

An underwater photograph showing a clear blue sea with many small bubbles rising from the bottom. A horizon line is visible in the upper third of the image, with a bright, cloudy sky above it. The overall color palette is dominated by various shades of blue and cyan.

AGAINST **THE TIDE**

THE JAPANESE SEAFOOD INDUSTRY
CONFRONTS NATURE'S LIMITS

TRACKER REPORT | MARCH 2021



ABOUT PLANET TRACKER

Planet Tracker is a non-profit financial think tank aligning capital markets with planetary limits. It was created to investigate the risk of market failure related to environmental limits. This investigation is primarily for the investor community where environmental limits, other than climate change, are often not aligned with investor capital.

Planet Tracker generates breakthrough analytics to redefine how financial and environmental data interact with the aim of changing the practices of financial decision makers to help avoid both environmental and financial failure.

SEAFOOD TRACKER

Seafood Tracker investigates the impact that financial institutions can have on sustainable corporate practices through their funding of publicly listed wild-catch and aquaculture companies. Our aim is to align capital markets with the sustainable management of ocean and coastal marine resources.

This report demonstrates how improved sustainability at Japanese seafood companies could drive improved operational and financial performance in a way aligned with both investors' interests and natural capital constraints.

Seafood Tracker is a part of the wider Planet Tracker Group of Initiatives.

ACKNOWLEDGEMENTS

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Planet Tracker would like to acknowledge the input of those who reviewed draft papers, including Martin Exel, Hiro Hayasaki, Kozo Ishii, Hideki Obata and Wakao Hanaoka and the Seafood Legacy team.

WITH THANKS TO OUR FUNDERS



This report is funded in part by the Gordon and Betty Moore Foundation through the Finance Hub, which was created to advance sustainable finance.



Suggested citation: Mosnier F, Willis J (2021):

Against the Tide, The Japanese Seafood Industry Confronts Natural Capital's Limits



WHY YOU SHOULD READ THIS REPORT

Is the state of nature (or natural capital) really relevant to companies' financials?

In this report, using an entire industry of a G7 country as a case study, Planet Tracker shows **how the depletion of the natural world negatively impacts financials, and how improved sustainability could drive better financial performance. Analysts and portfolio managers must therefore understand and account for natural capital and its interplay with financial performance.**

In this report we examine the Japanese seafood industry, from fishing companies and feed producers to retailers and restaurants, to determine whether exposure to a declining resource has impacted the finances of these companies. By analysing the long-term financial performance of 70 listed Japanese companies in this industry, Planet Tracker will show:

- Why declining seafood consumption, wild-catch, aquaculture output and seafood imports have been largely overlooked by investors in these Japanese companies
- What measures management teams have taken to counter dwindling seafood resources
- Which financial indicators are most relevant to equity investors in these companies
- How improved sustainability could drive an improvement in these financial indicators in a way which is aligned with the natural capital constraints these corporates face

Why the focus on Japanese seafood companies?

More than 55% of the world's oceans are subject to industrial-scale wild-catch harvest, spanning an area four times that covered by terrestrial agriculture.¹ Planet Tracker's research under the Seafood Tracker initiative focuses on investigating the financial and environmental stability of the seafood supply chain, from wild-catch and aquaculture through to retailers and restaurants. It is a long, globalised and often opaque supply chain, involving thousands of companies globally.

Yet within the 100 largest seafood companies globally, no other country is more represented than Japan. These large companies source globally, meaning their impact on the status of the world's oceans is significant.² Japanese seafood company Nissui, for example, accounted for 1.6% of the reported global wild-catch harvest in 2016.³

In 2019, Planet Tracker revealed that the Japanese seafood industry was facing a 'Perfect Storm' of declining seafood consumption and production in a context of overfishing and depleting fish stocks and argued that rebuilding sustainable stocks of wild-catch fish could transform the industry, increase profits, preserve its reputation and reduce financial risk to investors.

