

# SUSTAINABILITY LINKED DERIVATIVES

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Legal Briefings - By **Nick May and Nicholas Rutter**

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The challenges posed by climate change affect all sectors, and financial markets have a major role in providing the funding needed for the global transition to a sustainable economy. In relation to sustainable finance, derivatives can play an important role in this transition and support the allocation of long term capital to sustainable sources.

This can be achieved both by applying more traditional derivative transactions for new uses in an ESG context, as well as with a variety of new derivatives structures and transaction types with sustainable features, including sustainability-linked derivatives, ESG-related credit default swap ("**CDS**") indices, exchange-traded derivatives on listed ESG-related equity indices, emissions trading derivatives, renewable energy and renewable fuels derivatives, and catastrophe and weather derivatives. This briefing considers the world of sustainability linked derivatives that will be at the forefront of the growing focus on sustainable finance.

## SUSTAINABILITY-LINKED DERIVATIVES

### OLD PRODUCTS, NEW APPLICATIONS

Derivatives play a considerable role in enabling businesses to better manage their risks through hedging, whilst contributing to transparency through providing forward information on the underlying products in a way that contributes to long-term sustainability. This will be as important as ever when it comes to the transition to sustainability.

Green bonds, which are specifically identified as being to raise money for climate and environmental related projects and initiatives, are an increasingly common feature of debt capital markets. As the transition to a green world requires the issuance of trillions of dollars of capital in finance, this creates resultant interest rate, foreign exchange and credit risks.

As ever, derivatives offer hedging solutions in these circumstances and hedging these exposures can generally be achieved by conventional derivatives products such as interest rate swaps and credit default swaps.

## INNOVATION

Nevertheless, with the growth of sustainable investing there is increasing demand for derivative products which are specifically linked to ESG targets, and which link returns with sustainability performance and impact. These sustainability-linked derivatives generally build upon conventional hedging products (such as cross-currency swaps, or forwards) with the addition of an ESG pricing component, creating highly customisable transactions using various key performance indicators ("**KPIs**") to set sustainability targets.

An example of such a "sustainability improvement derivative" was executed by ING. The swap hedged the interest risk of a \$1 billion five-year floating rate revolving credit facility, but in a new feature added a positive or negative spread to the fixed rate payable by the borrower based on its ESG performance. Following that landmark transaction, other sustainability-linked derivatives in varying forms have emerged onto the market, with differing KPIs that are typically tailored to the specific borrower. These KPIs often go out to three or more years, making these derivatives a powerful means of impacting the sustainability of a company, and may in some cases be connected to ESG KPI targets set out in related ESG linked financings.

The highly customisable nature of these transactions prevents easy categorisation. Some sustainability-linked derivatives incentivise improved ESG performance through reducing a counterparty's payment on the achievement of certain sustainability related targets (such as the ING transaction noted above), whilst others use derivatives transactions as a means of facilitating a counterparty's ability to meet green and other sustainable targets (an example being a counterparty receiving a discounted rate under the derivative based on its positive contribution to one of the pillars of sustainable development, and in alternative cases where the counterparty is required to compensate any failure to meet relevant targets by supporting sustainability projects with defined payments linked to the pricing of the derivative).

Although this is a growing market, it is also new and embryonic and so uptake by market participants is expected to be gradual. Nevertheless, two notable further recent examples of sustainability-linked derivatives in the market are:

- **Interest Rates:** in January 2020, private rail operator Italo – Nuovo Trasporto Viaggiatori structured a €1.1 billion sustainability-linked syndicated loan, with €900m being designated to finance and refinance the company's low-carbon rolling stock. As part of this financing, the company also entered into an interest rate swap which incentivised compliance with the sustainable performance indicators set out in the financing agreement.

- **FX:** in September 2019, Italian power and gas company Enel hedged its exposure to the interest rate risk associated with a €1.5 billion bond through entry into a sustainable-development-goal-linked cross-currency swap. Société Générale gave Enel a discounted rate for the swap based on its commitment to sustainability, whilst the bond is linked to Enel's ability to increase its installed renewable electricity generation capacity from 45.9% to 55% by December 2021 (in default of which, interest rates on the bond will rise).

## ESG-RELATED CREDIT DERIVATIVES

Credit derivatives (**CDS**) offer market participants a mechanism for managing credit risk. CDS can also be used to hedge the credit risk of a counterparty's financial results or viability being threatened by climate change, by (i) managing the risk of future potential losses following a catastrophic environmental event resulting in bankruptcies or defaults; and (ii) managing the risk of changes in the market value of ESG/sustainability-linked bonds or loans themselves resulting from changed market factors (such as a shift in market expectations). CDS are usually publicly traded instruments, and so reference the public performance of large well know entities, hence they are unlikely to be used to hedge the risk arising from non-compliance with ESG targets in a particular ESG financing.

Research has suggested that companies with good ESG ratings pose less credit risk and offer higher returns, and the CDS market has reacted to that feature by using ESG ratings as a basis for CDS contracts. In May 2020, IHS Markit launched the iTraxx MSCI ESG Screened Europe Index (the "**Screened Europe Index**"), a broad European corporate CDS index derived using ESG criteria. The Screened Europe Index was launched in June 2020 and includes a basket of CDS contracts on companies meeting various ESG criteria. In September 2020, LCH CDS Clear also started clearing the Screened Europe Index and its constituent single names as available CDS contracts for members and their clients.

