8         | 1,736          | 3.3          | -0.7        | 31         |
| Barclays                      | 12        | 16        | 1,651          | 3.2          | 1.1         | 38         |
| Goldman Sachs & Co            | 13        | 11        | 1,615          | 3.1          | -0.3        | 21         |
| BNP Paribas SA                | 14        | 20        | 1,563          | 3.0          | 1.5         | 34         |
| Tianfeng Securities Co Ltd    | 15        | 49        | 1,357          | 2.6          | 2.4         | 6          |
| China Merchants Bank          | 16        | 18        | 1,235          | 2.4          | 0.4         | 38         |
| China Construction Bank       | 17        | 22        | 1,033          | 2.0          | 0.7         | 30         |
| JP Morgan                     | 18        | 10        | 1,018          | 2.0          | -1.6        | 20         |
| Bank of Communications Co Ltd | 19        | 24        | 787            | 1.5          | 0.4         | 15         |
| Orient Securities Co Ltd      | 20        | 15        | 739            | 1.4          | -1.1        | 23         |
| China Minsheng Banking Corp   | 21        | 29        | 705            | 1.4          | 0.7         | 24         |
| Bank of East Asia Ltd         | 22        | 28        | 694            | 1.3          | 0.5         | 24         |
| Citi                          | 23        | 27        | 627            | 1.2          | 0.3         | 13         |
| HeungKong Group Ltd           | 24        | 23        | 582            | 1.1          | -0.2        | 18         |
| DBS Group Holdings            | 25        | 26        | 537            | 1.0          | 0.0         | 12         |
| <b>Industry Total</b>         |           |           | <b>52,115</b>  | <b>100.0</b> |             | <b>158</b> |

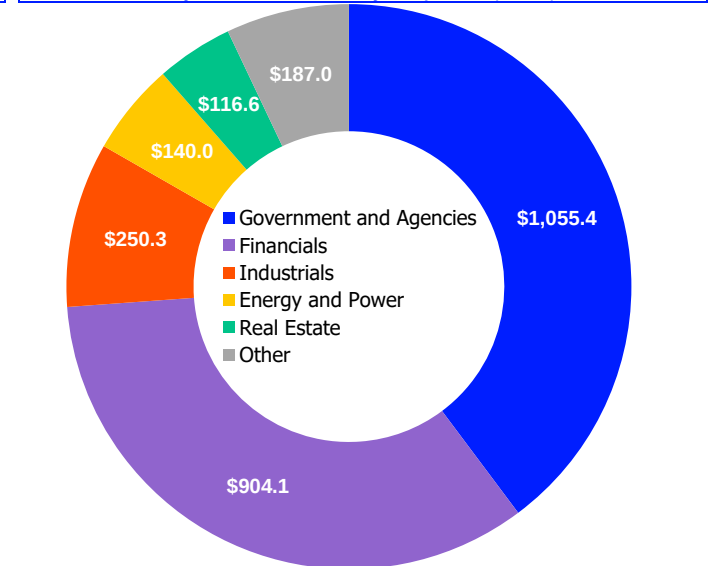
## Asian G3 Bond Volume - Currency (US\$b)



