Anthropocene Fixed Income Market Themes 2022

Ulf Erlandsson, Justine Leigh-Bell, Stéphanie Mielnik

This note serves as a non-exhaustive list of themes that AFII finds particularly interesting for fixed income/climate practitioners going into the new year. In addition to these themes, AFII subscribers should rest assured that we will continue working in the 'traditional' streams such as covering new fossil funding fixed income deals (see Notable fixed income funding deals 2021, 21 Dec), macro themes and their impact on the climate dimension in fixed income (see Big Oil's terrible day: Bond market (non-) reactions, 21 Jun; Green bonds duration risk review, 16 Nov) and general market technicals such as passive investing vehicles and their impact on climate related funding costs (see "Passive" money and new thermal coal mine builds, 28 Jul).

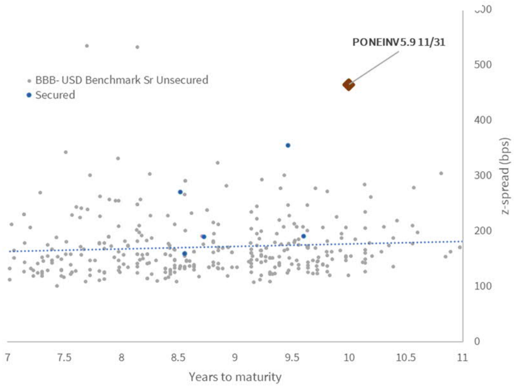
The themes (hyperlinked to document sections):

Earlier thoughts and a condensed text on this was published in NordSIP's Sustainable Fixed Income Handbook 2021 (10 Dec).

Sustainability linked bonds/loans (SLBs/SLLs)

Building structures where issuers' interest payments depend on reaching certain sustainability targets is quite a sensible approach. However, the approach has come under fire as, in practice, SLBs have tended to have very limited step-ups, often near the end of the life of the bond, not to mention underwhelming targets, and parameters that have been set rather arbitrarily across the market. AFII, for one, is proposing a new binary option pricing model to start quantifying what is really being built into the coupon structure in terms of sustainability ambitions.

Figure 1. Port of Newcastle's USD bond late in the year priced much wider/higher yield than comparable rated bonds. Source: AFII.



As some issuers of bonds have started to pay hefty premiums for being in unsustainable businesses, the incentives for SLB/SLL investors to lower these issuers' cost of capital on the back of credible, ambitious transition plans are mounting. Example: coal terminal Port of Newcastle raised 10y USD money at 6% in November; the fair level for that type of credit quality should be 4%. This gives PON a 2% differential incentive to start pricing into robustly structured SLBs.

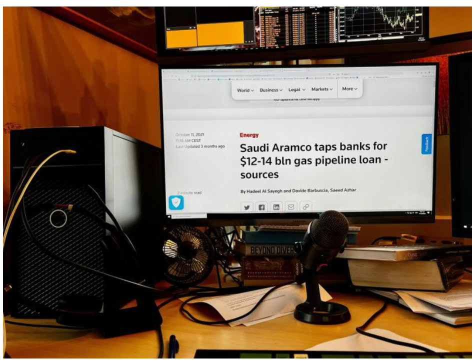
Read more:

- Coal funding premia: Port of Newcastle USD deal (19 Nov)
- Adani and what could be the world's coolest SLB (14 Jul)

Public to private asset transfers and carbon accounting

A large asset manager clearly outlined during a widely publicised session at COP26 the dichotomy between public and private assets in terms of sustainability, highlighting that valuation discounts on sustainability grounds on the public side would lead to significant arbitrage opportunities on the private side. At the time of writing, it has been announced that said asset manager's private arm just won a long-term lease-sell-back of the fossil gas pipeline network of the world's most prominent greenhouse gas emitter to the tune of USD15bn.

Figure 2. BlackRock's winning bid for Aramco's gas pipelines as announced just after COP26 with strong bridge support from a number of global banks. Source: AFII.



From AFII's perspective, these deals have important implications and complexities, in particular when it comes to proper carbon footprint accounting as the polluting asset leaves the public domain. A key to understanding these deals properly will be a better model for capital structure carbon footprinting (see below under 'Capital structure'), as well mapping out the various supporting public-to-private facilities such as bridge loans.

