PERSPECTIVE **MAY 2017**

Awakening the green giant

Climate change poses one of the biggest challenges of the 21st century. Still, fixed income markets lag in their response; the 'green' bond market remains modest, with some environmentally conscious investors deterred by its lack of standardisation and uncompetitive returns.

However, we think there is a way to address these investor concerns by targeting carbon reduction, instead of just green bonds, through borrowing data from the equity markets. This shifts the focus from solely following a principles-based approach, to one that emphasises the environmental outcome. It opens up a previously unappealing asset class for investors, allowing the environment to feature as a core strategy within a balanced bond portfolio.

Go green

The conventional investor approach to climate change has focussed on managing risks around 'stranded assets'. Companies that own potentially stranded assets (see margin) can be screened out by investors or, indeed, divested.

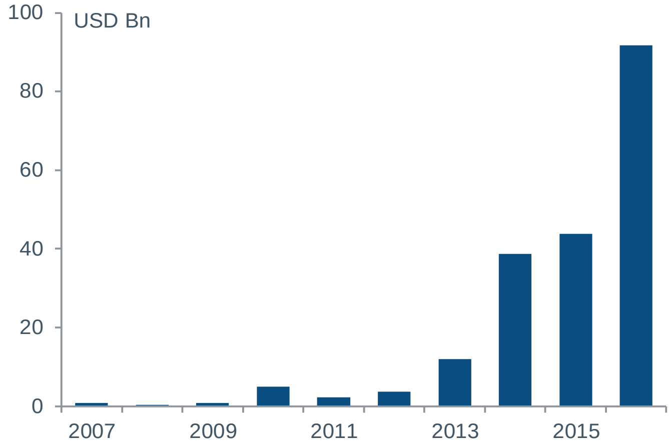
__Stranded assets:__ assets that suffer unexpected or premature write-downs, primarily due to regulatory changes or technological innovation, e.g fossil fuel-powered factories facing obsolescence as carbon restrictions are adopted.

This approach uses negative reinforcement to discourage environmentally unfriendly projects, but crucially it offers no reward for bond issuers considering more environmentally responsible undertakings. That's where green bonds come in.

Green bonds provide financing for projects which deliver environmental benefits and contribute to a more sustainable economy. This positive reinforcement is its key advantage. But it suffers from two important drawbacks:

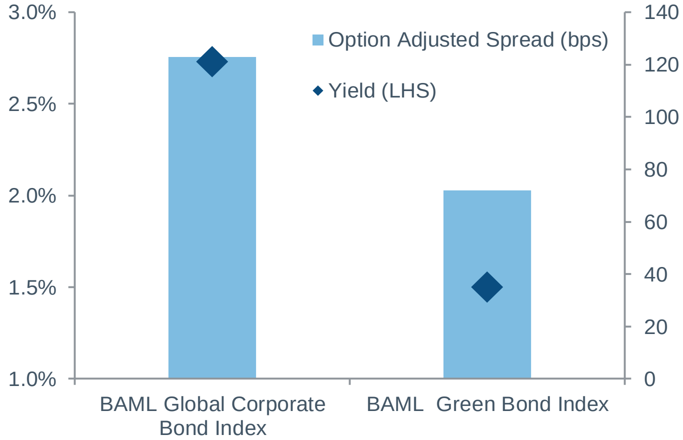
- There is no universally agreed standard for what a green bond is.
- The green bond universe offers only low yields and spreads (chart 2), especially when compared to a broader global credit portfolio.

Chart 1: Green bond issuance is growing



Source: BAML, Bloomberg, CBI, company filings, 28 February 2017

Chart 2: Relatively low yield and spread



Source: Fidelity International, BAML, 31 March 2016.