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



## Asian Local Currency Bonds - Macro Industry Composition (US\$b)



# Australia & China Rankings

Full Year 2020 | Debt Capital Markets | Managing Underwriters

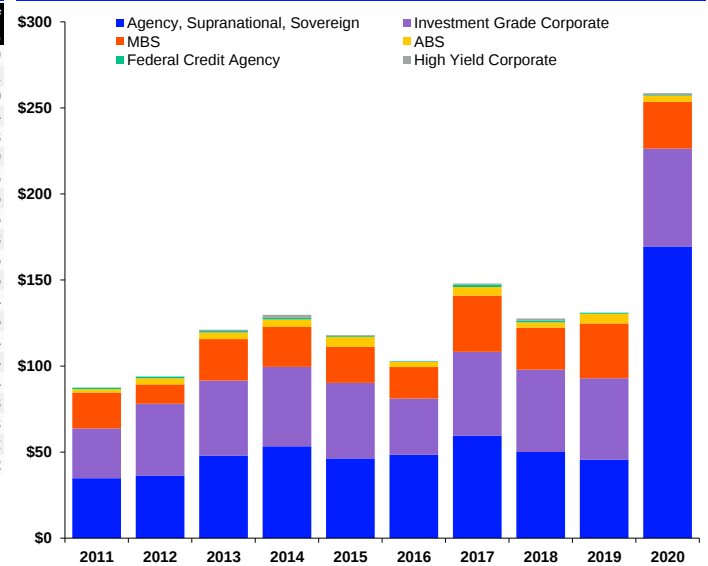
**All Australian Debt (ex self-funded) (AJ3a)** YoY Change (\$) 93% QoQ Change (\$) -61%

| Bookrunner                     | Rank 2020 | Rank 2019 | Proceeds AU\$mil | Market Share | Mkt. Sh Chg | # of Deals |
|--------------------------------|-----------|-----------|------------------|--------------|-------------|------------|
| Westpac Banking                | 1         | 2         | 34,474           | 13.4         | -1.6        | 83         |
| ANZ Banking Group              | 2         | 1         | 34,008           | 13.2         | -3.7        | 79         |
| UBS                            | 3         | 5         | 33,901           | 13.2         | 8.1         | 41         |
| Commonwealth Bank of Australia | 4         | 4         | 32,190           | 12.5         | 1.9         | 83         |
| National Australia Bank        | 5         | 3         | 23,427           | 9.1          | -5.6        | 118        |
| Deutsche Bank                  | 6         | 6         | 18,177           | 7.1          | 2.6         | 29         |
| Citi                           | 7         | 14        | 16,968           | 6.6          | 4.7         | 30         |
| JP Morgan                      | 8         | 12        | 16,679           | 6.5          | 4.5         | 22         |
| BofA Securities Inc            | 9         | 15        | 14,213           | 5.5          | 4.0         | 14         |
| TD Securities Inc              | 10        | 7         | 6,595            | 2.6          | -1.7        | 47         |
| Nomura                         | 11        | 8         | 3,908            | 1.5          | -2.5        | 26         |
| Macquarie Group                | 12        | 10        | 3,317            | 1.3          | -1.5        | 19         |
| RBC Capital Markets            | 13        | 9         | 3,044            | 1.2          | -1.7        | 16         |
| Standard Chartered PLC         | 14        | 16        | 2,273            | 0.9          | -0.4        | 13         |
| Mitsubishi UFJ Financial Group | 15        | 17        | 2,032            | 0.8          | -0.4        | 12         |
| HSBC Holdings PLC              | 16        | 11        | 2,019            | 0.8          | -1.5        | 14         |
| Sumitomo Mitsui Finl Grp Inc   | 17        | 23        | 1,853            | 0.7          | 0.3         | 9          |
| Mizuho Financial Group         | 18        | 13        | 1,233            | 0.5          | -1.5        | 16         |
| Natixis                        | 19        | 22        | 896              | 0.4          | -0.2        | 8          |
| Credit Suisse                  | 20        | 33        | 881              | 0.3          | 0.1         | 5          |
| <b>Industry Total</b>          |           |           | <b>257,583</b>   | <b>100.0</b> |             | <b>300</b> |

