

Increasing demand for green bond raises investors’ risk tolerance amid growing sustainability sentiment

By [Shania Mustika](#)

With the Paris Agreement and rallying environmental protection movement globally, issuance of green bonds has reached another milestone in the first half of 2019: unprecedentedly surpassing USD 100bn within six months of the year after plateauing in 2018 and predicted to reach between [USD 180bn](#) to [USD 250bn](#) by the end of the year. By analyzing the market dynamics of green bonds, we bring forth possible reasons behind the rising momentum. Through utilizing the NUS-CRI Probability of Default (PD), we also find that there has been increasing risk tolerance among green bond investors, with this tolerance likely to persist even in the future.

Green bonds are designated bonds intended to encourage sustainability and support climate-related or other environmental projects, such as projects aimed at energy efficiency, pollution prevention and cultivation of environmentally friendly technologies, among others. They often come with tax incentives but less liquidity for investors; and typically require additional transaction costs for issuers from verification and certification as well as tracking, monitoring and reporting of the use of proceeds.

The green bond market has seen an increase in issuance and issuer base as more borrowers from Asia Pacific join their American and European counterparts (Figure 1b). Most green bonds are issued by governments and financial institutions prompted by government to assist in green bond issuance. Beyond that, green bond issuers come mainly from industries like utilities, industrials, and energy (Figure 1a).

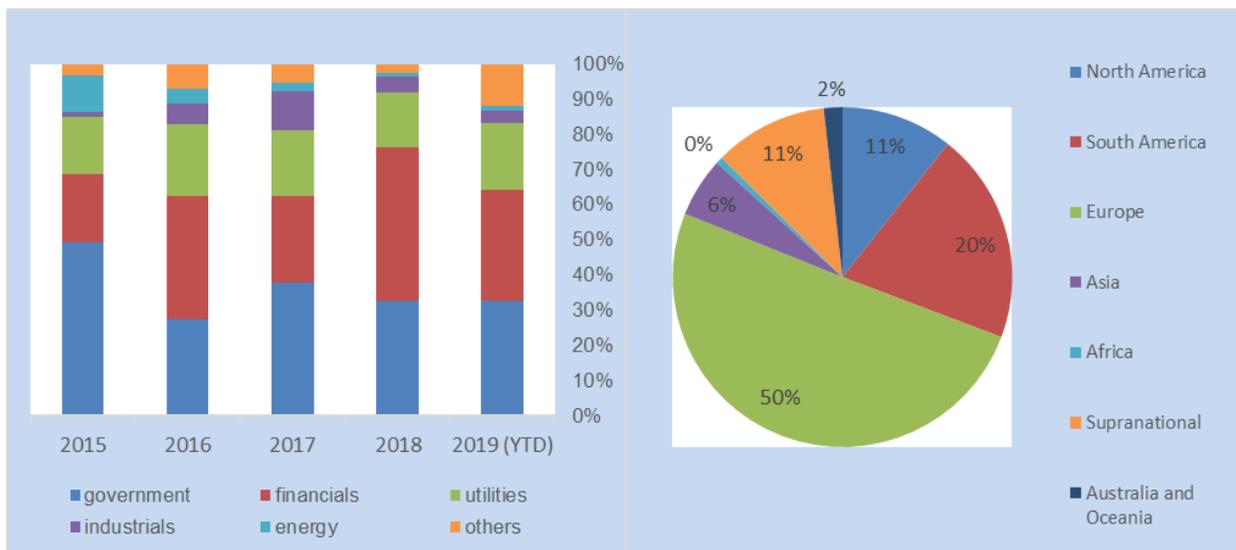


Figure 1a & b: Industry composition of green bond issuers based on amount issued and currency composition of green bond issuers based on amount outstanding. *Source: Bloomberg*

The increase in green bond issuance is driven by various factors. From the demand side, investors have shown increasing appetite to improve their environmental, social and governance (ESG) credentials through establishing funds dedicated to the asset class. Multiplied [oversubscriptions of green bonds](#) issued

have recently happened [globally](#). This intensified demand has potentially led to slightly lower funding costs than that of non-green bonds, which further stimulate the supply of green bonds. Besides, [ESG accounting and auditing systems are improving](#) thanks to the many legal, accounting, data and rating groups that are getting involved. The heightened scrutiny brought by the improving systems – making it easier to track companies that are ESG non-compliant – have caused business and finance executives to regard ESG as a risk management tool, hence encouraging their participation.

