COMMENT

Sovereign 'greenium' differs more than you might think

Term structure data shows wide variation in yields for green sovereign debt


By Marcello Minenna
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From 2021 to 2023, global borrowers issued more than $300 million of sustainability-linked bonds and loans – instruments whereby borrowers pay a higher return to investors in the event that the issuer misses a pre-determined sustainability target.

The idea has been to incentivise issuers to meet environmental, social and governance (ESG) goals and to reward them – in theory, at least – with cheaper borrowing from lenders aiming to invest sustainably themselves.

But what if we assume those investors are motivated only by returns? Putting aside non-economic considerations, the performance of an ESG product should depend on the likelihood that the issuer misses its target and so the investor achieves the extra return.

It would follow also that the greater the transparency regarding the trigger, the lower the investor's risk of misjudging the chances of a bonus coupon. Greater transparency ought to mean investors will accept lower returns over the life of the product – a so-called 'greenium' for the borrower. Poor transparency should lead to a higher return – and more cost for the issuer.

With these assumptions in mind, and to compare and understand the greenium from one sovereign issuer to another, we collated Bloomberg yield curve data for loans and bonds that are both sustainability-linked – that's to say, green – and non-sustainable – ie brown.

The results show that no major issuer is able to borrow at markedly lower cost by selling green bonds. Meanwhile, term structures vary substantially from country to country. The variation reflects both the perceived chances of an issuer missing or hitting targets, and the comparatively greater cost of green borrowing for those issuers with vague ESG metrics or fuzzy targets.

For investors assessing the relative value of investing in different green products, these charts may point to some useful-to-know differences. For issuers, the charts might indicate where borrowers are getting a good or a bad deal.

To summarise how we might interpret what we see: when markets are regulated and transparent, a positive greenium could indicate a low probability of the issuer achieving its ESG target, a negative greenium the

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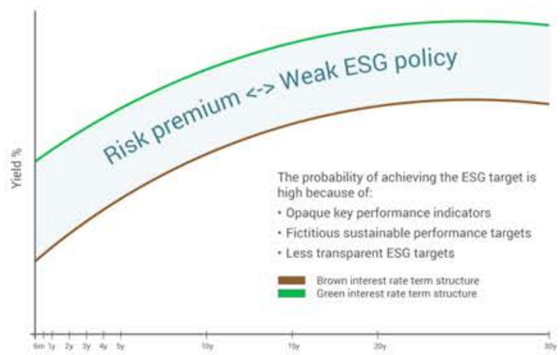
opposite.

At the same time, a positive greenium could reflect clear and challenging key performance indicators (KPIs) and transparent ESG triggers. And a negative premium might indicate opaque KPIs and unclear triggers.

For context, it's worth noting here that the EU, with its regulation on sustainability-related disclosure in the financial services sector (SFDR) is some way ahead of other regions in terms of transparency requirements for green issuers. Europe also represents more than two-fifths of total issuance of green products.

Negative greenium



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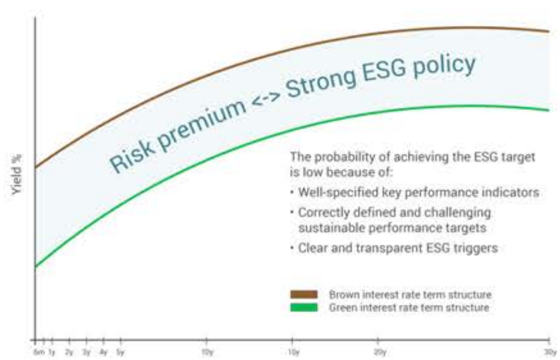
Greenium



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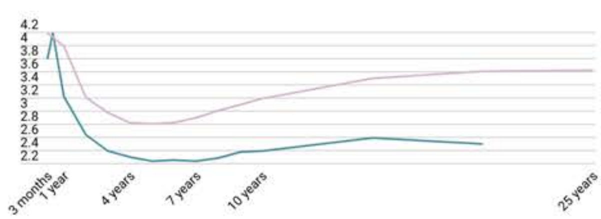
What, then, do the charts tell us? In Germany, the green interest rate term structure is consistently higher than the brown. That's to say, there is a negative premium for borrowers.