**All Australian International Bonds (AJ7)** YoY Change (\$) -14% QoQ Change (\$) -18%

| Bookrunner                     | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Mkt. Sh Chg | # of Deals |
|--------------------------------|-----------|-----------|------------------|--------------|-------------|------------|
| Citi                           | 1         | 1         | 5,368            | 13.8         | 1.7         | 19         |
| HSBC Holdings PLC              | 2         | 2         | 4,322            | 11.1         | 0.5         | 21         |
| BofA Securities Inc            | 3         | 4         | 4,119            | 10.6         | 3.4         | 20         |
| JP Morgan                      | 4         | 3         | 3,186            | 8.2          | 0.2         | 14         |
| ANZ Banking Group              | 5         | 15        | 2,338            | 6.0          | 3.3         | 8          |
| Goldman Sachs & Co             | 6         | 5         | 2,028            | 5.2          | -0.9        | 9          |
| RBC Capital Markets            | 7         | 8         | 1,810            | 4.6          | -0.4        | 6          |
| Westpac Banking                | 8         | 9         | 1,799            | 4.6          | -0.2        | 5          |
| Commonwealth Bank of Australia | 9         | 10        | 1,638            | 4.2          | -0.3        | 6          |
| BNP Paribas SA                 | 10        | 7         | 1,557            | 4.0          | -1.3        | 8          |
| TD Securities Inc              | 11        | 17        | 1,428            | 3.7          | 1.1         | 5          |
| UBS                            | 12        | 6         | 1,230            | 3.2          | -2.5        | 5          |
| National Australia Bank        | 13        | 11        | 1,141            | 2.9          | -0.7        | 4          |
| Deutsche Bank                  | 14        | 19        | 1,060            | 2.7          | 0.7         | 5          |
| Morgan Stanley                 | 15        | 12        | 948              | 2.4          | -0.9        | 4          |
| Mitsubishi UFJ Financial Group | 16        | 20        | 895              | 2.3          | 1.0         | 4          |
| Barclays                       | 17        | 16        | 852              | 2.2          | -0.5        | 4          |
| Macquarie Group                | 18        | 24        | 512              | 1.3          | 0.7         | 3          |
| Credit Suisse                  | 19        | 13        | 495              | 1.3          | -1.7        | 3          |
| ING                            | 20        | 28        | 316              | 0.8          | 0.5         | 2          |
| <b>Industry Total</b>          |           |           | <b>39,047</b>    | <b>100.0</b> |             | <b>52</b>  |

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



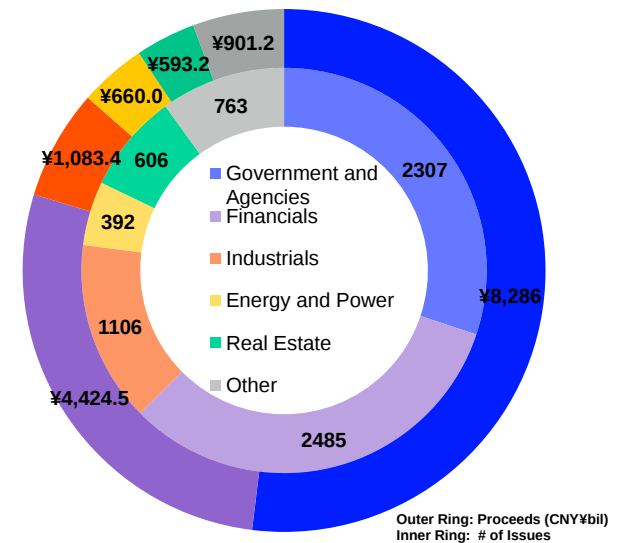
**China G3 Currency Bonds (AR5)** YoY Change (\$) -2% QoQ Change (\$) -21%