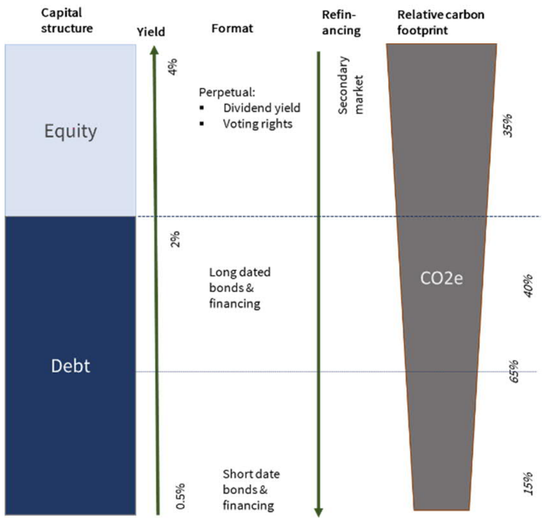
Read more:

- Going into year end… (bridge loans – non-technical explanation) (LinkedIn post, 20 Dec)
- Operation Private Markets: A Bridge CO2 Far (16 Dec)

Capital structure trades

Asset owners regularly hold both debt and equity in the same company. From a valuation perspective, there are interesting contrasts between how climate risks are priced in these markets, especially in companies such as the oil majors. Bonds are often trading at relatively tight spreads / low interest rates compared to the dividend yields offered on the equity side. Rebalancing or using derivatives to take exposure to this gap can give rise to interesting trade profiles, often seen as epitomizing the "deny debt, engage in equities" adage.

Figure 3. A schematic for allocating carbon footprint across the capital structe. Source: AFII.



Through 2021, we saw a few activist equity funds engage, such as Engine No. 1 lobbying for the Exxon board. It is no daring guess that activist investors will start playing a greater role in sustainability focused fixed income as well. For AFII, a particular area of interest in terms of more theoretical (yet applicable) research will be to better model the responsibility, so to speak, equity and debt own in terms of carbon accounting. We still lack a full model to allocate the carbon footprint between bonds and stocks – a schematic of a highly simplified such model is illustrated in Figure 3. Such a model will be helpful both in terms of carbon footprinting strategies focused on capital structure arbitrage, but perhaps even more so when it comes to carbon footprinting in the public to private context as mentioned above.

Read more

- Exxon cap structure arbitrage/impact trade idea (21 May)

Distressed debt situations/debt exchanges

The embodiment of both sustainability-linked bonds and capital structure trades comes in the distressed debt space, where investors essentially bear equity risk in holding bonds, and sustainability linkages can be applied in restructurings. The Belize Blue Bond restructuring in late 2021 used a debt-for-nature swap format: arguably, the terms of the refinancing were better due to environmental commitments. In our opinion, sustainable fixed income investors should really seize such creative destruction as an opportunity.

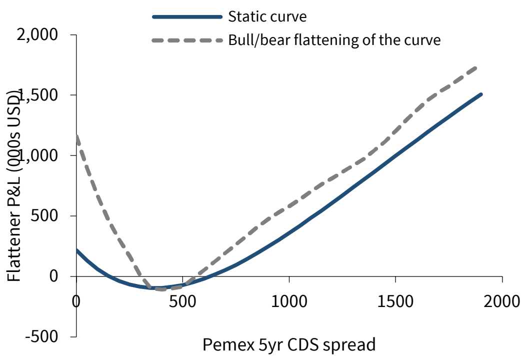
Read more:

- Belize Cures $553 Million Default With a Plan to Save Its Ocean (Bloomberg, 5 Nov)

Convexity and curves

The market is also becoming fraught with saddle-point climate investment cases. By this, we mean situations where bond issuers may have to decide if they wish to see a full transition, or dig their heels in and retain a fully 'fossil-based' business model. Such pivot points in sustainability related situations may lead to tighter spreads (if successful) or much wider spreads (if they fail). For example, late this year, an activist investor suggested a break-up of commodity trader Glencore – an issuer with large coal and methane leakage exposures. If bond holders were to land in the non-coal entity, they would likely enjoy much lower spreads than if their bonds were converted to be securities of the coal entity where many would be compelled to divest. In trading lingo, Glencore and other situations –often driven by activist equity investors – are significantly exposed to convexity. The natural way to play convexity in credit, given the lack of options on single-names, is to use credit curve exposures (in cash or CDS) to go long or short convexity in such situations.

Figure 4. DV01 neutral flatterner on PEMEX yields a straddle like payoff profile. Source: AFII.



