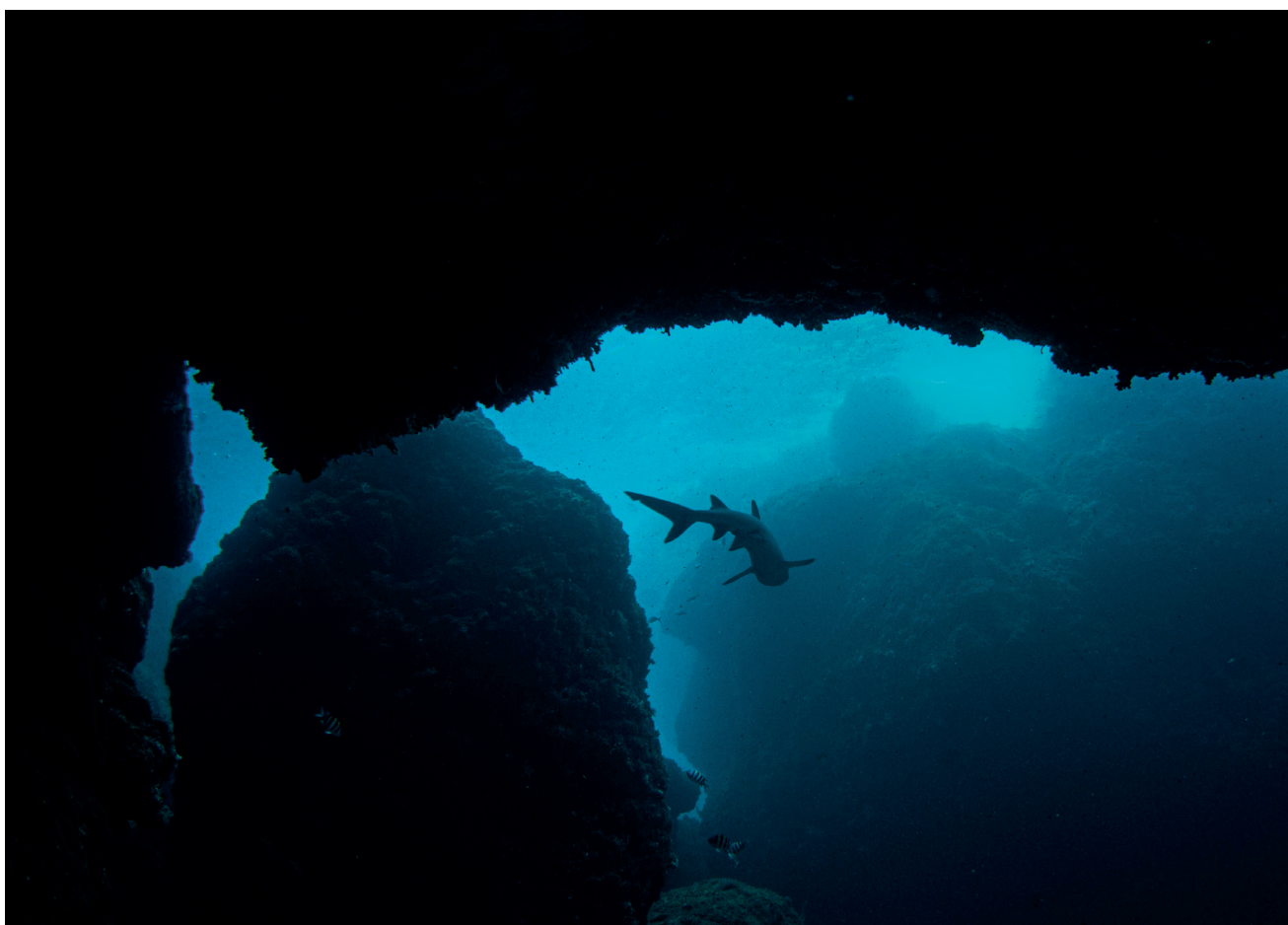




EDMOND
DE ROTHSCHILD

THE SRI CHRONICLES

N° 32 - January 2023



News | p.3

THE COP15 CALLS
FOR A BIODIVERSITY
“PEACE PACT WITH
NATURE”