| Bookrunner                     | Rank 2020 | Rank 2019 | Proceeds US\$mil | Market Share | Mkt. Sh Chg | # of Deals |
|--------------------------------|-----------|-----------|------------------|--------------|-------------|------------|
| Bank of China Ltd              | 1         | 1         | 10,292           | 6.1          | -0.1        | 138        |
| HSBC Holdings PLC              | 2         | 2         | 8,237            | 4.8          | -0.5        | 95         |
| Goldman Sachs & Co             | 3         | 8         | 7,315            | 4.3          | 1.0         | 44         |
| CITIC                          | 4         | 4         | 6,919            | 4.1          | 0.1         | 144        |
| JP Morgan                      | 5         | 21        | 6,877            | 4.0          | 2.1         | 53         |
| Industrial & Comm Bank China   | 6         | 10        | 6,693            | 3.9          | 0.7         | 81         |
| Standard Chartered PLC         | 7         | 9         | 6,345            | 3.7          | 0.4         | 82         |
| UBS                            | 8         | 7         | 5,990            | 3.5          | 0.0         | 85         |
| Citi                           | 9         | 23        | 5,838            | 3.4          | 1.5         | 50         |
| Credit Agricole CIB            | 10        | 6         | 5,703            | 3.4          | -0.2        | 36         |
| BofA Securities Inc            | 11        | 20        | 5,550            | 3.3          | 1.3         | 41         |
| Haitong Securities Co Ltd      | 12        | 3         | 5,427            | 3.2          | -1.6        | 144        |
| China Construction Bank        | 13        | 13        | 4,934            | 2.9          | 0.2         | 79         |
| Deutsche Bank                  | 14        | 18        | 4,920            | 2.9          | 0.8         | 74         |
| Guotai Junan Securities        | 15        | 11        | 4,665            | 2.7          | -0.4        | 128        |
| Credit Suisse                  | 16        | 5         | 4,632            | 2.7          | -1.0        | 78         |
| China International Capital Co | 17        | 15        | 4,472            | 2.6          | 0.3         | 79         |
| Bank of Communications Co Ltd  | 18        | 12        | 4,278            | 2.5          | -0.6        | 61         |
| BNP Paribas SA                 | 19        | 22        | 4,228            | 2.5          | 0.6         | 53         |
| Barclays                       | 20        | 25        | 3,747            | 2.2          | 0.5         | 54         |
| <b>Industry Total</b>          |           |           | <b>170,102</b>   | <b>100.0</b> |             | <b>353</b> |

**Chinese Yuan Bonds (ex-Self Funded) (AS24)** YoY Change (\$) 29% QoQ Change (\$) -38%

| Bookrunner                     | Rank 2020 | Rank 2019 | Proceeds CN¥mil   | Market Share | Mkt. Sh Chg | # of Deals   |
|--------------------------------|-----------|-----------|-------------------|--------------|-------------|--------------|
| Bank of China Ltd              | 1         | 1         | 1,100,959         | 6.9          | -1.8        | 2,098        |
| CITIC                          | 2         | 4         | 1,074,897         | 6.7          | 0.6         | 1,973        |
| Industrial & Comm Bank China   | 3         | 2         | 1,057,652         | 6.6          | -1.2        | 1,979        |
| China Construction Bank        | 4         | 3         | 956,079           | 6.0          | -0.8        | 2,057        |
| Bank of Communications Co Ltd  | 5         | 5         | 824,029           | 5.2          | -0.6        | 1,731        |
| Agricultural Bank of China     | 6         | 6         | 800,941           | 5.0          | -0.2        | 1,668        |
| CSC Financial Co Ltd           | 7         | 7         | 674,227           | 4.2          | -0.3        | 1,218        |
| Industrial Bank Co Ltd         | 8         | 8         | 553,817           | 3.5          | 0.1         | 1,238        |
| Guotai Junan Securities        | 9         | 9         | 490,399           | 3.1          | 0.3         | 887          |
| Huatai Securities Co Ltd       | 10        | 16        | 447,591           | 2.8          | 1.2         | 749          |
| China Merchants Bank           | 11        | 10        | 435,882           | 2.7          | -0.1        | 789          |
| China International Capital Co | 12        | 11        | 398,608           | 2.5          | 0.0         | 503          |
| China Minsheng Banking Corp    | 13        | 12        | 360,629           | 2.3          | -0.1        | 744          |
| Haitong Securities Co Ltd      | 14        | 14        | 351,893           | 2.2          | 0.1         | 592          |
| Shanghai Pudong Development Bk | 15        | 13        | 336,506           | 2.1          | 0.0         | 631          |
| Postal Savings Bank Of China   | 16        | 15        | 301,227           | 1.9          | 0.2         | 615          |
| Everbright Securities Co Ltd   | 17        | 20        | 231,263           | 1.5          | 0.2         | 466          |
| China Everbright Bank          | 18        | 21        | 213,553           | 1.3          | 0.1         | 407          |
| China Merchants Securities Co  | 19        | 19        | 211,443           | 1.3          | 0.0         | 302          |
| Shenwan Hongyuan Securities Co | 20        | 24        | 189,056           | 1.2          | 0.3         | 249          |
| <b>Industry Total</b>          |           |           | <b>15,948,719</b> | <b>100.0</b> |             | <b>7,659</b> |

