

A SOLUTION TO THE PLASTIC POLLUTION PROBLEM PRESENTS RISKS TO THE CHEMICAL INDUSTRY

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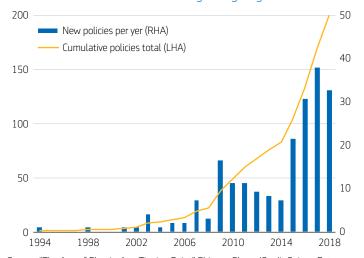
The public as well as regulators have become increasingly concerned about plastic pollution. This has broad implications for responsible investing as well as for specific sectors that sit along the plastics value chain from chemical and packaging companies to retailers and waste companies.

There are substantial environmental externalities related to the use of plastic that warrant the concern. These externalities are primarily related to degradation of natural systems (especially marine biodiversity) and greenhouse gases resulting from the production, after-use incineration and degradation of plastic. According to a study done by the World Economic Forum, if plastic production continues on its current trajectory, there will be more plastic than fish in the ocean, by weight, by 2050.

The Growing Problem

There has been a surge of local, national and regional policies across the globe that have been initiated to limit the environmental damage caused by plastic waste (see Exhibit 1). The European Union is taking the lead in reduction of plastics, with a target of 55% of packaging plastics to be sourced from recycling by 2030. While this appears to be a stretch goal, if achieved, this would have negative demand implications for the upstream chemical industry as they are the primary producers of virgin plastic. A shift towards more recycling is likely to offer positive opportunities for waste management companies who sit at the other end of the plastic value chain.

Exhibit 1: New Policies Announced Regulating Single-use Plastic



Source: "The Age of Plastic: At a Tipping Point" Phineas Glover/Credit Suisse. Data as of 11/19/2018.

Other Strategies

As recycling alone will likely not solve the world's plastic problem, other strategies have been introduced and include bans and/ or consumption reduction targets on single-use plastics. Some countries have introduced tax incentives to encourage companies to eliminate unnecessary packaging and to provide a competitive advantage for recycled plastic. All of these considerations may have long term implications for plastic demand and are also likely to result in disruption for packaging companies that use plastic as their primary substrate.

The current backlash against plastic highlights the importance of integrating environmental, social and governance (ESG) factors into fundamental credit research. While plastic does offer a number of positive benefits (inexpensive, decreases food waste, light-weighting for fuel efficiency), the negative environmental implications have been dominating the headlines. Regulatory, reputational and operational risk for certain companies has increased given the heightened awareness of the environmental impacts of plastic. While the fundamental impact on certain companies/industries is difficult to measure at this point given uncertainty around timing, this ESG risk needs to be factored into an investor's fundamental analysis as a company's response to this risk is likely to influence the severity of the impact on the credit profile.

Impact Investing

On the flip side, we believe the situation creates opportunities from an impact investing standpoint as investors can channel funds to companies that are focused on mitigating the environmental risk of plastics and developing alternatives to conventional plastics. Companies that are focused on addressing the plastic problem align quite well with two of the United Nations Sustainable Development Goals (#12 - Responsible Production & Consumption and #14 - Life Below Water) and could offer an opportunity for investors to contribute to the goal of a more sustainable future for all.



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