This report revisits Japan and undertakes a thorough financial analysis of the seafood industry to determine whether these companies have been influenced by natural capital factors. We also provide practical recommendations to simultaneously improve the sustainability of the industry and its financial performance.

KEY TAKEAWAYS

- As overfishing and multiple other anthropogenic pressures caused a drop in fish stocks, seafood supply and demand fell in Japan. Yet between 2010 and 2019, rising profits and share prices of 70 companies listed on the Tokyo Stock Exchange and exposed to seafood defied the challenges of falling production, consumption, imports and farming of seafood. How could this be?
- Companies' management used foreign expansion, acquisitions, vertical integration, cost-cutting and de-leveraging to bypass these natural capital constraints. However, the last three strategies are reaching their limits.
- Meanwhile, the share of overfished stocks is at an all-time high and deeper analysis shows that the financials of the companies most exposed to seafood (seafood retailers, wholesalers and producers, along with restaurants) are suffering from natural capital degradation. Investors have recognised this: the valuations of these companies have decreased relative to their peers.
- Currently investors in seafood companies primarily care about the growth in five financial indicators: revenue, EBIT margin, operating cash flow, return on capital employed and valuation multiples. Whilst none of these properly reflect natural capital issues (but seafood volume-based metrics would), Planet Tracker proposes a list of recommendations through which companies exposed to seafood could align these five drivers with increased sustainability:
 - Disclose seafood volumes handled by species and origin
 - Commit to reducing overfishing
 - Develop closed-cycle aquaculture operations, sustainable feeds, plant-based seafood and lab-grown seafood, traceability solutions, and certified products
 - Reduce bycatch, the environmental costs of aquaculture, and food waste
 - Gradually retire and write-off bottom trawling fleets, freeze their footprint and not trawl marine protected areas
 - Remove ghost fishing gear
 - Implement independently verified sustainability policies in both English and Japanese, that inform corporate and M&A strategies
 - Consider participating in a blue bond scheme that would allow for a recovery in fish stocks based on a temporary catch reduction while increasing their returns

EXECUTIVE SUMMARY

Profits and share prices in the Japanese seafood sector have grown despite natural capital constraints

Between 2010 and 2019, the consumption, wild-catch, aquaculture output and imports of seafood in Japan have all trended one way: down. A combination of changing consumer trends and anthropogenic pressures on marine resources led by overfishing and climate change have driven that decline, further compounded by industry practices harmful to the environment such as bottom trawling, ghost fishing,^I bycatch^{II} or nutrient pollution in fish farms.

Yet, whilst the state of marine resources on which the Japanese seafood industry depends inexorably deteriorates, the revenue, profits and capitalisation of 70 publicly-listed Japanese companies exposed to seafood have trended one way in the same period: up. How is that possible?

Aggregating the financials of an entire sector in a G7 economy to draw natural capital-related conclusions

Planet Tracker analysed more than 800 financial datapoints for each of the 70 companies outlined in Table 1, covering everything from inventories level to cash spent on acquisitions - see Appendix A for the methodologies used and Appendix B for financial details on these companies. We are not aware of any similar analysis having previously been conducted.

We have classified companies in the Planet Tracker Universe of 70 companies into sub-sectors: from feed producers, food producers and seafood producers at the beginning of the seafood value chain, down to food and seafood wholesalers and retailers, as well as restaurants.

Within these categories, seafood producers and seafood retailers/wholesalers are those with the highest exposure to seafood, whilst food producers, feed producers and food retailers all generate more sales from other products (see definition on page 22 and in Appendix A). The same is true for conglomerates, which are present at all stages of the seafood value chain, but for which seafood represents a minimal portion of sales.

