RBC Global Asset Management

Turning the tide on plastic pollution

June 2024

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"While plastic waste is a global issue, certain countries are contributing more today than others."

Each year it is estimated that between 8-13 million metric tons[1] of plastic end up in the ocean, wreaking havoc on marine ecosystems, entangling wildlife, and breaking down into toxic microplastics that infiltrate food chains.

Fixed income investing isn't necessarily the first thing that comes to mind when considering these issues. However, comparing 10 years ago to where the fixed income market is now – there are an increasing number of investment vehicles emerging within this space aiming to counter some of the damage done by this pollution and offer investors the potential for an attractive return profile.

Understanding the drivers behind plastics pollution in the oceans

While plastic waste is a global issue, certain countries are contributing more today than others. These countries tend to be developing nations[2] experiencing rapid urbanization and whose economies are growing too fast for their waste management infrastructure.

That being said, developed countries are not exempt from responsibility. Countries like Germany, the Netherlands, Japan, the UK, and the US are all known for exporting large swathes of waste to countries with less stringent waste management systems in place. While only accounting for roughly 35% of plastic consumption, OECD member countries account for almost 80% of plastic waste exports of which nearly 50% is heading to non-OECD member countries[3]. This practice allows developed nations to publish recycling rates that do not necessarily reflect the reality of waste ending up in foreign landfills or the oceans.

In addition, the economics of plastic recycling versus new plastic production make a transition to reducing plastics pollution challenging. New plastic production benefits from economies of scale and the artificially low price of oil while recycling plastic requires collection, storage, sorting, cleaning, and processing which generally ends up more expensive and labour-intensive. While oil subsidies persist it is cheaper to produce new plastics than go through the energy intensive process of recycling[4]. There is also a problem with the recyclability of plastic which tends to degrade in quality after a few cycles[5].

[1] oceanliteracy.unesco.org/plastic-pollution-ocean
[2] greenmatch.co.uk/blog/10-countries-producing-most-plastic-waste
[3] worldpopulationreview.com
[4] oceanconservancy.org/blog/2021/06/29/end-fossil-fuel-subsidies
[5] sustainability.colostate.edu/humannature/plastic-economy-is-recycling-broken

This explains why according to one recent study only about 10% of laminated plastic packaging is recycled[6]. The rest is either incinerated, which increases air pollution, or ends up in oceans and landfills. However, the fixed income market does present a unique avenue for investors interested in impact and impact-aligned investments.

Plastic offsets – carbon credits for plastic producers

Plastic offsets allow investors to fund the collection and recycling of plastic waste 'offsetting' their plastic footprint. These offsets can be traded, bought, or sold, providing a financial incentive for companies to reduce plastic usage and support cleanup operations. Despite their potential, critics tend to question the effectiveness of offsets and the lack of transparency in measuring the actual impact of cleanup efforts. Much like their better-known cousin, the carbon credit, there is also concern that offsets may permit companies to continue producing plastic waste, relying on offsets to mitigate their environmental impact rather than reducing their plastic use at the source[7].

Other fixed income investments addressing plastics pollution

Another option for investors is through funding projects dedicated to environmental sustainability, such as waste management infrastructure and recycling facilities. Investors can not only drive the potential for significant real-world change, but with core yields likely at or near cycle highs, investing in these specific funding projects at this juncture could provide a strong entry point to the asset class.

The World Bank recently issued the Plastic Waste Reduction-Linked Bond, which leverages the concept of plastic credits, linking financial returns towards achieving tangible waste reduction targets[8]. Investors in the bond will earn a return that is, in part, linked to the provision of plastic and carbon credits from the two recycling projects[9]. The bond's proceeds have funded projects in developing countries where plastic waste management is a pressing concern.

These initiatives aim to improve waste collection infrastructure, enhance recycling capabilities, and ultimately reduce the flow of plastic into the oceans. While this issuance represents a significant step forward towards the private markets being able to direct capital towards this space, as they are relatively new to market their effectiveness to reduce plastic pollution in the oceans remains to be seen.

However, can financial instruments in this vein be scaled up to meet the enormity of plastics pollution within the oceans? Utilising plastic offsets to allow these principal-protected notes to provide above market yields is a notable marker within this space. Unlike biodiversity directed outcomes-based bonds which are hard to scale due to the different projects being funded, in our view outcome-based bonds for plastic waste reduction shouldn't have a problem with pooling projects - increasing the likelihood of a deal large enough to be included in standard fixed income indices which would help improve liquidity in this (currently) niche market.

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Municipal bonds (munis) are also emerging as a strategic financial tool in reducing oceanic plastic pollution. Cities and local governments, particularly those that are ocean adjacent, are issuing these bonds to fund projects aimed at intercepting and recycling plastic waste before it reaches waterways[10]. While munis specifically targeting plastic pollution are also still quite niche they offer investors another option to consider.

What this means for investors

As awareness grows and demand for sustainable investment options increases, we can expect to see more innovative financial solutions aimed at tackling environmental issues. The fixed income market is where we believe this innovation is likely to take place, given the nature of the asset class, where it can provide a direct line of funding to specific projects. Whilst it remains incredibly challenging to measure the impact of investment instruments and projects like these, they do offer investors the potential of being able to do so.

Targeted municipal bonds and outcomes-based solutions offer those investors interested in reducing plastics pollution within the oceans an avenue to invest within this space in a route that is unique to the fixed income market. In this sense, we believe fixed income investments stand out not only for their potential financial returns but also for their capacity to fund initiatives targeted at preserving the oceans and planet.

[6] iberdrola.com/sustainability/recycling-laminated-plastics-david-espinosa
[7] newrepublic.com/article/181204/plastic-offsets-credits-recycling
[8] ft.com/content/c010dfc3-1304-43ba-92b2-594fa8f473ba
[9] packagingeurope.com/news/investors-to-receive-financial-returns-from-plastic-waste-reduction-and-recycling-projects-in-new-bond/10933.article
[10] climatebonds.net/files/reports/markets_waste_resource_efficiency_briefing_2020.pdf

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