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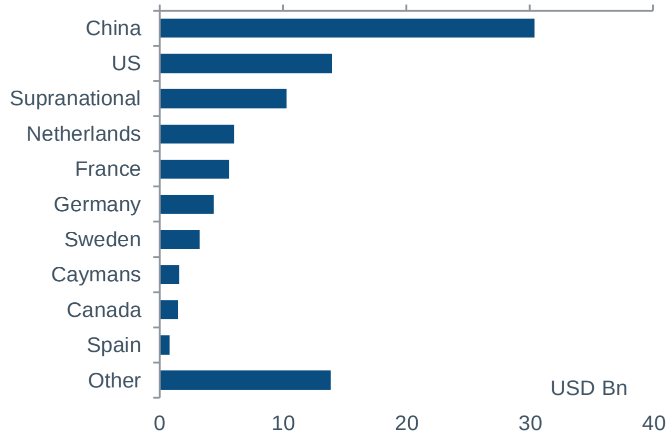
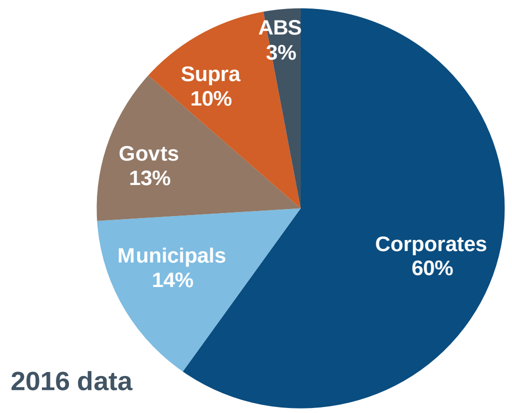
Chart 3: Who issued green bonds in 2016?



Source: BAML, Bloomberg, CBI, company filings, 28 February 2017

Chart 4: Significant government/supranational issuance



Source: BAML, Bloomberg, CBI, company filings, 28 February 2017

Greenwashing

What defines a green bond? Several independent organisations have published guidelines for green bond issuers that promote transparency. However, in theory anyone can issue a bond and call it green. This risks undermining confidence in the asset class.

The Green Bond Principles published in 2014 formalised World Bank standards but only on a voluntary basis, and within the principles there is wide scope for interpretation.

In 2016, 69% of bond issues above $200 million had third opinions (an independent review)[1], which means nearly a third were not independently verified.

What the market needs is a common language around common tools, and agreed 'greenness' thresholds, benchmarks and impact measurement. Unfortunately, the proliferation of approved third-party verifiers makes this unlikely. Another consideration is that standardisation shouldn't stifle the innovation the market will need to continue fostering.

Green Bond Principles (GBP) cover:

- *Use of proceeds*
- *Process for project evaluation & selection*
- *Management of proceeds*
- *Reporting*

Greenium

Green bond issuance is expected to grow from the record $92 billion in 2016 to more than $100 billion in 2017, with more issuers coming to the market. The green bond universe remains strongly influenced by government and supranational entities, which contributed over 37% of issuance in 2016. Because they can issue bonds cheaply, it depresses yields and spreads for the green bond universe compared to the broader credit market.

In a low-yield environment, many investors can't ignore even a minor 'greenium' (a green bond premium that reduces the yield for investors but provides cheaper funding for issuers). It could preclude green bonds as a core portfolio holding.

It's a paradox for the market. Cheap funding encourages issuers to pursue green projects, benefiting society, but those low yields keep some investors at bay.

Some sort of selective credit enhancement, including guarantees, subordinated debt and insurance, could be part of the solution. This would boost the credit rating of the bonds, potentially improving the risk-return profile for investors.

Limited liquidity

__Climate-aligned bonds__: the Climate Bonds Initiative (CBI) defines these as 'issuers with at least 95% of revenues from climate-aligned businesses' - but it doesn't clearly state what those activities include.

The market's limited liquidity poses a similar challenge. Although it's not a problem in the Sovereigns, Supranationals and Agencies (SSA) sub-sector, it does matter in the corporate market, where investors tend to buy and hold the longer-dated issues. This is exacerbated by:

- Weak US involvement - there is little participation by US corporates and government bodies. While the market is viable without the US, the absence of American issuance significantly reduces the long-term growth potential of green bonds.
- The myopic definition of green bonds; in addition to the ambiguity of what a green bond is, the definition also ignores the broader range of 'environmentally aware' schemes. The Climate Bonds Initiative (CBI) estimates that including 'climate-aligned' bonds would boost the size of the universe from $118 billion to $694 billion.[2] In any case, the CBI definition of climate-aligned bonds suffers from the same fuzziness around standards that green bonds do.