I Derelict fishing gear that continues to catch fish

II The portion of a commercial fishing catch that consists of marine animals caught unintentionally

Table 1: List of Companies Exposed to Seafood that Planet Tracker Analysed.⁴

Food Producers	Seafood Producers	Feed Producers	Seafood Retailers/ Wholesalers	Food Retailers/ Wholesalers	Restaurants	Conglomerates / Other
AHJIKAN CO., LTD.	DAIREI CO.LTD.	FEED ONE CO. LTD.	Chubu Suisan Co., Ltd.	ALBIS Co., Ltd.	Daisyo Corporation	Akasaka Diesels Ltd.
Aohata Corporation	Global Food Creators Co., Ltd.	Higashimaru Co., Ltd.	Chuo Gyorui Co., Ltd.	Daikokutenbussan Co., Ltd.	General Oyster, Inc.	Furuno Electric Co., Ltd.
Hagoromo Foods Corporation	Ichimasa Kamaboko Co., Ltd.	Nichiwa Sangyo Co., Ltd.	Daisui Co., Ltd.	Halows Co., Ltd.	GOURMET KINEYA CO., LTD.	Hanwa Co., Ltd.
Hayashikane Sangyo Co., Ltd.	Kyokuyo Co., Ltd.	Showa Sangyo Co., Ltd.	Daito Gyorui Co., Ltd.1	JM Holdings Co., Ltd.	Kaihan Co., Ltd.	Itochu Corporation
Imuraya Group Co., Ltd.	Maruha Nichiro Corp.		Hohsui Corporation	Maxvalu Kyushu Co., Ltd.	Kanmonkai Co., Ltd.	Marubeni Corporation
Kakiyasu Honten Co., Ltd.	Maruichi Co., Ltd.		Tohto Suisan Co., Ltd.	Maxvalu Tokai Co., Ltd.	Tokyo Ichiban Foods Co., Ltd.	Mitsubishi Corporation
Natori Co., Ltd.	NICHIMO CO., LTD.		Tsukiji Uoichiba Company, Limited	Nishimoto Co., Ltd.	Umenohana Co., Ltd.	Nitta Gelatin Inc.
Nichirei Corporation	Nippon Suisan Kaisha, Ltd.		Uoriki Co., Ltd.	Plant Co., Ltd.	Uoki Co., Ltd.	Nitto Seimo Co., Ltd.
NIHON SEIMA CO., LTD.	OUG Holdings Inc.		Yokohama Maruuo Co., Ltd.	S. ISHIMITSU&CO LTD		Shimano Inc.
Toyo Suisan Kaisha, Ltd.	Yokohama Gyorui Co., Ltd.		Yokohama Reito Co., Ltd.	Satoh & Co., Ltd.		Shinyei Kaisha
Wakou Shokuhin Co., Ltd.	Yonkyu Co., Ltd.			Super Value Co., Ltd.		Sojitz Corp.
Yamae Hisano Co., Ltd.						Tiemco Ltd.
Yoshimura Food Holdings KK						
Yutaka Foods Corporation						

¹ Maruha Nichiro closed the acquisition of Daito Gyorui in May 2020. We keep Daito Gyorui in our list when analysing 2010-2019 performance.

We then researched how companies bypassed natural constraints and how instead they could grow in a way that values nature.

Foreign expansion, acquisitions, vertical integration, cost-cutting and de-leveraging have allowed companies to bypass natural constraints

The proportion of assets held abroad by the 70 listed Japanese companies in the Planet Tracker Universe almost doubled between 2010 and 2019, to reach 10% on average. As a result, **foreign revenue grew eight times faster than domestic revenue** over the 2010 to 2019 period, partially helped by favourable currency fluctuations. Overall, these companies grew revenue by an average of 2.1% per annum (p.a.) despite the decline in seafood resources. Mergers and acquisitions (M&A) contributed an estimated 11% of that growth.

EBIT^{IV} margins slightly declined - by 30 basis points (bps) - as companies stepped up their investments (away from wild-catch and often away from seafood), with capital expenditures rising by 60% as a proportion of sales. **Profitability was, however, supported by a combination of vertical integration and cost-cutting rather than improvements in sustainable practices:** on average, non-production costs (excluding depreciation and amortisation) accounted for 6% of sales in our Universe in 2019, down from 10% in 2010.