From an academic point of view | p.4 et 5

WHO PAYS
FOR SUSTAINABILITY?
AN ANALYSIS OF
SUSTAINABILITY-LINKED BONDS



**JEAN-PHILIPPE
DESMARTIN**

Head of the Responsible
Investment Team

2023 WILL BE THE YEAR OF BIODIVERSITY

Eight billion humans on Earth, the new record reached at the end of 2022, will put the planet's resources under increasing pressure. Global population growth – fourfold in less than a century – is a major challenge, particularly for biodiversity.

The good news is that behind one COP lies another. At the end of 2022, the achievements of the COP15 on Biodiversity held in Montréal took many by surprise, unlike the COP27 on Climate Change held earlier in Charm el-Cheikh. We shall discuss this in more detail in the News section. Thanks to the success of the COP15, which set tangible and ambitious goals after 10 disappointing years, 2023 will be the year of biodiversity. On the government side, all countries will be able to build or align their biodiversity plans with the Kunming-Montréal agreement.

For corporates and investors, version 1.0 of the Taskforce on Nature-related Financial Disclosures (TNFD) roadmap should be unveiled at the end of 2023. This will establish a common language around biodiversity for the private sector, just as the Taskforce on Climate-related Financial Disclosures (TCFD) did for climate change back in 2017. For investors, we believe this will involve innovating and building a common climate change & biodiversity roadmap drawing from the TCFD and TNFD frameworks, both of which are compatible. We look forward to taking part in this learning experience in 2023.

One particular announcement could have a major impact in improving the effectiveness of these summits: running concomitant Climate Change and Biodiversity COPs. All stakeholders agree that environmental AND social challenges are intertwined, both in terms of problems and solutions. Better coordination would enable the definitive launch of the Biodiversity COPs, while supporting Climate Change COPs. This surprise (and positive) announcement may be made at the next COP28 in Dubai, in 2023.

To quote Henri Bergson, philosopher: “The future is not about what will happen to us, but what we shall make of it”

We wish you a pleasant read.



**Sustainable Finance and
Responsible Investment Chair**

**Edmond
de Rothschild
Asset Management**
is a co-sponsor of
the Sustainable
Finance and
Responsible
Investment Chair
which is co-
managed by Ecole
Polytechnique and
the Toulouse School
of Economics, and is
a co-sponsor of the
FIR - PRI european
research awards.

FIR FORUM POUR
L'INVESTISSEMENT
RESPONSABLE

PRI Principles for
Responsible
Investment

THE COP15 CALLS FOR A BIODIVERSITY “PEACE PACT WITH NATURE”

The football world cup and the war in Ukraine have unsurprisingly taken centre stage in a lot of media coverage, and this has resulted in the outcome of the COP15 on Biodiversity held in Montreal (referred to as “the last chance for nature”) not getting the press attention many would argue it deserved, despite some surprising outcomes...

A HISTORICAL AGREEMENT...

After 4 years, the absence of country leaders did not prevent the negotiations from culminating in the Kunming-Montreal agreement on December 19th. This landmark agreement, signed by the 196 United Nations countries – including the Democratic Republic of Congo, in the final stretch – can be viewed as the “Paris Agreement” for Biodiversity.

The agreement finally provides an implementation framework for the next eight years based on detailed indicators. It is now down to each country to draw up its own national biodiversity plan by the end of 2024.

The common goal is deeply laudable: to secure a habitable planet for all life on Earth, including human beings.

... TO AVOID THE 6TH MASS EXTINCTION OF LIVING SPECIES

Amazonia is close to its tipping point, oceans are suffering from overfishing, and insects and birds are declining at an increasingly rapid rate. According to WWF estimates, half of the world's GDP depends on nature and the preservation of nature, while the IPBES – the equivalent of the IPPC for biodiversity – believes that 75% of the world's terrestrial ecosystems and 66% of our oceans have been damaged. One million plant and animal species are threatened with extinction at a pace that

is 10 to 100 times higher than the natural rate.

