Exploring Root Causes of the ESG Paradox

~ A Perspective of Systems Thinking ~

April 2025

NISSAY
Nippon Life Insurance Company

Executive Summary

Nippon Life Insurance Company held a sustainability event in December 2024 themed "Sustainability Challenges and Systems Thinking," including a panel discussion on the relationship between ESG performance and corporate financial performance. This report is a compilation based on the discussion, with supplementary material added.

1 Numerous studies have been conducted on the relationship between ESG factors and corporate financial performance by the financial industry and academia, with many suggesting a positive correlation. However, the results vary depending on the time frame, country, and industry analyzed, indicating that this positive relationship based on the disclosed information is not universally applicable.

2 In the U.S. and Europe, companies with higher ESG ratings tend to show higher average ROE and PBR. In contrast, among Japanese companies, no relationship between ESG ratings and financial performance can be found. This paradoxical phenomenon stands out, considering the proactive ESG efforts of Japanese companies.

3 The ESG paradox in Japan can occur when companies (1) lack concrete strategies and plans to enhance business value with regard to sustainability issues, (2) prioritize risk management over opportunity creation, and do not take proactive steps to embrace risk in pursuit of new opportunities. Additionally, (3) low sustainability awareness among Japanese consumers may further hinder companies from generating new opportunities.

4 To resolve this paradox, it is crucial to take the following steps: (1) ensure the board of directors plays a more active role in the materiality assessment process and strengthens its oversight function to encourage sound risk-taking by management; (2) enhance the reliability of sustainability information and promote constructive dialogue between investors and companies; and (3) adopt a systems thinking approach that takes into account the interconnectedness of sustainability issues, rather than a siloed approach that treats them in isolation.

5 If the ESG paradox is not addressed, it will not only hinder progress toward achieving the SDGs, including decarbonizing the economy, but also suppress Japan's potential economic growth rate and keep overall market returns stagnant. This situation exposes institutional investors to undiversifiable, system-level risks. It is essential for the entire investor community to recognize these risks and collaborate to address them based on a systems thinking approach.

Forewords

David Atkin

CEO of the PRI

(Principles for Responsible Investment)

“

I was honoured to be invited to speak at Nippon Life Insurance Company’s event ‘Sustainability Challenges and Systems Thinking’ in December 2024. This report, based on those discussions, provides an important assessment of responsible investment (RI) in the Japanese market. We recognise Nippon Life’s field-building efforts in disseminating the conclusions of the conference.

At its core, RI is about improving investment decision-making – broadening the information considered when making fully informed risk adjustment decisions. For some time now, investors have been aware of evidence that the traditional balance sheet analysis doesn’t tell you everything you need to know about the business value of a company.

Applying an RI lens allows investors to capture relevant sustainability factors that are intangible, but potentially financially material – from the importance of access to clean water to business operations, to poor health and safety records leaving companies open to litigation or prosecution, to lax corporate governance resulting in pressures on the social licence to operate. Investors have seen many examples over the past twenty years of shareholder value being destroyed because of these intangibles.

As the report concludes, it is essential that investors, corporates, and policy makers address sustainability issues with a systems thinking approach, taking into account their interconnectedness within and between systems, in order to create value over the short, medium and long term.

We look forward to continued collaboration with Nippon Life Insurance Company and the wider PRI signatory base in Japan.

”

William Burckart

CEO of TIIP (The Investment Integration Project) and co-author of the book *21st Century Investing: Redirecting Financial Strategies to Drive Systems Change*

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The ESG paradox explored in this report makes one thing clear: sustainable investing must adopt a systems lens—one that moves decisively beyond disclosure and risk management to focus on opportunity creation and long-term value generation.

As someone who helped establish system-level investing as a field of practice, I have consistently championed an investment paradigm that confronts interconnected risks and seizes cross-cutting opportunities to shape markets and drive sustainable economic outcomes.

This report offers a critical analysis of some of the system-level levers —corporate governance, consumer behavior, and market incentives— that can either obstruct or accelerate progress. Its insights echo the work of The Investment Integration Project (TIIP), which has long led the charge in equipping investors to manage system-level risks and opportunities while building environmental, financial, and societal resilience.

I commend this report for advancing the field and urge investors to act on its call for bold, integrated, systems-based strategies.