As **interest rates paid by companies halved and companies deleveraged** (net debt/EBITDA ratios were brought down to almost zero), net incomes rose. So did share prices, by 75% on average, in line with the TOPIX 100 index.^V

In brief, investors have implicitly rewarded Japanese seafood companies for using management strategies to offset the impact on their business of depleting natural capital assets, rather than for ensuring those assets stop being degraded.

Can the Japanese seafood sector afford to keep ignoring natural capital constraints?

Further financial approaches to growth (foreign expansion and additional acquisitions) are still possible. However, debt levels cannot be substantially lowered any more to decrease interest costs, and there are limits to both vertical integration and cost-cutting. Perhaps more importantly, our deep dive into the financials of the 70 listed companies exposed to seafood reveals that, behind the veneer, **nature has been affecting the financials**, despite managements' best efforts to offset this.

IV Earnings Before Interest and Taxes, see Glossary
V The 100 most liquid large companies in Japan by market capitalisation



Companies highly exposed to seafood have started to suffer from natural capital constraints

The trends exhibited by the companies most exposed to seafood are worrying – see Figure 1:

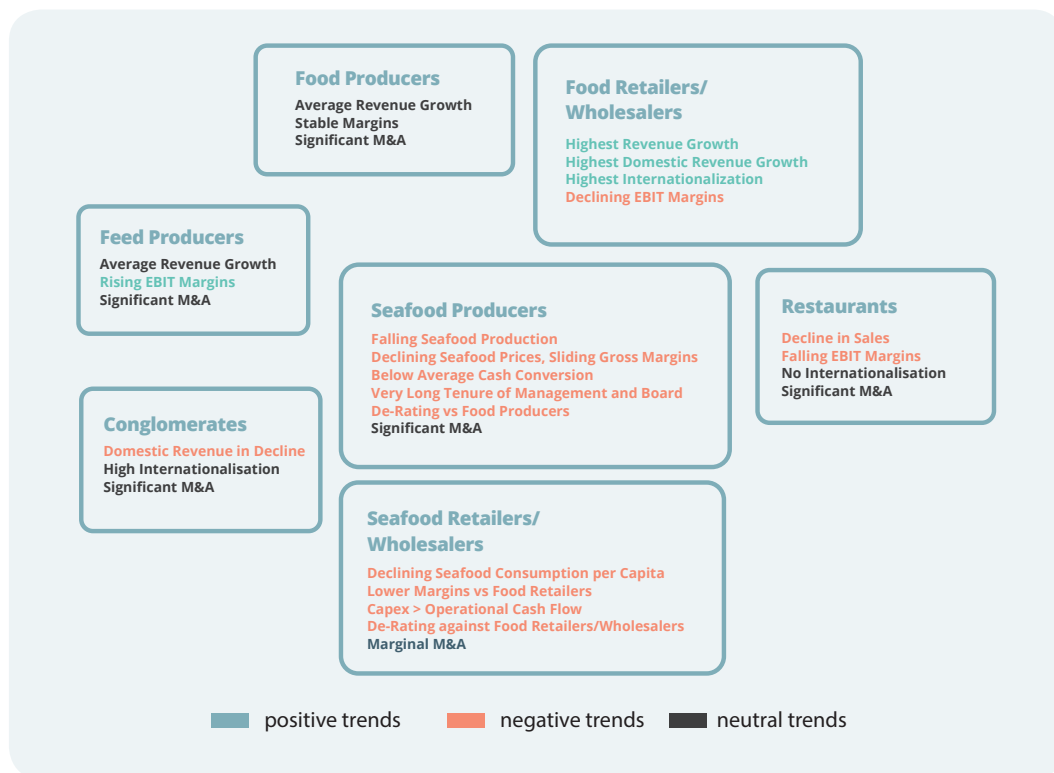


Figure 1: Selected Trends Across the Japanese Seafood Value Chain.⁵

- Domestic sales at seafood retailers and wholesalers have trended **down**, after overfishing led to a decrease in seafood volumes, further amplified by a change in diet away from seafood. In contrast, the more diversified food retailers enjoyed solid revenue growth.
- Restaurants highly exposed to seafood have seen a **decline in both sales and margins**.
- Seafood producers generate average gross margins **12 percentage points lower** than the more general food producers, who are less exposed to seafood. The same margin gap is noticeable for seafood retailers/wholesalers, compared to food retailers/wholesalers, and is slightly widening.^{VI}