Moreover, political and regulatory risks are drawing more investors and issuers into the market as well. Three dozen [central banks](#), for instance, declared they will consider environmental factors when regulating the banks. Another case is [S&P Global Rating](#) that began offering company-specific ESG reports and stated that ESG factors have influenced their ratings decisions.

The increase in demand for green papers also sees a rise in investors' risk tolerance, as shown by the NUS-CRI historical 1-year Aggregate PD (Agg PD) below (Figure 2). We compare the NUS-CRI historical 1-year Agg PD for green bond and non-green bond issuers of bond with 3- to 5-year maturity and same coupon rate and found that the Agg PD for green bond issuers lies consistently above that of non-green bond issuers. The gap between the two is also increasing in the recent years, indicating that for the same return, green bond investors are willing to tolerate greater risks.

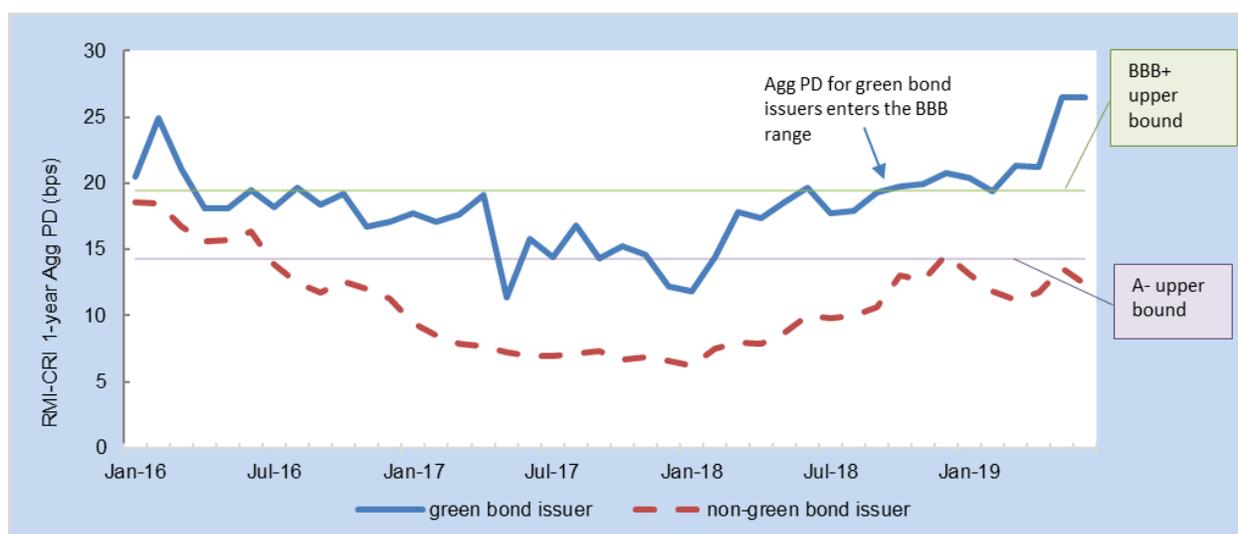


Figure 2: NUS-CRI historical 1-year Agg PD for green bond and non-green bond issuers of bond with 3- to 5-year maturity and same coupon rate. *Source: NUS-CRI*

The RMI-CRI Probability of Default Implied Rating (PDiR) shows that green bond issuers lie in the BBB+ range and enters the BBB range this year (Figure 2), concurrent with the aforementioned spike in issuance. The RMI-CRI PDiR provides a more conventional interpretation of PDs – it translates RMI-CRI 1-year PDs to letter ratings by taking reference from the historical observed default rates of Standard & Poor's (S&P) rating categories.