The market seems to assign a high probability to the likelihood that the product will achieve the goal at its core and so will not pay higher coupons.

Germany



Non-green yield Green yield

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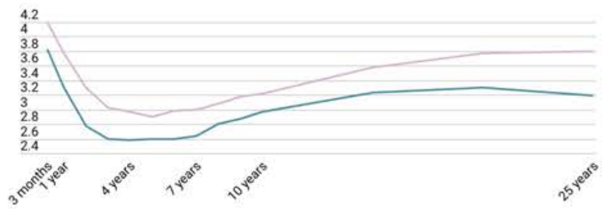
France's and South Korea's interest rate term structures are comparable, although in the case of South Korea the cost to issuers is amplified by the lack of transparency that characterises this market.

France



Non-green yield Green yield

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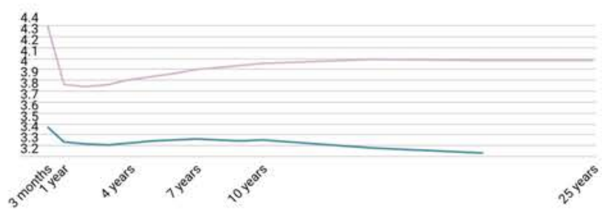
South Korea



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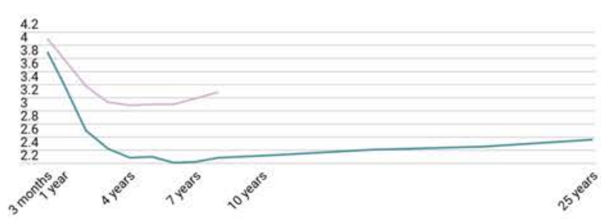
For Sweden, China and the US, we were unable to construct the entire term structure. That said, so far as the data is available, these countries also exhibit a negative premium – a cost to borrowers of issuing green loans and bonds.

Meanwhile, the green and brown term structures in China and the US show a degree of backwardation at the short end. That is, yields are relatively higher for green instruments over brown at shorter maturities compared with longer. The magnitudes of the phenomenon reflect the transparency deficits typical of the China market.

Sweden



Non-green yield Green yield

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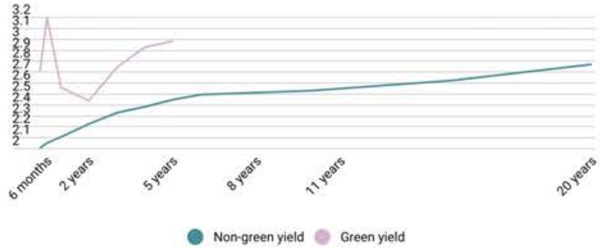
China



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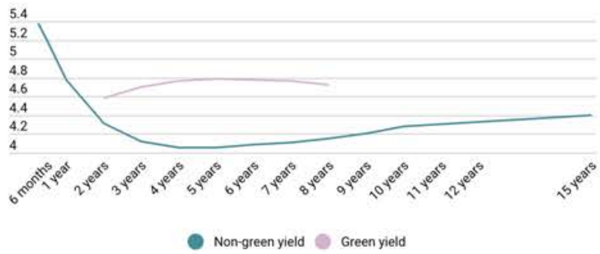
US



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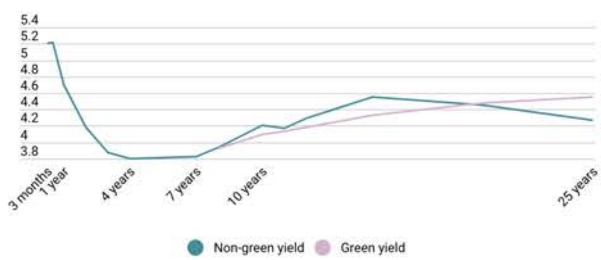
For the UK, we were also unable to reconstruct the entire term structure. But from year eight on, we see a substantial alignment of the two interest rates. The alignment suggests that investors assign equal probability to the UK hitting or missing its ESG objectives. The structure also indicates the high standards of risk transparency in the UK financial markets.