- Gross margins for seafood producers are on a **downward trend**, likely because average producer prices of seafood are declining in Japan.
- Cash flow conversion at seafood producers is **by far the lowest** within the sector, often due to changes in the value of biological assets (i.e. change in the price of fish grown in farms).
- Seafood retailers and wholesalers are heavily investing away from seafood due to the decline in seafood volumes but **are no longer able to cover the costs of their investments** through their operational cash flow alone.
- Companies with the highest exposure to seafood have the **highest exposure to very long-term debt**: 91% of the seafood producers' debt is due in 2030 and beyond, whilst visibility on fish production and therefore profit generation in the next decades is very limited.
- The average time in office for management and boards of seafood producers is 29 years, **three times longer** than restaurants for instance and four years more than at food producers. This might create stability but also inhibit fresh management thinking.

VI

Food producers/retailers refer to companies for which the majority of the production/trade consists in other items than seafood products.

Have investors turned away from Japanese seafood companies?

Against this backdrop, it is perhaps not surprising to note that the EV/EBIT^{VII} multiple of seafood producers has come down from 18x to 14x – i.e. by four notches – while the multiple of food producers (less exposed to seafood) has expanded by the same magnitude. Similarly, the P/E^{VIII} multiple of seafood retailers declined between 2010 and 2019, whilst that of food retailers expanded. This could suggest that exposure to seafood is less desired by investors – see Figure 2.

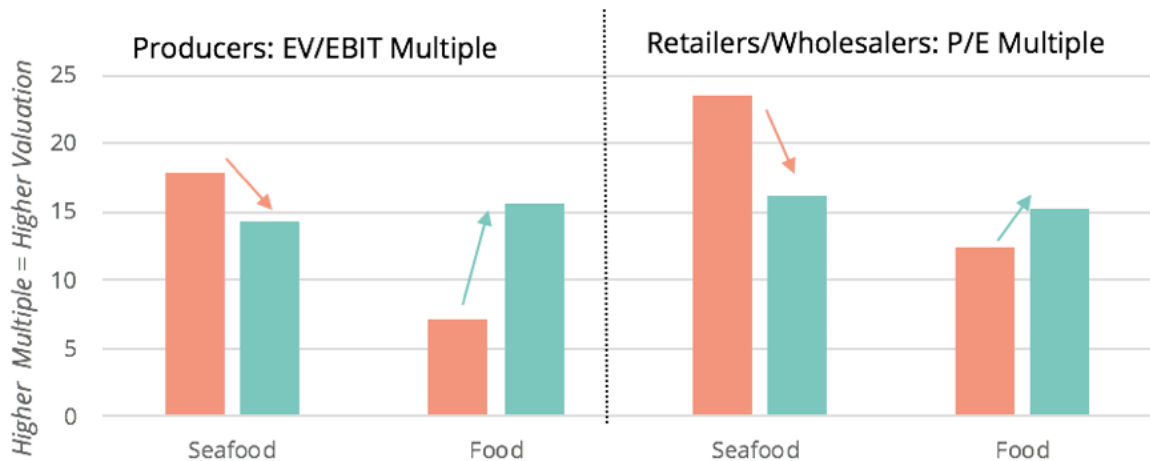


Figure 2: Evolution of the Valuation of Seafood vs Food Producers and Retailers/Wholesalers.⁶