CDC Biodiversité on the other hand, has estimated world-wide biodiversity loss at 40%, a level that is “20 to 25% below the acceptable uncertainty zone for the future of humanity”. Though fewer people are talking about it, biodiversity loss is more critical than climate change.

A GLOBAL COMMITMENT TO PROTECT 30% OF TERRESTRIAL AND MARINE AREAS

The main commitment made by all signatories is to create protected areas covering 30% of the planet, including land and oceans. Rather simplistically, this objective has been presented as the equivalent, for biodiversity, of the 2015 Paris Agreement on Climate Change. As a comparison, only 17% and 10% of terrestrial and maritime areas are currently protected worldwide.

THE OTHER COMMITMENTS ARE ALSO CRITICAL

Among the 23 goals selected for 2030, there were other vital and ambitious commitments made. These include:

- Guarantees for indigenous peoples, who are guardians to 80% of the remaining biodiversity on Earth
- A goal to cut food waste by half
- Reduce pollution caused by plastic (just think of the 7th continent or plastic vortex located in the North-East Pacific)
- Cut subsidies that are harmful to nature by 500 billion dollars per year (subsidies for fossil fuels, for instance)
- Reduce the risks associated with the use of pesticides by half. This reference to pesticides did not disappear from the final wording at the last minute (a miracle?)

FUNDING MATTERS HAVE NOT YET BEEN SOLVED, BUT...

Pessimists will say that the issue of funding is far from solved. Many are concerned that the means are not sufficient and claim an additional 100 billion dollars would be needed every year. Proposals have already been made, however, to double the international aid for biodiversity by 2025. This should increase from 10 to at least 20 billion dollars per year, and then to over 30 billion by 2030. The COP15 has also approved the creation of a dedicated biodiversity branch within the current Global Environment Fund (GEF) in 2023.

"WHO PAYS FOR SUSTAINABILITY? AN ANALYSIS OF SUSTAINABILITY- LINKED BONDS"



Dr. JULIAN KÖLBEL

Dr. Julian Kölbels is assistant professor of sustainable finance at the University of St. Gallen, School of Finance and Center for Financial Services Innovation. He is also a research affiliate at MIT Sloan, where he is a co-founder of the Aggregate Confusion Project, and faculty member of the Swiss Finance Institute. His research covers the real-world impact of sustainable investing, analysis of environmental, social and governance (ESG) metrics, and investor preferences for sustainability. Julian has studied at ETH Zurich and the University of Oxford. Next to his academic work, he serves on the investment committee of the Swiss pension fund Abendrot.



ADRIEN-PAUL LAMBILLON

Adrien-Paul Lambillon is researcher in sustainable finance at the University of Zurich. He is also research affiliate at the Center of Competence for Sustainable Finance (CCSF). Next to his academic work, he is a member of the ESG & Sustainability team at Partners Group, a global private markets investment manager. Adrien-Paul studied at the University of St. Gallen, as well as at Ecole Polytechnique, HEC Paris and ENSAE.

A recent evolution in the field of corporate finance is the issuance of sustainability-linked bonds (SLBs). These are any type of bond instruments fostering the issuer's achievement of predetermined sustainability performance objectives. Certain sustainability targets related to ESG ratings or GHG emissions, for example, are thus included in the bond documentation and margin ratchet. The margin ratchet is a mechanism whereby the coupon of the bond is adjusted during the bond's lifetime depending on whether the company achieves the predetermined and externally verified sustainability objectives. Thus, from the perspective of impact investing, SLBs are an important and promising mechanism.

SLBs seem to emerge as a major sustainable capital financing instrument for corporates. While the volume of SLBs is still relatively small, it has been increasing strongly. The first SLB was issued in December 2018. Since then, the market size of issued bonds has grown to over USD 140 billion as of end of 2021. Currently, little is known about this new financial instrument, and we are not aware of any study focusing on SLBs.

