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Abstract

Utilising the twin powers of law and finance in tackling ocean biodiversity loss caused by the commercial fishing industry.

Let’s Dive Deeper: Exploring the Blue Audit

Executive Summary

# Environmental Issues

 Aquaculture first emerged as a proposed alternative to wild capture in part due to the rapid decline in fish stocks caused by overfishing.[[1]](#footnote-1) Coupled with population growth, rising household incomes and a corresponding demand for animal protein, there has been a surge in fish consumption which has fuelled substantial growth within the aquaculture industry.[[2]](#footnote-2) With salmon being one of the fish species most commonly eaten by humans,[[3]](#footnote-3) salmon farming specifically has played a large role in supplying this increasing demand.

 "Marine biodiversity" encompasses the variability of all life forms and systems in the marine realm, from genes to ecosystems. The loss of biodiversity would therefore mean the loss of variety. Currently, sea-based salmon farming (otherwise known as “mariculture”) in the commercial fishing industry contributes to the loss of marine biodiversity for three main reasons. Firstly, lice infestation leads to massive mortality rates of farmed salmon. Secondly, mariculture operators' excessive use of chemicals to treat lice infestations degrades the surrounding water bodies. Worsened by being mixed with other contaminating substances, this release of effluents impacts the stability of marine ecosystems by eutrophication. Apart from the resultant loss of marine biodiversity which presents itself in the form of an uninhabitable ecosystem, eutrophication also reduces the ability of natural water bodies to act as a carbon sink, which contributes to worsening climate change. Finally, the risk of farmed salmon escaping and breeding with wild salmon can compromise the genetic integrity of wild salmon populations.

 These problems are magnified by the scale of production in the commercial fishing industry and patchy regulation leaving much room for corporate self-management.

# Legal Issue

 The conditions that challenge biodiversity are shaped by increasing volatility, uncertainty, complexity and ambiguity, while the current standards and reporting frameworks that deal with the issue are primarily voluntary and discretionary, such as the current EU directive that non-financial reports can be included in annual reports. This runs counter to the urgency of mitigating biodiversity loss and suggests that current policies and regulations that attempt to disclose and measure the impact of investments are inadequate.

 According to a McKinsey survey, nearly 97% of investors believe that sustainability disclosures should be audited in some way, and 67% said that sustainability audits should be as rigorous as financial audits.[[4]](#footnote-4) This places demands on external auditors of sustainability disclosure content; to serve the marine economy, corporate reporting must be of high quality, consistent, comparable and verifiable. The current policy does not meet these demands.

# Solving Problems

 In this context, we recommend that specific covenants relating to sustainability be imposed on debt issues, which could be used to require greater disclosure or prohibit the use of proceeds for risky activities. The professionalism and rigour of external audits would also be enhanced to ensure accountability and transparency through independent verification and audit of non-financial information. This audit report would also form part of the borrowing company's annual report, entitled the “Blue Audit”.

 It needs to be clear that environmental issues can indeed be a risk in financial markets, affecting investment returns and business operations. In its Global Risks 2020 report, the World Economic Forum ("WEF") found that failure to mitigate climate change is the most impactful risk that global businesses will face. In addition to this, the WEF ranked the loss of biodiversity as the second most impactful risk. This is partly because the loss of biodiversity affects global food and health systems, and the disruption of these systems can have a systemic impact on all members of these supply chains - including banks. With the market's focus on the environment and the climate, the attitude of a company or any market participant to the environment can have a direct impact on its reputation. Some studies have shown that borrowers with strong sustainability practices have easier access to capital in terms of loan prices. Bauer and Hann[[5]](#footnote-5) show that environmental concerns are associated with significantly higher debt financing costs and lower credit ratings. They find that positive environmental practices are associated with lower costs of debt.

 Traditionally, banks have played a crucial role in the functioning of the economy and because of this, we seek to use the relationship between banks and lending firms to effect systemic change. Amongst other things, the existence of a core group of core actors and multi-stakeholder platforms, such as the Loan Market Association (“LMA”), can provide a potential leverage point for achieving high-level action across the seafood industry. So far, although the LMA is well established in using standardised documentation to build cooperation,[[6]](#footnote-6) the LMA standard form does not contain a standard “basket” that would allow more debt to be dedicated to marine-related investments or initiatives.

 As can be seen, law and finance and ecology interact with each other. Modern finance relies heavily on contract law and financial obligations involving claims set out in contracts, and ecology is increasingly incorporated as an expected risk in the investment decisions of financial institutions. Blue Audits bring these three closer together. The role of banks in financing the transition to a blue economy is to release private investment and to assess projects from an economic and environmental point of view while taking into account the overall risks. This means that the bank accepts the loan agreement initiated by the LMA and constructs a legal relationship with the company that relies on contract law.

 One deterrent mechanism that banks can use in terms of specific implementation guarantees is the inclusion of a buy-back clause in the loan contract. In the context of blue audits, clawback clauses can be used to ensure that borrowers provide fair and accurate information on the status of their environmental practices, as the recovery of these funds is usually triggered when the conditions of some loan covenants are not met. Such a mechanism could therefore be an effective way for banks to ensure that borrowers comply with the annual publication of the Blue Audit report. In addition to this, banks can add “green pill” clauses to their loan covenants. The green pill mechanism uses the bank's power to grant loans to borrowers so that access to these loans and the interest rates charged are dependent on the borrowers meeting their environmental commitments under the contract. As a result, if borrowers do not meet these conditions, they risk losing the preferential interest rates set out in their contracts. Borrowers may also be unable to obtain debt financing from the bank due to this enforcement mechanism.

 In summary, we believe that the inclusion of blue audits in loan agreements is an approach that can be taken to address the loss of marine diversity. For further details and more in-depth discussions, please refer to the extended version of the report (*to be published shortly*).

1. Nathanial Gronewold, ‘Aquaculture May Replace Wild Fish Stocks’ (*Scientific American*) <https://www.scientificamerican.com/article/aquaculture-replace-fish-stocks/> accessed 7 June 2022. [↑](#footnote-ref-1)
2. Rosamond L Naylor and others, ‘A 20-Year Retrospective Review of Global Aquaculture’ (2021) 591 Nature 551. [↑](#footnote-ref-2)
3. Ranithri Abeynayake and Eresha Mendis, ‘Seafood Science, Advances in Chemistry, Technology and Applications’ (2014). [↑](#footnote-ref-3)
4. Sara Bernow and others, ‘Refining Sustainability Reporting for Investors | McKinsey’ <https://www.mckinsey.com/business-functions/sustainability/our-insights/more-than-values-the-value-based-sustainability-reporting-that-investors-want> accessed 13 May 2022. [↑](#footnote-ref-4)
5. Rob Bauer and Daniel Hann, ‘Corporate Environmental Management and Credit Risk’ (Social Science Research Network 2010) SSRN Scholarly Paper 1660470 <https://papers.ssrn.com/abstract=1660470> accessed 7 June 2022. [↑](#footnote-ref-5)
6. Loan Market Association, ‘LMA Documents & Guidelines’ (*LMA Documents & Guidelines*) <https://www.lma.eu.com/documents-guidelines/documents> accessed 7 June 2022. [↑](#footnote-ref-6)