Read more:

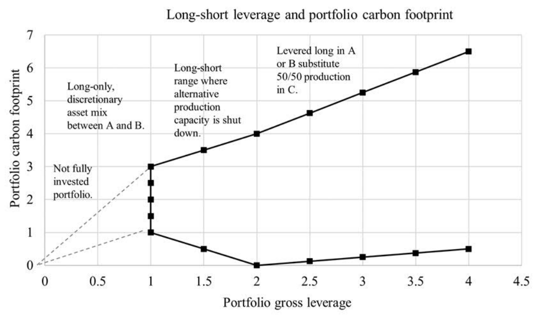
- Mexiconvexity: Credit, IMF, Pemex (8 Sep)
- Glencore: Implications for iTraxx investors (30 Nov)

Systematic fixed income trading opportunities and leverage

With green and other sustainability instruments migrating beyond the plain vanilla space, the potential to "green up" more traditional trading strategies is improving. This can crystallize in various ways – better described in a longer format – but the active sustainability-oriented fixed income investor should cherish the opportunity to trade the Bund-BTPS spread in a green format.

Another dimension of this concerns carbon exposures in leveraged fixed income portfolios – long-short implementations in particular – where one can actually argue for carbon-negative portfolio set-ups. This is clearly an area where hedge funds could become more active.

Figure 5. Potential carbon footprint of a leveraged portfolio applying a long-short overlay – it is possible to reach zero emissions footprint through this technique. Source: AFII.



Read more:

- Low carbon credit performance: equity and rates sell-off update (8 Nov)
- Carbon negative leveraged investment strategies (12 Aug)
- ESG in CDS indices (14 Aug 2020)

Philanthropy

Switching to what may appear to be exactly the opposite of the leveraged hedge fund domain, something that may be in the fringes of market participants' attention is the philanthropic community. Obscure, perhaps, but it is clear that the broader philanthropic community is paying greater attention to climate risks and fixed income markets. Full disclosure: our own organisation benefits from this. The impact of this is a new breed of activism, where fixed income investors can also be targeted in campaigns that traditionally used to be deployed directly towards companies or equity backers of controversial activities. A strong grassroots campaign in Germany against a domestic bank's role in syndicating a thermal coal mining bond deal? That is not something that has been very common before, but it may well be in the coming years.

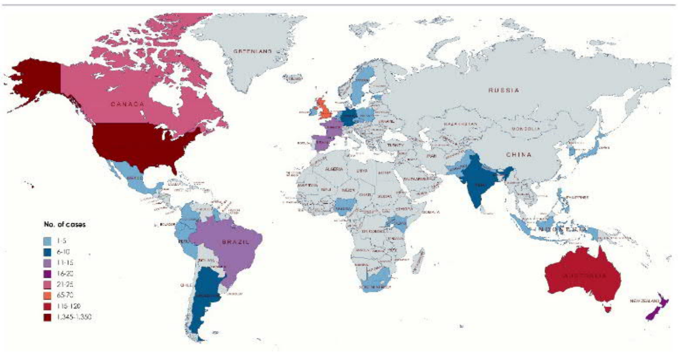
Read more

- It's time for philanthropy to step up the fight against climate change (McKinsey, 20 Oct)
- Bond Vigilante Calls Out 'Dead Fish' Credit Investors on Climate (Bloomberg, 7 Apr)

Legal: disclosure and ESG controversies

One particular area where philanthropies and non-governmental organisations have been successful is in the field of strategic litigation: as oil major Shell experienced in the spring of 2021, litigation driven by non-profit interest can have material effects. In this area, bond disclosures are quite interesting. Equity investors are used to receiving a plethora of information about any issues that could become material to the valuation of the company they are invested in. The tradition, which ought to see such risks formally flagged as "material risk factors" in bond prospectuses, is much weaker in the fixed income space.

Figure 6. Geographical distribution of climate change litigation cases. Source: LSE, Columbia, CCCEP report.



In September, AFII filed a complaint with the SEC in respect of a failure on the part of a subsidiary of the Adani Group – the developer of the Carmichael coal mine in Australia – to disclose material ESG risks, and we are starting to see actions in a similar vein from traditional activist groups. With enhanced disclosure, there will also be higher expectations of investors to actually take note of such disclosures.

Read more:

- Banks hit by 'fraud' complaint to SEC over ADani SLB coal links(GlobalCapital, 21 Oct)
- Global trends in climate change litigation: 2021 snapshot (LSE, Columbia, CCCEP, Policy Paper)

The age of the active counterparty

One of the great events during COP26 happened away from the actual conference. A large custody bank stepped back from providing a substantial loan to the aforementioned coal mine on what appears to have been considerable pressure from *custody* clients, rather than investors. This flavour of counterparty engagement is a very significant and important change. It is an extension of an approach referred to by traders as "putting a counterparty on ice" when some behavioural alignment is required. In the same way, asset owners and managers can manage their counterparties to align with their sustainability strategy. The step from not buying coffee from companies using child labour in their production for the office coffee machine to (temporarily) refusing to transact with financial service providers failing to adequately act against the climate crisis does not appear large.