The grass can be greener

While the green bond market goes through growing pains, we think there is a solution for investors that enhance both the environmental impact and the potential return. **That solution involves shifting the emphasis to carbon reduction, accentuating the environmental outcome rather than solely focussing on the principles-based approach of green bonds**.

If green bonds are supplemented by low-carbon bonds, the investable universe grows dramatically, with many benefits:

- *Negative and positive reinforcement.* Green bonds provide positive reinforcement by acting as an incentive for issuers to pursue green projects. Low carbon bonds discriminate against less environmentally-friendly issuers, acting as negative reinforcement.
- *Quantifiable metrics of green credentials.* A carbon reduction mandate creates a clear, objective target. We can use established carbon-intensity indices developed for equity markets to construct a portfolio that quantifiably reduces carbon production.
- *Mirroring global corporate bond characteristics.* It is possible to create portfolios that preserve carbon reduction goals and still mimic the risk profile of a global corporate bond index, using fundamental portfolio management techniques.

Low carbon bonds: A three-stage investment process

STEP 1: Define the universe - green bonds plus low-carbon issuers

To create such a portfolio, the first step is to combine negative screening of stranded carbon assets with positive screening based on green bonds and readily available low-carbon indices. Unfortunately, there are no fixed income benchmarks for low-carbon footprint because of the high proportion of private issuers, which makes data collection difficult, but equity indices such as the MSCI Global Low Carbon Leaders Index can act as good proxies.

This benchmark aims to cut the carbon footprint compared with the broader market by at least 50%, by excluding companies with the highest carbon emissions intensity and the largest owners of carbon reserves. These equity names can be mapped to debt instruments to construct a low-carbon subset of a traditional, global investment grade corporate bond index. The resulting bond pool represents nearly 70% of the original universe and reduces carbon emission intensity by over 40%.

STEP 2: Apply active overlay

Active security selection can augment the return potential by minimising losses caused by downgrades and defaults. Fundamental credit analysis can filter out the weaker issuers to make the portfolio more robust.

STEP 3: Optimise the portfolio

Next, the portfolio needs to be managed for yield, duration and credit rating to replicate the key risk characteristics of a global corporate bond index. Sector, country and issuer constraints can all be built in. Optimisation ensures a minimum level of issuer diversification, while position sizing scales on the basis of credit risk. Liquidity considerations can also be incorporated.

Chart 5: Model portfolio versus traditional benchmarks

Key attributes	Low Carbon Solution	BAML Global Corporate Bond Index	BAML Global Corporate Bond ex Energy Index*	BAML Green Bond Index
Yield	2.70%	2.73%	2.66%	1.50%
Duration	6.2	6.6	6.5	5.8
Option Adjusted Spread (bps)	123	123	120	72
Average rating	BBB+	A-	A-	AA-
Number of bonds	113	12,780	11,529	161

* Approximation for a divestment strategy
Source: Fidelity International, BAML, 31 March 2017.

Conclusion

Interest in green bonds is on the rise, but the market is challenged by a lack of standardisation, low yields and liquidity constraints. Low costs may attract issuers, but they also deter investors, making the environmental benefits hard to realise.

One way of unlocking the green bond market is by shifting the emphasis from a principles-based method to one which focusses on the environmental outcome of carbon reduction. By leveraging the equity market's superior disclosures, and mapping that information to the bond market, we can create a broader, but more quantifiable, universe of 'green' fixed income investments.

This approach preserves the risk and return characteristics of the global credit universe. The low carbon model portfolio has higher yields and spreads, and longer duration than the green bond index while maintaining investment grade credit ratings (chart 5). The solution's attributes are comparable to global corporate bond indices.

Environmentally aware investors don't have to be penalised in the performance of their bond portfolios. With this approach, ESG mandates can be respected and environmentally friendly investment can become a viable core strategy within a balanced bond portfolio.

References

[1]Natixis, January 2017

[2]CBI estimate July 2016.

Important Information

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