**Chinese Yuan Bonds - Macro Industry Composition**



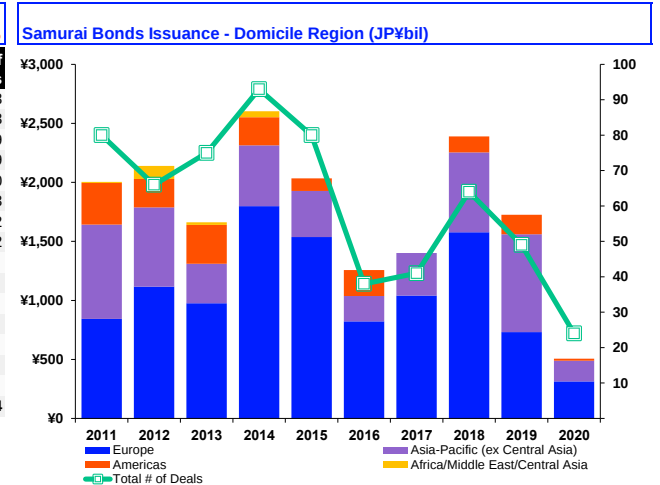
\*Indicates a Tie

# Japan Rankings

Full Year 2020 | Debt Capital Markets | Managing Underwriters

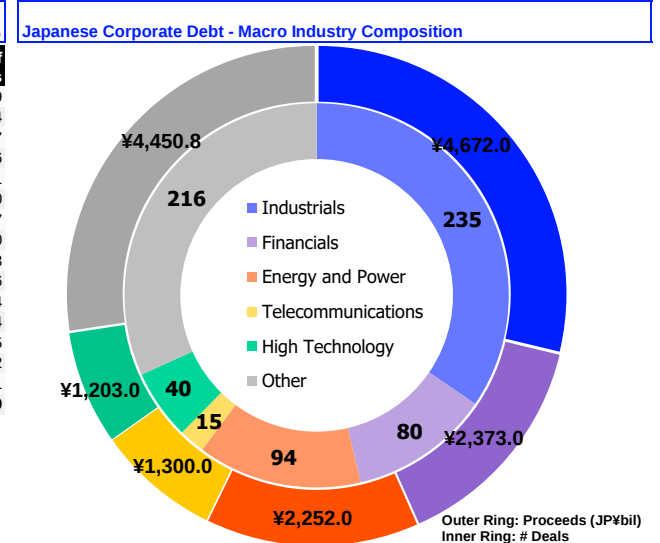
| All Bonds in Yen (AP05)        |           |           |                  |              |                |            |
|--------------------------------|-----------|-----------|------------------|--------------|----------------|------------|
|                                |           |           | YoY Change (¥)   | 1%           | QoQ Change (¥) | 0%         |
| Lead Manager                   | Rank 2020 | Rank 2019 | Proceeds JPY¥bil | Market Share | Mkt. Sh. Chg   | # of Deals |
| Mizuho Financial Group         | 1         | 1         | 6,520            | 23.1         | 0.4            | 848        |
| Sumitomo Mitsui Finl Grp Inc   | 2         | 2         | 4,969            | 17.6         | 0.8            | 720        |
| Nomura                         | 3         | 4         | 4,715            | 16.7         | 1.1            | 644        |
| Daiwa Securities Group Inc     | 4         | 5         | 4,499            | 16.0         | 0.8            | 610        |
| Mitsubishi UFJ Morgan Stanley  | 5         | 3         | 4,460            | 15.8         | -0.6           | 606        |
| Goldman Sachs & Co             | 6         | 8         | 645              | 2.3          | 0.6            | 61         |
| Mitsubishi UFJ Financial Group | 7         | 7         | 485              | 1.7          | -0.2           | 29         |
| Sumitomo Mitsui Trust Holdings | 8         | 6         | 385              | 1.4          | -0.8           | 34         |
| BofA Securities Inc            | 9         | 9         | 275              | 1.0          | -0.1           | 30         |
| Tokai Tokyo Financial Holdings | 10        | 10        | 225              | 0.8          | -0.2           | 61         |
| Shinkin Central Bank           | 11        | 12        | 190              | 0.7          | 0.0            | 52         |
| Barclays                       | 12        | 11        | 139              | 0.5          | -0.2           | 11         |
| BNP Paribas SA                 | 13        | 15        | 138              | 0.5          | -0.1           | 11         |
| Okasan Securities Group Inc    | 14        | 19        | 85               | 0.3          | 0.0            | 26         |
| Shinsei Bank                   | 15        | 14        | 83               | 0.3          | -0.3           | 6          |
| Industry Total                 |           |           | 28,192           | 100.0        |                | 1,401      |