Reconciling investors with seafood companies using sustainability as the key equity story

From its Universe of 70 companies, Planet Tracker analysed the share price performance of the ten best and ten worst performing Japanese companies exposed to seafood and compared it to their financials. We conclude that [the five key drivers of share price performance in the Japanese seafood industry were growth in revenue, growth in EBIT margin, growth in operating cash flow, growth in return on capital employed and expansion in valuation multiples.](#)

Mindful of the fact that these five indicators fail to account for how well natural capital is managed (seafood volumes would be a better indicator for that purpose), we nonetheless analysed how these five drivers of financial performance could grow further in a way that is aligned with natural capital constraints.

VII Enterprise Value to EBIT, a measure of the valuation of a company – see Glossary
VIII Price to Earnings ratio, a common measure of the valuation of a company – see Glossary

! CALL FOR ACTION: WHAT COMPANIES CAN DO

Planet Tracker recommends **Japanese companies exposed to seafood** implement the following strategies to grow in a way that values nature and improves share price drivers:

- **Growth in revenue:** the development of closed-cycle aquaculture operations, sustainable feeds, plant-based seafood and lab-grown seafood and credible certified products are the most sustainable strategies to grow revenue for companies in the Planet Tracker Universe, along with a reduction in bycatch and ghost fishing.
- **Growth in EBIT margins:** can be achieved in the short term through the implementation of traceability systems (since it reduces food recall, waste and liability costs) and in the longer term through the disclosure and reduction of the environmental costs of aquaculture.
- **Growth in operational cash flow:** a sustainable way to improve cash conversion is for each company alongside the supply chain to ensure they reduce food waste, a widespread issue potentially evidenced by the rising inventories to sales ratios in each subsector.
- **Growth in returns on capital employed:** an effective way to reduce overfishing and improve returns at the same time would be for fishing companies to participate in a blue bond scheme where wild-catch volumes are temporarily and significantly reduced, and investors finance the temporary loss in free cash flow, thus allowing for a recovery in fish stocks and higher catch level in the medium-term. In our modelling, the returns of such a scheme would be high for fishing companies, even though many challenges would need to be overcome.⁷

Another solution that would make the sector more asset-light and sustainable would be for owners of fishing fleets to gradually retire and write-off their bottom trawlers - one of the least sustainable type of fishing vessels because of their impact on the seabed - freeze their footprint (i.e. refrain from trawling new areas) and commit to not trawling marine protected areas.

- **Growth in valuation multiples:** research shows that the market rewards firms with high corporate sustainability performance.^{ix, 8, 9} With this in mind, disclosure of seafood volumes handled by species and origin, detailed plans on how to end overfishing, and implementation of independently verified sustainability policies (in both English and Japanese, to broaden the investor base) that inform corporate strategies would allow investors to know, understand and analyse the many natural capital risks that weigh on these companies, and how they plan to mitigate them. Among seafood producers Nissui, for instance, already partially discloses the volumes sourced and tends to acquire companies aligned with its sustainability strategy, but better disclosure is required across the board.

WHAT FINANCIAL MARKET PARTICIPANTS CAN DO

Analysts, investors, lenders, bankers and insurers of these companies can assist by:

- Understanding how defying nature can result in lower revenue growth, margins, cash flows and ultimately valuations and ability to repay debt for these companies
- Engaging with these companies on the ways to align revenue, profit and cash flow growth strategies with natural capital constraints, including by discussing the merits of the recommendations provided by Planet Tracker (see above) with each company. To guide investors in their thinking, we provide in the table below our summarised view on how the implementation of our recommendations could improve companies' financials and valuations – see detailed explanations from page 93.

ix A survey by McKinsey & Co indicates that C-suite leaders would be willing to pay about a 10 percent median premium to acquire a company with a positive record for ESG issues over one with a negative record. That's true even of executives who say ESG programs have no effect on shareholder value.



