
EU: ECO-WARRIOR OR BOND VILLIAN ?

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In this piece, Henry and Arrowsmith examine the landmark issuance of €220 billion worth of green bonds as part of funding for its COVID-19 Relief and Recovery Fund. The paper explores the current state of the green bond market, the additional environmental spending that may consequently occur due to the EU stipulating that a certain proportion of the funding must be spent on so-called green projects, and the impact of a federal body entering this market on the regulatory framework. Henry and Arrowsmith concur that the impact of this historical shift in financing will be significant in scope, both in terms of the market and indeed, the environment.

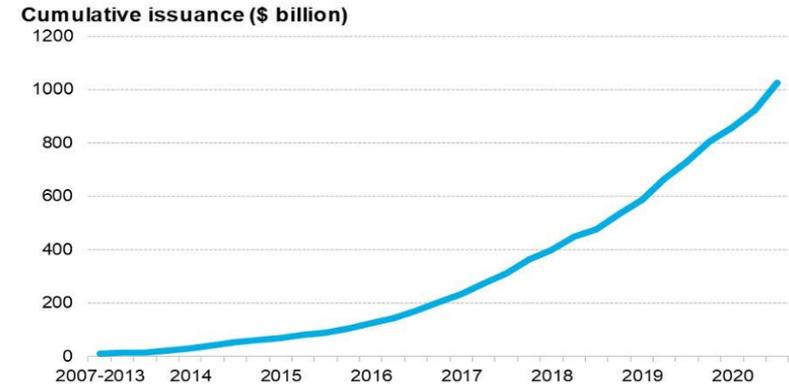
In this essay, Evan Henry and Greg Arrowsmith examine the landmark issuance of €220 billion worth of European Union green bonds as part of the funding for the COVID-19 Relief and Recovery Fund. Henry and Arrowsmith explore the current state of the green bond market. The additional environmental spending that may consequently occur due to the EU stipulating that a certain proportion of funding must be spent on so-called green projects is then analysed. Henry and Arrowsmith conclude that the impact of this historical shift by the EU in financing will have significant consequences, for both financial markets and, indeed, the environment.

Introduction

Green bonds are an asset class pioneered by the European Investment Bank in 2007, identified as a way to raise funds to finance environmentally-friendly projects, such as renewable energy systems, clean water, and public transport. Issuance grew rapidly from 2012 onwards (see figure 1), and though this growth cooled in 2020, between €350bn and €500bn in new green bonds are expected to be issued in 2021 (Nauman, 2021). However, this is still a minuscule portion of overall sovereign debt, with the total green bonds issued by governments accounting for only 3% of sovereign debt issued worldwide in

issuer, with other EU members such as Sweden and Poland also to the fore.

Figure 1: Cumulative green bond issuance by quarter, 2007-3Q 2020



Source: BloombergNEF, Bloomberg L.P.

In response to the Covid-19 crisis, the EU agreed on a landmark recovery package in summer 2020, worth over €750bn. Officially titled NextGenEU, €672.5bn of the funds consist of a Recovery and Resilience Fund (RRF), which is essentially a massive fiscal stimulus package that member states will be able to draw from. The agreement of this recovery package was a historic moment in EU integration, with some claiming it was the EU's own 'Hamiltonian moment', a reference to the move by the US Secretary of the Treasury, Alexander Hamilton, to mutualise war-time debt amongst the colonies into federal debt (Hall, Fleming & Chazan, 2020). In the same vein, the 'fiscal hawks' of Northern Europe warily agreed to the creation of a Eurobond, a pan-European debt instrument that mutualised EU debt. Through the issuance of bonds, no longer budgetarily constrained, the EU has expanded its spending capacity considerably, with the NextGenEU programme being the first instance of this.

However, in exchange for bearing the risk of Southern European countries defaulting on their debt obligations, the fiscal hawks insisted on conditions for how the money is spent to further existing EU objectives. One 'string' attached to receiving funding was that 37% is to be spent on 'green' projects, in line with the EU's Green Deal programme, which targets climate neutrality by 2050. Concurrently, it was determined that 30% of the NextGenEU fund will be financed by the issuance of €225bn in EU green bonds (European Commission, 2020). As the RRF already has a condition mandating 37% of spending to be green- which could be as easily funded by conventional bonds- the green bond market's small size means that the relative enormity of the EU's issuance could flood the market with supply. This could cut green bond prices and make it too expensive for issuers of green bonds to raise funds for their environmental projects. We will explore the possibility that the EU's issuance may have an unintended negative effect, both by pricing other countries out

of the green bond market and by setting a lax regulatory precedent. We will assess the likely impact of the EU's green bond issuance under four headings: additionality, the effect on the green bond market, the regulatory impact, and the signalling effect.