In this paper, the authors try to understand who pays for the sustainability improvement in the case of SLBs. If the investor pays for the improvement in sustainability, then SLBs are a mechanism for investors to have impact. If the company pays, SLBs are a costly signaling tool for companies to signal their commitment to sustainability.

OVERALL APPROACH

To address this question, the paper analyses how SLBs are priced at issue in comparison to their non-sustainable counterpart and investigate how the sustainability target agreement affects the issuance price. A priori, one might expect that investors pay for the impact of a SLB. In this case, a SLB that specifies a coupon step-up for failing to reach the sustainability target should have a lower yield when issued compared to a conventional bond. However, it is also possible that companies pay, using SLBs to signal that they are serious about reaching a sustainability target. In this case, a SLB with a coupon step-up could be traded in line with conventional bonds or even with a higher valuation.

MATCHING METHODOLOGY AND EMPIRICAL APPROACH

To address the research question and test for the existence of a sustainability premium, the authors perform a matching approach at the

bond-level. The aim of the matching procedure is to match bond pairs with a SLB and a non-sustainable bond by the same issuer, which has to be as similar as possible except for the sustainability features linked to it. In a first step, the authors match a sample of 102 bond pairs. The sample of (corporate) SLBs is extracted from Bloomberg's fixed income database, covering all bonds labeled as 'sustainability-linked bonds' as of December 31, 2021. Each bond pair consists of a SLB and a non-sustainable counterfactual bond from the same issuer. In a second step the authors compare and analyze the yield differential, as SLBs and conventional bonds of the same company are subject to the same financial risk once all their differences have been controlled for. Finally, in the third step, they perform a cost-benefit analysis of the SLB issuance.

RESULTS

The results show that in most cases investors pay for the improvement in sustainability, while issuers benefit from a sustainability premium. There are three main findings:

- First, the results indicate that there is a statistically significant sustainability premium. The yield differential between SLBs and non-sustainable counterfactuals at issue is on average -29.2 bps. SLB Issuers benefit from lower cost of capital, while investors pay for the sustainability improvement.
- Second, the results confirm that the pricing dynamics are different for at maturity and callable SLBs. Issuers of callable SLBs benefit from a significantly higher sustainability premium.
- Third, there is a 'free lunch' for some SLB issuers, as their financial savings are higher than the potential penalty, and they have a call option to reduce this penalty. As the average coupon step-up is lower than the sustainability premium and comes into effect in the last year(s) of a SLB, companies benefit from a lower cost of capital even when they fail to achieve their SPT (Sustainable Performance Targets).

GREENWASHING OR SIGNALLING?

The existence of a premium provides relevant insights into the potential motivations of companies issuing SLBs, namely signalling, greenwashing, or the cost of capital.

Findings suggest that most SLBs incentivize sustainability improvements by offering a lower cost of capital. Due to the existence of a sustainability premium, issuers of SLBs benefit from a lower cost of capital, and could thus be driven by financial motivations.

The existence of a 'free lunch' for many issuers suggests that SLBs can also be a form of greenwashing, when they are issued purely for financial optimization without a real commitment to carry out sustainability

improvements. In particular, the commitment of SLB issuers with unambitious SPTs or small potential penalty can be questioned. Furthermore, the callable feature of a high proportion of SLBs, especially in advanced economies, might further reduce the issuer's future penalty and commitment, thus implying the potential presence of greenwashing motivations from issuers.

On the other hand the results show that approximately a third of the companies does not benefit from a lower cost of capital and commit to a high potential penalty in case of failure of achievement of their sustainability performance targets. Thus, such issuers seem to issue SLBs to signal their commitment to sustainability targets. They may use SLBs as a costly signalling tool for their commitment to more sustainable operations, or as a business case motive to set a company-internal price for sustainability.

FURTHER OUTLOOK

Since the paper is the first study addressing the new phenomenon of SLBs, it offers a multitude of future research opportunities.