The NUS-CRI Aggregate Forward 1-year PD also shows that the higher risk tolerance among investors is likely to persist even in the future (Figure 3). The NUS-CRI Aggregate Forward PD represents the credit risk of a company in a future period. For instance, the 6- month forward 1-year PD is the probability that the firm defaults during the period from 6 months onwards to 1 year plus 6 months, conditional on the firm surviving the initial 6 months.

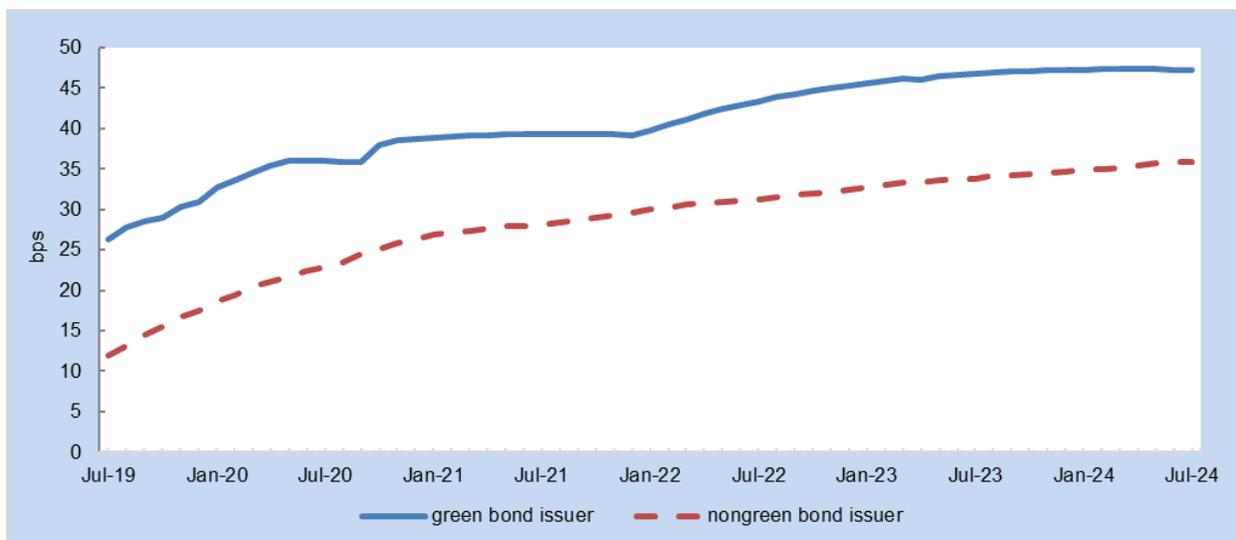


Figure 3: NUS-CRI Aggregate Forward 1-year PD for green bond and non-green bond issuers of bond with 3 to 5 year maturity and same coupon rate. Source: NUS-CRI

The higher demand and hence, higher bond pricing may contribute to future increase in issuance as issuers enjoy potential cut in financing costs. This widening issuer base would mean good news as it will allow for growth stability and reduce volatility in the green bond market. Investment managers, currently facing too small a universe to build a sufficiently-diversified fund to meet their yield requirements, may also see their market share increase from the current 12.07%. With rallying ESG sentiment among investors, together with the strengthening support of institutions, it seems that the green bond market is here to stay. What remains to be answered is the question of whether future green bond issuers will maintain their integrity and not only pursue an economic, but also an environmental bottom line.

Credit News

Japanese investors pile into world's biggest covered bond market

Jul 9. Japanese investors have bought DKK 2bn in callable Danish bonds in May this year. Total new investments in the long-term, fixed-rate securities of DKK 10.3bn so far this year have already surpassed the numbers of the entire year of 2017 by DKK 1bn, according to Nordea Bank Abp. This increase in demand for Denmark's AAA assets comes despite the market expecting a record wave of mortgage refinancing, due to interest rates being at a historic low. Last week, all government bonds were driven to negative yields by the high demand for low-risk assets. ([BusinessTimes](#))