Read more:

- BNY Mellon cuts ties with controversial Adani coal mine (Financial Times, 5 Nov)
- The Box: Algorithmic climate impact for fixed income markets (15 Sep)
- Net green/fossil funding syndication league table (23 Sep)

Biodiversity and nature loss

With half of the world's GDP relying on nature and its services, biodiversity and nature loss has become an increasing area of concern within the financial community. The urgency to act on biodiversity loss and protection of ecosystems is interconnected with the fight against climate change as the "*destruction of ecosystems undermines nature's ability to regulate GHG emissions and protect against extreme weather*".[1]

Despite the hurdles to measure how a company negatively impacts nature and the obvious lack of widely accepted "culprits", some activities have been pointed out by the international scientific community as particularly impactful. Deforestation stands on top of the podium and 2021 has been marked by the agreement reached at COP26 to end deforestation by 2030 as well as pledges from financial institutions. But pledges alone will not be enough to make a difference and investors now need to take concrete action.

Towards the end of 2021, an extremely interesting case from the perspective of AFII was Shell operations to carry out seismic surveys in the middle of the whale migration season on the Wild Coast of Sout Africa. It illustrates several dimensions of three themes this note tries to highlight: the interlinkages between biodiversity and climate change mitigation, complex funding chains and the usage of litigation to stop environmentally destructive projects. At the time of writing, the seismic surveys have been stopped by South African courts. Oceans absorb 25% of our carbon emissions and are playing a key role in the journey to net-zero. We will keep a close eye on our oceans' health.

Read more:

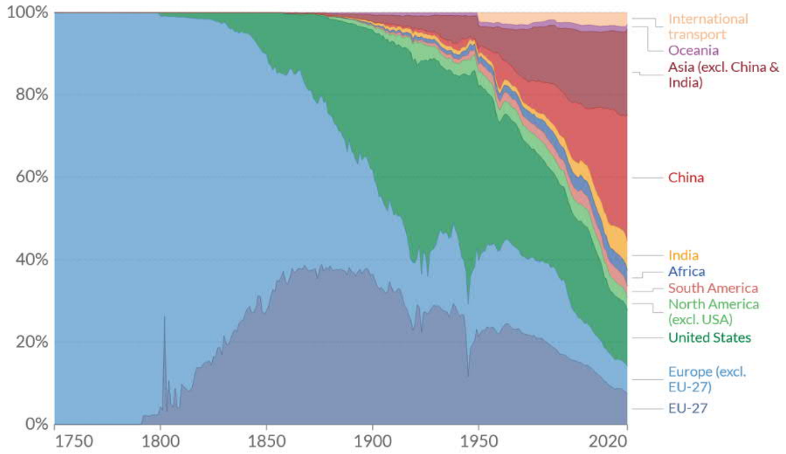
- Shell-shocked: a whale trade in corporate bonds (1 Dec)
- South African cours halts Shell's offshore seismic survey (Reuters, 28 Dec)

[1] Climate change and biodiversity loss should be tackled together (European Commission Horizon, 29 Oct)

Regions

For general credit markets, the final stretch of 2021 has centred around Chinese real-estate developers and potential defaults. Whereas Chinese bond markets historically have not been a focus point for investors, it is clear that this is quickly changing, and with the outsized impact the Chinese energy transition will have for global climate targets, it is a key area for climate impact in general. During the year, AFII provided a primer on exposures for bond investors to Chinese climate related risks and we would expect to return to this theme a fair bit in 2022.

Figure 7. CO_2 emissions by region. Source: [Our World in Data](#).



India is another key economy in the climate transition. Although an economy with a high degree of government involvement, there are potentially bigger engagement opportunities with India related climate exposure compared to the China case. AFII has been engaging on the critical side in terms of some coal businesses, but would also like to highlight the outsized positive opportunities, not least in well-structured SLBs and green bonds. Also, there seems to be some inertia in terms of global investors picking up Indian exposure in non-USD currencies, which to us represents a big opportunity to generate both low cost funding as well as interesting investor exposures to the Indian energy transition.

Read more:

- Market opportunity: Indian (green) bond issuance in EUR (30 Sep)
- Trading climate opportunities in the Chinese bond market: A practitioner's perspective (27 Sep)

The Anthropocene Fixed Income Institute is a non-profit organization "to monitor, advocate for and influence the impact of the fixed income and bond markets in the age of human induced climate change." For more information about the Institute, please visit wwww.anthropocenefii.org or follow us using the hashtag #anthropocenefii.