For instance, future research could analyze to what extent the sustainability targets set by companies are ambitious, and how the distance from the target impacts the sustainability premium of SLBs in order to provide more insights into the motivation of issuers and allow to distinguish between signaling and greenwashing purposes. Market dynamics could be considered, by analyzing the impact of investor demand on the pricing of these SLBs on the primary and secondary bond market. In addition, while the present paper focuses on the yield differential at bond issuance, future research could analyze the development of SLBs on the secondary market as well as the actual impact of SLBs on companies' sustainability profile. Finally, the present paper's focus on the issuer perspective and motivations could be completed by future studies integrating the investor perspective.

Note: an updated version of this article will be published in Q1 2023 by the authors. Julian Kölbel and Adrien-Paul Lambillon, Who Pays for Sustainability? An Analysis of Sustainability-Linked Bonds (January 12, 2022). SSRN: <https://ssrn.com/abstract=4007629> or <http://dx.doi.org/10.2139/ssrn.4007629>

CRODA INTERNATIONAL

Croda International is a British specialty chemicals company founded in Yorkshire in 1925. Croda's business is underpinned by a focus on sustainability deeply rooted in its heritage. Between the wars, in the North of England, M. CROWE M. Dawe (an enterpreneur and a chemist, respectively) took a close interest in the potential use of natural wool grease recovered when sheep are shorn.

Today, Croda International still sources the vast majority of its materials (69% in 2021) from natural and non-fossil products, unlike most chemicals companies. Four generations later, Croda has unlocked a wide range of market opportunities within cosmetics, fragrances, and life sciences, a sector that is increasingly keen to incorporate natural ingredients.

Croda International's ESG integration qualities are not simply the result of its historical business model but are also driven by specific practices and commitments. For example:

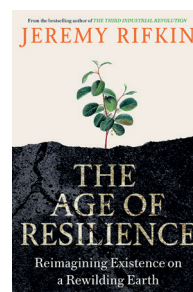
- High Quality, stable and people-driven management, with a focus on employee empowerment – as demonstrated by the low staff turnover (8% in 2021, 5% in 2020)
- Constant innovation, with a research focus on biopesticides
- Strong commitments to climate action, with +1.5°C goals approved by the SBTi initiative
- On the governance front, an independent board of directors, a consistent remuneration policy which is aligned with the company's financial and extra-financial performance, and the separation of duties between CEO and Managing Director

1. Science-based Targets Initiative.

The information about the companies cannot be assimilated to an opinion of Edmond de Rothschild Asset Management (France) on the expected evolution of the securities and on the foreseeable evolution of the price of the financial instruments they issue. This information cannot be interpreted as a recommendation to buy or sell such securities.

THE AGE OF RESILIENCE: "REIMAGINING EXISTENCE ON A REWILDING EARTH..."

A former advisor to Barack Obama, Jeremy Rifkin has published major works, including the Green New Deal. He's back with a simple message. The Age of Progress, focused on efficiency, has dominated our recent development. It must now give way to the Age of Resilience to enable us to overcome the vulnerabilities of our environment and our societies. The planet has less and less room for manoeuvre when it comes to mankind. **This one figure says it all: homo sapiens accounted for under 1% of the terrestrial biomass but consumed 24% of the net primary production created by photosynthesis in 2020. This could reach 44% in 2050.** Note also that Rifkin



The Age of Resilience
by Jeremy Rifkin

has rehabilitated physiocrats. These economists integrated the cost of natural resources. The good news is that as a species, humans have a remarkable ability to adapt and are rediscovering the virtuous link between nature and health.

30%

Commitment by all governments under the Kunming-Montreal agreement to protect 30% of terrestrial areas and coastal and marine ecosystems to enhance biodiversity.

Source: Convention on Biological Diversity; 18 December 2022.

8 billion

The world population as of 15 November 2022. It took 12 years to go from 7 to 8 billion people.

Source: UN; November 2022.

THE CHALLENGE OF PROPOSING RESOLUTIONS AT AGMS FOR MINORITY SHAREHOLDERS

As a long-term believer in shareholder engagement to help investment companies improve their practices and ESG strategies, Edmond de Rothschild Asset Management has always exercised its shareholder right. These include voting, but also proposing agenda items at company AGMs.