UK



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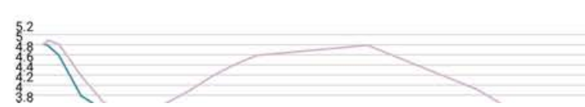
In Canada, the structure is distinct. Initially, the two yields exhibit a near-perfect alignment. But after the fourth year a decoupling emerges, and the same curve shape observed in other countries is once again evident.

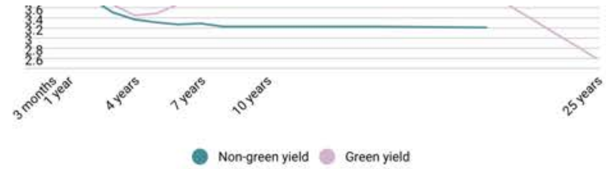
Markets may be treating the ESG target for short-term Canadian sustainable-linked products as effectively already met. Returns, then, would be perfectly aligned.

Then, at longer maturities, the likelihood that the ESG target will be achieved increases, and with it the investor demand for extra returns.

At still longer maturities, though, the probability of hitting or missing a trigger converges towards 50%. As a result, the green term structure tends to converge towards the term structure of the brown products.

Canada





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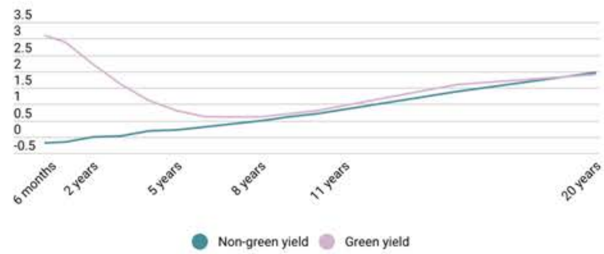
The case of Japan presents yet a different dynamic. In the short term, the probability of achieving the ESG target is high, which leads to a negative green premium. As the maturity of the investment increases, though, the probability of an ESG event occurring becomes equal, resulting in a convergence of returns.

Japan



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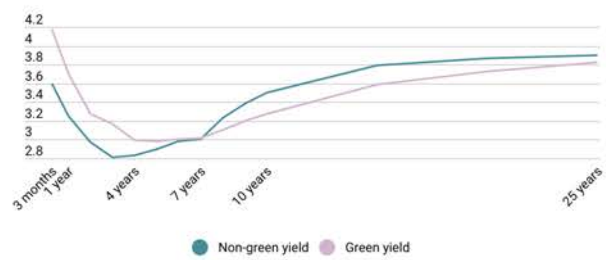
The graph for Spain shows the two curves almost perfectly aligned, but with a regime shift after the seventh year. That's to say, markets seem to reckon the chances are high of Spain hitting its ESG targets until seven years, after which the chances of success or failure are more even.

Spain



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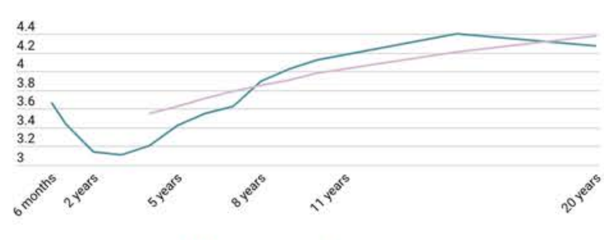
Finally, the case of Italy is distinct. In this instance, as illustrated in below, the two curves are perfectly aligned, yet the reason is somewhat different.

The "green BTP" has no trigger event. It is analogous to a conventional BTP, with the exception that the government assumes the responsibility of investing funds in "green-labelled" initiatives. There is no rationale, then, for a discrepancy in returns between the green BTP and the conventional BTP.

Italy



Non-green yield Green yield

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