Additionality

Additionality is a concept related to environmental funding, which poses the question of whether green bond issuance actually leads to additional spending on environmental projects. It is relevant in this instance, as the EU has committed to spending 37% of the RRF on green projects, regardless of whether funding is raised through conventional bonds, green bonds or grants. It is important to understand the mechanisms of the RRF to ascertain the impact that green bond issuance may have on actual EU environmental spending. Each member state who wishes to draw funds from the RRF must submit a proposal to the European Commission (EC) which is in line with the Green Deal and clearly maps out how their funding of certain projects helps the environment. The EC must then review and pass this plan by a qualified majority vote, whilst any member state with serious concerns over the proposed spending has a 'brake' veto power, where they can insist that funding is withheld until a more in-depth review of the proposed spending is conducted. The funding is provided and reviewed twice a year, so all aspects of spending are under frequent scrutiny, including whether environmental targets are being reached or not (European Commission, 2021).

It is still possible (though unlikely) that, given the significant political pressure that will come from Covid-stricken populations, member states may get away with falling short of their proposed environmental spending commitments. With the issuance of EU green bonds to fund this spending, a failure to enforce the conditions of the RRF could damage not only the EU's political credibility, but also their credit rating. Whilst the RRF does not ringfence green bond funds for green spending, the approval and brake mechanisms make it much more likely that the green project funding targets are met. Meanwhile the issuance of green bonds, despite not increasing the RRF's required level of spending on green projects, mean that it is imperative that the EU does enforce the RRF conditions, as failure to do so could result in loss of credibility as a green bond issuer.

Effect on the Green Bond Market

The effect EU green bonds issuance has on the market for this asset class depends strongly on the size of the 'greenium'. The greenium is defined as the premium investors pay for green bonds in relation to conventional bonds. There is some debate around whether a difference in yield exists between green bonds and conventional bonds. Conventional wisdom says that investors are willing to pay a higher price for bonds with a high Environmental, Social and Governance (ESG) rating. As such, a greenium, which makes borrowing for green projects cheaper, exists. However, this is disputed, with some scholars claiming that there is no incontrovertible evidence of a greenium.

This uncertainty is conclusively rejected by Kapraun and Scheinz (2019), who show in a study of 2114 green bonds that a greenium does exist. They claim that the inconclusive results of Karpf and Mandel (2017) and Hachenber and Schiereck (2018) are due to small sample sizes and exclusion of recent data, which is salient in such a new market. Kapraun and Scheinz show that the size of the premium depends on the credibility of the issuer, with governments and supranational institutions having premia of 31 basis points on average for their green bonds compared to their conventional bonds, allowing for options and liquidity. They also posit that some doubts regarding the existence of a greenium come from corporations dubiously claiming that their bonds are green, when in fact they don't fund environmental projects, and so are not rewarded by ESG-conscious investors who have done their research. Given that the EU will be seen as a highly credible institution, they will likely enjoy a greenium on their green bonds.

The green bond market is currently oversubscribed, especially for high-credibility bonds such as sovereign bonds. In March 2021, the first Italian green bond issuance received €80bn in purchase orders for €8.5bn in bonds, which are trading at a negative premium of 0.15% versus conventional Italian government bonds (Oliver, 2021). Similarly, in 2020, the first German sovereign green bond issuance was oversubscribed by 500%, and trades at an increasingly negative premium of 0.46% (Ravindirane, 2020). With the EU borrowing on the strength and credibility of economic powerhouses like Germany and Italy, but on a much larger scale than their initial offerings, supply may fall in line with demand for high-credibility green bonds. This issuance could reduce the greenium, making it more expensive for other countries to borrow on the green bond market, and potentially pricing some out of funding green projects.

However, this is unlikely to occur for two reasons. Firstly, governments don't borrow using green bonds out of necessity or to borrow cheaply, but rather to signal and meet public demand. Most governments can almost certainly afford to borrow in conventional markets given the current low level of interest rates. It is thus unlikely that any other government's green projects will suffer as a result of the EU's issuance. Secondly, the reduction of the greenium will make it more attractive for investors to buy credible green bonds, as they won't feel like they're sacrificing profits for ESG considerations. Simultaneously, the EU's entrance into the market will increase investor confidence in green bonds and spur demand. This may lead to a growth cycle for the green bond market, with an increase in supply cyclically causing an increase in demand. On balance, any negative impacts from the EU's issuance of green bonds shrinking the greenium will likely be negated by the growth cycle their issuance could spark (Technical Expert Group, 2019).

Regulatory impact

In conjunction with their issuance of green bonds, the EU will also attempt to regulate the market for green bonds. This is partially to ensure that they are

held accountable for their own issuance, and partially to solve existing problems within the market. The EU released the technical screening criteria for its own voluntary Green Bond Standard (GBS) in 2019, which updates the UN's global Green Bond Principles framework, creating a more stringent definition of what qualifies as green. The GBS is based on the EU's Taxonomy (2020), a classification system that directs investments towards achieving the Green Deal's goal of climate neutrality by 2050. The GBS is a tangible improvement on existing EU regulations, given the grandiose rhetoric that has emanated about their environmental commitment in the past, despite much investment actually going toward 'brown' schemes and projects (Battison & Monasterolo, 2019).