The Screened Europe Index can be used as a macro instrument to hedge broad ESG European corporate risk (as well as to hedge bond portfolios) and also as an investment for firms wanting to gain long exposure to a portfolio of ESG companies.

## ESG-RELATED EXCHANGE TRADED DERIVATIVES

In response to the growing focus on sustainable finance and the likely acceleration of ESG-related issuances in the months and years ahead, global derivative exchanges – like Eurex, Intercontinental Exchange ("**ICE**") and Nasdaq – have launched a series of new equity index futures and options contracts tied to ESG benchmarks. These ESG futures markets are growing, being used by an increasingly wide range of investors – although these markets remain novel and so liquidity in most of these contracts is still relatively low. These ESG-related exchange traded derivatives allow the hedging of ESG investments, better implementation of ESG investment strategies and more effective management of cash inflows and outflows of ESG funds, as well as enabling participants to meet target allocation in a more cash-efficient way than through direct investment.

ESG index derivatives reference ESG indices, based on parent benchmarks that define the companies from which the constituents of an ESG index are selected. These indices can be based on an exclusion methodology enabling investors to eliminate certain types of exposures (e.g. companies considered non-compliant with certain ESG standards) whilst retaining similar risk-return characteristics to the parent benchmark. However, these indices can also be based on positive criteria, to allow investors to gain exposure to high ESG ratings or a specific ESG theme.

## **CATASTROPHE DERIVATIVES**

One of the most visible impacts of climate change has been a rise in ecological events such as hurricanes and earthquakes, resulting in an inherent increase of natural disaster risk. This has created a demand for financial products (including derivatives) to transfer this risk, and the creation of instruments that allow them to do so. The result has been the development of “catastrophe” derivatives, which are customisable OTC derivatives which transfer part of this exposure to natural disasters to investors in return for a premium.

These catastrophe derivatives are of particular use to countries, allowing the transfer of part of such countries’ exposure to such ecological events to insurance and capital markets without increasing the principal amount of sovereign debt. These catastrophe derivatives are often structured so as to pay out quickly upon the occurrence of a natural disaster. The World Bank has been active in designing several catastrophe swaps to enable developing countries to hedge this form of exposure; in 2017, the World Bank launched \$320 million of pandemic catastrophe bonds and \$105 million of pandemic-risk linked swaps, hedging the risk of pandemic outbreak and providing financing for the Pandemic Emergency Financing Facility aimed at supporting developing countries at risk of the outbreak of pandemics.

A prominent 2017 example of such a derivative is a \$206 million catastrophe swap issued for the Philippines. Under this swap:

- the government of the Philippines purchased insurance policies from the Philippines Government Service Insurance System to protect national and local government assets against the risk of earthquakes and severe typhoons;
- to transfer the risk outside of the Philippines, the World Bank acted as intermediary by executing a catastrophe swap with international investors. The World Bank transferred the premium paid by the Philippines to those investors; and
- on the occurrence of a natural disaster covered by the swap and provided that the loss for such a disaster exceeds a pre-defined minimum, the national and local governments of the Philippines will receive a pay-out within 20 days.

## THE FUTURE

It seems clear that the growth of ESG finance will be a major feature going forwards and, far from acting as a brake, the COVID-19 pandemic has accelerated this trend. On 16 September 2020, European Commission president Ursula von der Leyen announced that 30% of Europe's €750 billion COVID-19 recovery fund will be raised through green bonds. Even as demand for ESG derivatives by counterparties grows, as they seek to hedge environmental risks or secure compliance with cap-and-trade regimes, market participants are creating increasingly complex and bespoke instruments designed to meet these needs and facilitate buyers' objectives. This trend seems only likely to continue in the years to come and the market for ESG derivatives will continue to expand and evolve.

The biggest inhibitor of this process in the immediate future will be a lack of standardisation, in documentation and market processes, as markets inevitably take time to adjust to the new world. In this context, ISDA's announcement that it will seek to promote such standardisation whilst expanding the range of ISDA environmental templates is a welcome one, and many market segments are already using ISDA documentation and definitions for ESG transactions. Moreover, on 17 February 2021 ISDA and ten other trade associations published a [set of principles for a US transition to a sustainable low-carbon economy](#). It is clear that these principles - which include fostering the international harmonisation of taxonomies, data standards and metrics - are of application beyond the US, and will enable sound risk assessment and disclosure in addition to providing investors with the clarity needed to assess the expanding universe of ESG derivatives.

The increasing importance placed on ESG by regulatory authorities, market participants and investors is likely to continue and build over time and market participants must therefore act swiftly to secure their position in a world increasingly focused on ESG concerns. The creation and increasing usage of ESG derivatives offers increasing possibilities for clients to participate in this process, and market participants would be well advised to grapple with how such products might factor into their long-term business plans early to ensure they are well prepared for the transition.

## KEY CONTACTS

If you have any questions, or would like to know how this might affect your business, phone, or email these key contacts.



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