Yield gap between risky corporate debt and investment grade sinks to 12-year low

Jul 8. Junk-rated bonds of grade BB+ and lower typically reward investors with a higher yield compared to investment-grade bonds as they have a greater chance of default. However, US bond investors are finding that the reward for owning junk debt compared to investment-grade debt has gone down significantly as it has recently fallen to a 12-year low. According to Morgan Stanley Wealth Management's global investment committee, only 60bps of yield separate the lowest rated investment-grade BBB-rated corporate bonds from the highest junk-rated BB-rated bonds. Due to low or even negative interest rates elsewhere, more investors appear to be willing to invest in these risky bonds, driving down the yield. ([MarketWatch](#))

ECB will find plenty of new corporate bonds if purchases resume

Jul 8. The European Central Bank (ECB) will have plenty of corporate notes to consider if it returns to the corporate bond market as part of new stimulus measures. Companies have issued USD 121bn of ECB-eligible bonds so far this year, which has kept the overall ECB-eligible universe at over USD 1.12tn. The ECB may buy USD 3.92bn to 5.38bn of corporate bonds each month, corresponding to 50% to 67% of the current net supply. It is however limited to a maximum of 70% per note. Recent comments by current ECB president Mario Draghi had indicated a renewed stimulus program for the European economy. ([Bloomberg](#))

Sales of riskier company bonds vanish in Indian credit scare

Jul 8. As India's shadow banking crisis continues to put pressure on the country's capital markets, new issuances of riskier corporate bonds rated A+ and lower have dropped to a five-year low. Compared to one year prior the numbers for the second quarter of 2019 indicate a decline of 84%, as investors are currently shunning riskier investments. This may lead to a lack of financing ability for many Indian companies, causing delays in expansion plans and negatively affecting economic development. The Indian government has recently announced steps to combat this effect. ([Bloomberg](#))

Deutsche Bank credit risk tumbles as lender reveals revamp

Jul 5. Deutsche Bank AG credit investors were in favour of the German lender's plans to overhaul its business as risk gauges fell to fresh lows and its euro subordinated bonds initially rising. Credit protection cost on the bank's riskiest bonds rose as much as 0.5 cents on the euro, the highest level since April, but gains were later pared. Deutsche Bank's overhaul will see the lender exiting the equities business, posting a EUR 2.8bn second-quarter loss and also cutting the workforce by a fifth to reverse a slide in profitability. The bank is also creating a new unit called "capital-release unit" to let go of non-strategic assets. The unit will account for EUR 74bn of risk-weighted assets and EUR 288bn of leveraged exposure as of the end of last year. Credit rating agencies are not expected to upgrade the lender from its low investment-grade ranking. ([Bloomberg](#))

Emerging market assets are running on empty ([FT](#))

Fund Managers crumble as fee fury hits USD 2tn savings pool ([Bloomberg](#))

JPMorgan says bond-market rally faces risk of tantrum like 2013 and 2016 ([MarketWatch](#))

Regulatory Updates

Australia to raise bank capital buffers by less than expected

Jul 6. The Australian Prudential Regulation Authority (APRA) has decided to raise the capital buffer for banks by less than originally proposed. New regulation would only see the financial institutions' total capital lifted by 3 percentage points of risk weighted assets by Jan 1, 2024 instead of the originally proposed 4-5 percentage points. An easier market compliance while gaining the desired effect of bolstering banks' ability to sustain difficult phases of the financial markets were cited as reasons for this decision by the APRA. The new requirements are expected to bolster the loss-absorbing capacity of the major banks by a total of AUD 50bn, while resulting in a small rise in funding costs of less than 5 bps. Australia's four major banks had previously argued that originally proposed higher capital target would have put too large a burden on them. ([StraitsTimes](#))

Indian government moves to ease flow of credit to financial sector

Jul 6. Indian finance minister Nirmala Sitharaman has proposed plans for regulatory changes that aim to improve India's crisis-stricken capital market. These plans include the recapitalization of state-run banks, partial governmental guarantees for high-rated non-bank financial companies' (NBFC) assets in a pooled asset purchasing program, in addition to increasing the regulatory power of the Reserve Bank of India over NBFCs and housing finance companies. Plans to increase activity in the tri-party repo market, which can be used to provide short-term liquidity to its participants by borrowing against securities, were also announced. ([LiveMint](#))

Mortgages will be easier to get as banking regulator eases restrictions ([Guardian](#))

Lawmakers push for new Bitcoin rules ([WSJ](#))

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