In recent years, however, submitting resolutions at shareholders' meetings has become more difficult for investors. The very short notice imposed and the high ownership thresholds, requiring shareholders to coordinate to submit proposals, have hindered the process.

But the biggest challenge is the lack of clarity in the rules governing the receivability of the resolutions which enable issuers to reject proposed agenda items, as Total and Vinci did respectively in 2022 and 2020.

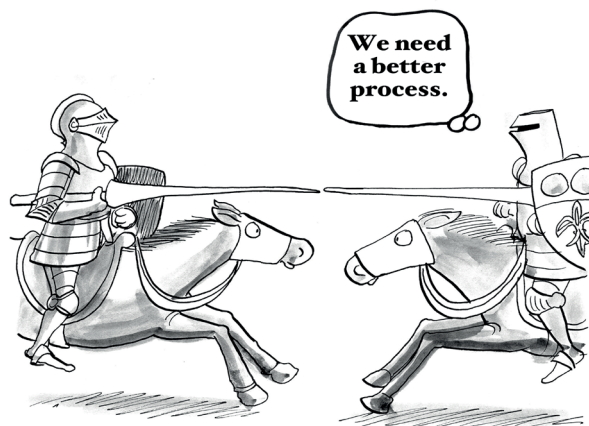
THE RULES OF THE GAME MUST BE CLARIFIED

In October 2022, Edmond de Rothschild Asset Management and the proxy voting firm Proxinvest held a roundtable to discuss the difficulties encountered when proposing external resolutions. Loïc Dessaint, Head of Governance at Proxinvest, reminded participants of the

importance of dialogue and engagement for investors, notably in the context of article 29 of the French energy and climate law. Antoine Gaudemet, professor of private law at Panthéon Assas University in Paris, insisted on the non-applicability of the Motte judgment in these matters, an argument that has been used by issuers to refuse putting these resolutions on their agendas.

Many investors who attended this roundtable came up with ideas to simplify and clarify the regime for submitting resolutions,

highlighting the important role played by external environmental and social resolutions in driving progress on these issues. There is no doubt that these discussions will continue into 2023 in order to prepare the next AGM season calmly this spring, notably pending potential contributions from the AMF's Climate and Sustainable Finance Commission.



January 2023. Non-binding document. This document is for information only. Any reproduction, disclosure or dissemination of this material in whole or in part without prior consent from the Edmond de Rothschild Group is strictly prohibited. The information provided in this document should not be considered as an offer, an inducement, or solicitation to deal, by anyone in any jurisdiction where it would be unlawful or where the person providing it is not qualified to do so. It is not intended to constitute, and should not be construed as investment, legal, or tax advice, nor as a recommendation to buy, sell or continue to hold any investment. Edmond de Rothschild Asset Management or any other entity of the Edmond de Rothschild Group shall incur no liability for any investment decisions based on this document. This document has not been reviewed or approved by any regulator in any jurisdiction. The figures, comments, forward looking statements and elements provided in this document reflect the opinion of Edmond de Rothschild Asset Management on market trends based on economic data and information available as of today. They may no longer be relevant when investors read this communication. In addition, Edmond de Rothschild Asset Management shall assume no liability for the quality or accuracy of information / economic data provided by third parties. Edmond de Rothschild Asset Management refers to the Asset Management division of the Edmond de Rothschild Group. In addition, it is the commercial name of the asset management entities of the Edmond de Rothschild Group.

**EDMOND DE ROTHSCHILD
ASSET MANAGEMENT (FRANCE)**
47, rue du Faubourg Saint-Honoré, 75401 Paris Cedex 08
Société anonyme governed by an executive board and a supervisory board with capital of 11,033,769 euros
AMF Registration No. GP 04000015 - 332.652.536 R.C.S. Paris
www.edram.fr



EDMOND
DE ROTHSCHILD

WE DON'T
SPECULATE
ON THE
FUTURE.
WE BUILD IT.

EDMOND DE ROTHSCHILD
BOLD BUILDERS OF THE FUTURE.

INVESTMENT HOUSE | edmond-de-rothschild.com