The way in which the EU can make the biggest strides to ensure that green bond issuance increases green spending is by regulating the green bond verification process. The market's existing issuer-pays verification model, where the bond issuer pays a ratings agency to verify their bond's greenness, is problematic. The issuer-rater transaction creates a conflict of interest, where ratings agencies are incentivised to give a favourable (and possibly inaccurate) rating to the bond. If they don't, issuers can simply turn to their competitors. Proponents of deregulated markets claim that the potential for reputational damage to the ratings agencies will keep them in line. However, this system failed in the lead up to the Global Financial Crisis with mortgage-backed securities, and the same thing could easily occur in a green bond market without regulation. Additionally, this deregulated model sees the problem of divergent ratings for similarly green projects arising due to different ratings systems and metrics across different ratings agencies (Berg, Kölbel & Rigobon, 2020)

The Commission, acting on recommendations from a Technical Expert Group (2019), are planning to make it mandatory for ratings agencies to gain accreditation from the European Securities and Markets Agency (ESMA), in order to have a GBS stamp of approval for bond issuers seeking to meet, and indeed inform investors that they meet, EU standards. It will take time for the ESMA to gather the necessary expertise, so in the immediate future there will be a registration process for ratings agencies to gain approval from the European Commission. Whilst this is not as strong a move towards regulation as the ESMA verifying the bonds itself, it is a significant step. In fact, this process is likely more sensible for two reasons. Firstly, the ESMA lacks the expertise and manoeuvrability of private sector ratings agencies, and secondly, it has existing relationships and processes from other interactions with these external verifiers, who are predicted to be relatively small in number for the green bond market (Technical Expert Group, 2019).

The question of whether or not the issuer-pays and divergent ratings problems are solved depends on the stringency with which the Commission, and eventually, the ESMA enforces accreditation. Ultimately, issuers will still pay ratings agencies. If the EU is unwilling to remove an agency's verification licence for approving bonds that do not meet the GBS criteria, the current accreditation

and divergent green ratings. The ESMA should also encourage ratings agencies to use common standards and ratings methods, which will reduce transaction costs for investors and increase confidence in the asset class (Berg, Kölbel & Rigobon, 2020). Much will depend on the ESMA's resolve, on how far they will push ratings agencies, and whether they are willing to remove non-compliant agencies' accreditation. If they are strict, this will certainly increase confidence in the green bond market and pave the way for it to expand rapidly, releasing funds for much-needed environmental projects.

Signalling:

Nudge theory suggests that an exogenous factor may influence an environment in a predictable way, unconsciously causing one to behave in a certain way, and that nudges aren't orders, and so can be avoided without repercussion (Thaler and Sunstein, 2008). For example, placing a salad bar before a burger counter in a diner is a nudge to increase healthy eating, whilst banning burgers is not. In the context of the green bond market, the EU's issuance of a huge quantity of green bonds will signal that they are serious about green finance, and nudge the private sector towards adopting this asset class.

The EU's entrance into the green bond market, along with the introduction of a voluntary GBS will nudge existing private sector green bond issuers towards the adoption of higher, common standards for green bonds. It will do so by nudging the public (both the masses and 'representative' investment firms) further towards green investment. How will this occur? With the EU placing trust in green investment and linking its own fate to green bonds, it is signalling its commitment to the green agenda. If premia on green bonds were to skyrocket due to a collapse in confidence in them as a credible asset class, the EU and its reputation would suffer. This show of faith by the EU should encourage investors to trust green finance. Such an increase in investor confidence (and thus demand) would likely reinforce the nudge and further encourage corporations to issue green bonds.

Conclusion

We can see that the EU's issuance of green bonds will have significant and wide-ranging effects on the green bond market, and ultimately, on the environment. Though it may not lead to additional green spending under the NextGenEU programme, it will make the EU more wary of missing their own environmental targets. Furthermore, the enforcement and brake mechanisms the European Commission can use to control these funds means that the EU's green bonds are likely to be pristinely green, setting a new benchmark in the market. Meanwhile, whatever effects EU issuance has on the greenium and the affordability of financing green projects will likely be nullified in the medium-term by the market growth their issuance will inspire. The scale of this market growth and the strength of the signalling effect hinges on how strictly the Commission, and eventually the ESMA, will evaluate the ratings agencies to ensure that their newly-published Green Bond Standard is enforced. Otherwise, unsupervised accreditation processes could lead to investor confidence falling, and stunting the market's growth. However, on balance, it seems that

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