| Samurai Bonds (AP01)          |           |           |                  |              |                |            |
|-------------------------------|-----------|-----------|------------------|--------------|----------------|------------|
|                               |           |           | YoY Change (¥)   | -71%         | QoQ Change (¥) | -38%       |
| Lead Manager                  | Rank 2020 | Rank 2019 | Proceeds JPY¥bil | Market Share | Mkt. Sh. Chg   | # of Deals |
| Sumitomo Mitsui Finl Grp Inc  | 1         | 3         | 143              | 28.2         | 8.0            | 18         |
| Daiwa Securities Group Inc    | 2         | 2         | 109              | 21.6         | 1.3            | 18         |
| Nomura                        | 3         | 4         | 101              | 20.0         | 4.2            | 19         |
| Mizuho Financial Group        | 4         | 1         | 61               | 12.0         | -12.2          | 9          |
| Mitsubishi UFJ Morgan Stanley | 5         | 5         | 54               | 10.7         | 2.9            | 10         |
| Credit Agricole CIB           | 6         | 10        | 20               | 4.0          | 3.6            | 3          |
| Natixis                       | 7*        | 7         | 9                | 1.8          | -1.4           | 2          |
| JP Morgan                     | 7*        | -         | 9                | 1.8          | 1.8            | 2          |
| Industry Total                |           |           | 507              | 100.0        |                | 24         |