Table 2: Main Goal and Estimated Impact of Each of Our Recommendations, Sorted by Financial Goal

Recommendation	Main goal		Impact on				
	Financial	Environmental	Revenue growth	EBIT margin	Operational cash-flow	Returns	Multiples
Closed-cycle aquaculture	Revenue growth ↑	Overfishing ↓	↑	Likely ↑	Likely ↓	↓ in the short term ↑ later	Likely ↑
Manufacture of sustainable feeds	Revenue growth ↑	Deforestation ↓ Overfishing ↓	↑	Likely ↑	Uncertain	Uncertain	Likely ↑
Plant-based/Lab-grown seafood	Revenue growth ↑	Overfishing ↓	↑	Uncertain	Uncertain	Uncertain	Likely ↑
Implementation of certification	Revenue growth ↑	Harmful environmental practises ↓	↑	Likely ↑	Uncertain	Uncertain	Likely ↑
Bycatch reduction	Revenue growth ↑	Pressure on marine animals ↓	↑ in the long-term	Likely ↑	Uncertain	Uncertain	Likely ↑
Removal of ghost fishing gear	Revenue growth ↑	Pressure on marine animals ↓	↑ in the long-term	Likely ↑	Likely ↑	Likely ↑	Likely ↑
Implementation of traceability	EBIT margin ↑	IUU ↓	Potentially ↑	↑	↑	↑	Likely ↑
Reduction in aquaculture environmental costs	EBIT margin ↑	Nutrient and chemical pollution ↓	Uncertain	↑	↑	Uncertain	Likely ↑
Reduction in food waste	Operational cash-flow ↑	Overfishing ↓	Potentially ↑	Likely ↑	↑	Uncertain	Likely ↑
Participation in a blue bond-based recovery of fish stocks	Returns ↑	Overfishing ↓	↓ in the short term ↑ later	Uncertain	Uncertain	↑	Likely ↑
Retirement of bottom trawlers	Returns ↑	Pressure on seabed ecosystems ↓	Likely ↓	Uncertain	Uncertain	Likely ↑	Likely ↑
Disclosure of seafood volumes handled	Valuation multiples ↑	Overfishing ↓	Uncertain	Uncertain	Uncertain	Uncertain	Likely ↑
Sustainability policies in line with corporate strategies	Valuation multiples ↑	Harmful environmental practises ↓	Uncertain	Uncertain	Uncertain	Uncertain	Likely ↑
Commitment to reducing overfishing	Valuation multiples ↑	Overfishing ↓	Uncertain	Uncertain	Uncertain	Uncertain	Likely ↑

- Understanding that whilst growth in the five key financial metrics outlined above currently drive share price performance, these metrics fail to allow an assessment of natural capital management. **Volume-based metrics including species and origin** would enable the assessment of both financial and natural capital-related performance.
- Discuss, design and structure **financial tools that aim at reducing overfishing** or improving the general sustainability of the industry. Besides the blue bond previously mentioned, another example could be a **sustainability-linked bond** where a fishing company currently engaged in bottom trawling would commit not to trawl marine protected areas and freeze its trawling footprint, secure debt at a low interest rate but pay penalties if it breached its commitments.



WHAT THE PUBLIC SECTOR CAN DO

Governments, policymakers, fisheries agencies and regulators in turn should:

- Understand how the status quo is likely to negatively impact tax receipts, the balance of payments, value added (hence GDP growth) and employment if natural capital continues to be depleted
- Ensure that **fishing quotas are set in line with scientific advice** and not higher than maximum sustainable yields and that they eventually cover all species
- Encourage companies to **disclose seafood volumes sourced**
- Support initiatives that **reduce overfishing**
- Reduce any form of support that encourages overfishing (such as subsidies)
- Assess the **feasibility of a blue bond** scheme that would allow for a recovery in fish stocks