| Japanese Securitizations (AP02) |           |           |                  |              |                |            |
|---------------------------------|-----------|-----------|------------------|--------------|----------------|------------|
|                                 |           |           | YoY Change (¥)   | -10%         | QoQ Change (¥) | -7%        |
| Lead Manager                    | Rank 2020 | Rank 2019 | Proceeds JPY¥bil | Market Share | Mkt. Sh. Chg   | # of Deals |
| Mizuho Financial Group          | 1         | 1         | 1,400            | 29.4         | -0.2           | 157        |
| Sumitomo Mitsui Finl Grp Inc    | 2         | 2         | 654              | 13.7         | 1.1            | 32         |
| Daiwa Securities Group Inc      | 3         | 6         | 540              | 11.3         | 3.9            | 15         |
| Mitsubishi UFJ Financial Group  | 4         | 4         | 466              | 9.8          | 1.2            | 27         |
| Sumitomo Mitsui Trust Holdings  | 5         | 3         | 385              | 8.1          | -3.3           | 34         |
| Nomura                          | 6         | 5         | 315              | 6.6          | -1.1           | 9          |
| Goldman Sachs & Co              | 7         | 12        | 278              | 5.8          | 3.6            | 5          |
| Mitsubishi UFJ Morgan Stanley   | 8         | 7         | 262              | 5.5          | -1.9           | 6          |
| BofA Securities Inc             | 9         | 8         | 146              | 3.1          | -0.3           | 4          |
| Barclays                        | 10        | 9         | 90               | 1.9          | -1.2           | 3          |
| BNP Paribas SA                  | 11        | 13        | 85               | 1.8          | 1.2            | 2          |
| Norinchukin Bank                | 12        | 10        | 55               | 1.2          | -1.8           | 4          |
| Shinsei Bank                    | 13        | 11        | 50               | 1.1          | -1.6           | 2          |
| ORIX Corp                       | 14        | 16        | 22               | 0.5          | 0.4            | 3          |
| Godo Kaisha Yu                  | 15        | -         | 10               | 0.2          | 0.2            | 1          |
| Industry Total                  |           |           | 4,768            | 100.0        |                | 262        |

| Japanese Corporate Debt (AP03) |           |           |                  |              |                |            |
|--------------------------------|-----------|-----------|------------------|--------------|----------------|------------|
|                                |           |           | YoY Change (¥)   | 13%          | QoQ Change (¥) | 16%        |
| Lead Manager                   | Rank 2020 | Rank 2019 | Proceeds JPY¥bil | Market Share | Mkt. Sh. Chg   | # of Deals |
| Mizuho Financial Group         | 1         | 1         | 3,843            | 23.7         | 0.8            | 489        |
| Nomura                         | 2         | 3         | 3,161            | 19.5         | 1.6            | 434        |
| Mitsubishi UFJ Morgan Stanley  | 3         | 2         | 2,985            | 18.4         | -1.8           | 407        |
| Sumitomo Mitsui Finl Grp Inc   | 4         | 4         | 2,967            | 18.3         | 0.4            | 476        |
| Daiwa Securities Group Inc     | 5         | 5         | 2,775            | 17.1         | -0.1           | 401        |
| Shinkin Central Bank           | 6         | 6         | 142              | 0.9          | -0.1           | 40         |
| Goldman Sachs & Co             | 7         | 9         | 116              | 0.7          | 0.0            | 27         |
| Tokai Tokyo Financial Holdings | 8         | 8         | 82               | 0.5          | -0.2           | 30         |
| BofA Securities Inc            | 9         | 13        | 61               | 0.4          | 0.3            | 23         |
| SBI Holdings Inc               | 10        | 7         | 47               | 0.3          | -0.6           | 16         |
| Shinsei Bank                   | 11        | 11        | 33               | 0.2          | 0.1            | 4          |
| Okasan Securities Group Inc    | 12        | 10        | 22               | 0.1          | -0.1           | 14         |
| Citi                           | 13        | 16        | 8                | 0.1          | 0.1            | 5          |
| Aozora Bank Ltd                | 14        | 12        | 8                | 0.1          | 0.0            | 2          |
| BNP Paribas SA                 | 15        | 17        | 2                | 0.0          | 0.0            | 1          |
| Industry Total                 |           |           | 16,251           | 100.0        |                | 680        |



\*Indicates a Tie

# Debt Capital Markets Criteria

Full Year 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-Israeli  
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 December 31, 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 "An bun Hoshiki" (Proportional) basis beginning with Japanese Fiscal Year 2014 - 2015 after April 1st, 2014. Please note that the Samurai Bonds ranking (AP1) will be consistent with all other international bonds rankings and will remain on the "Equal-to-Each" allocation basis. Following our mid-year League Table Inquiry, all 2014 US mortgage-related securitizations have been classified as mortgage backed regardless of risk category or deal structure.

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

© 2020 Refinitiv. All rights reserved.