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1 Introduction

The integration of ESG (Environmental, Social, and Governance) factors into the investment process—commonly referred to as ESG integration—has become increasingly widespread in international capital markets. Over 5,000 signatories have joined the PRI (Principles for Responsible Investment), an international investor initiative promoting ESG integration with investment, and their total assets under management have surpassed $120 trillion.

Even now that ESG integration has become mainstream, investors remain highly interested in understanding the relationship between ESG factors, corporate financial performance, and investment returns. Numerous studies from the financial industry and academia have explored this relationship, with many indicating a positive correlation between the two.[1] However, the results of these analyses vary depending on factors such as time period, country, and industry sector, and the positive correlation between ESG performance based on the disclosed information and corporate financial performance does not appear to be universally applicable.

For instance, as detailed in the next section, a positive correlation between ESG ratings and corporate financial performance is observed in global companies across the U.S., Europe, and other regions. However, such a relationship is not necessarily observed among Japanese companies. Why does this paradoxical phenomenon occur in Japan's capital markets, where companies are actively engaged in ESG information disclosure and ESG integration is widely accepted by investors?

If a positive correlation between ESG and financial performance is not observed, then the notion of causality—where engagement in ESG leads to enhanced corporate value—becomes highly questionable. This not only makes it difficult for investors to identify promising ESG companies and generate excess returns (*alpha*), but it also implies that if the sustainability efforts of the economy as a whole do not lead to corporate value improvements, the market as a whole cannot expect to see a long-term increase in returns (*beta*). This represents a significant system-level risk for institutional investors. Since system-level phenomena emerge from the complex interactions of various factors, a "systems thinking approach" is needed to solve challenges.

In response to this issue, Nippon Life Insurance Company hosted an event in December 2024 themed "Sustainability Challenges and Systems Thinking," inviting experts to discuss the paradoxical phenomenon of ESG factors in Japan's capital markets. This report summarizes the key points of the discussion from the specific panel dedicated to the topic

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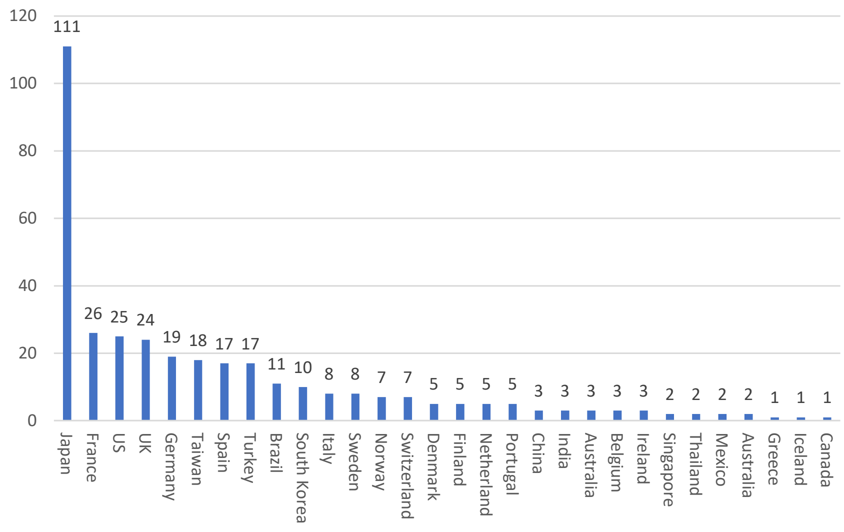
[1] PRI, "ESG factors and returns – a review of recent research," Part III (Sep 2024), Part II (Jan 2023), Part I (June 2021).

at the event.[2] In the process of developing this report, we received valuable feedback from many experts, primarily from the Japanese PRI signatories, with the support of PRI.[3]

2 Corporate Financial Performance and ESG Ratings

Japanese companies have been proactive in initiatives related to ESG integration and information disclosure. For example, the TCFD (Task Force on Climate-related Financial Disclosures) has been endorsed by approximately 5,000 companies worldwide, with around 1,500 of them being Japanese—making Japan the largest endorser (as of October 2023). Regarding the adoption of the TNFD (Task Force on Nature-related Financial Disclosures), Japanese companies also lead globally, with 135 out of a total of 517 companies worldwide having endorsed it (as of January 2024). In addition, Japan has the largest number of companies worldwide that have received the highest A score from CDP, the global organization that manages environmental impact disclosure systems (Figure 1).

Figure 1. CDP Climate Change Assessment (2023): Number of A-list Companies by Country



Source: CDP Climate Change Report 2023

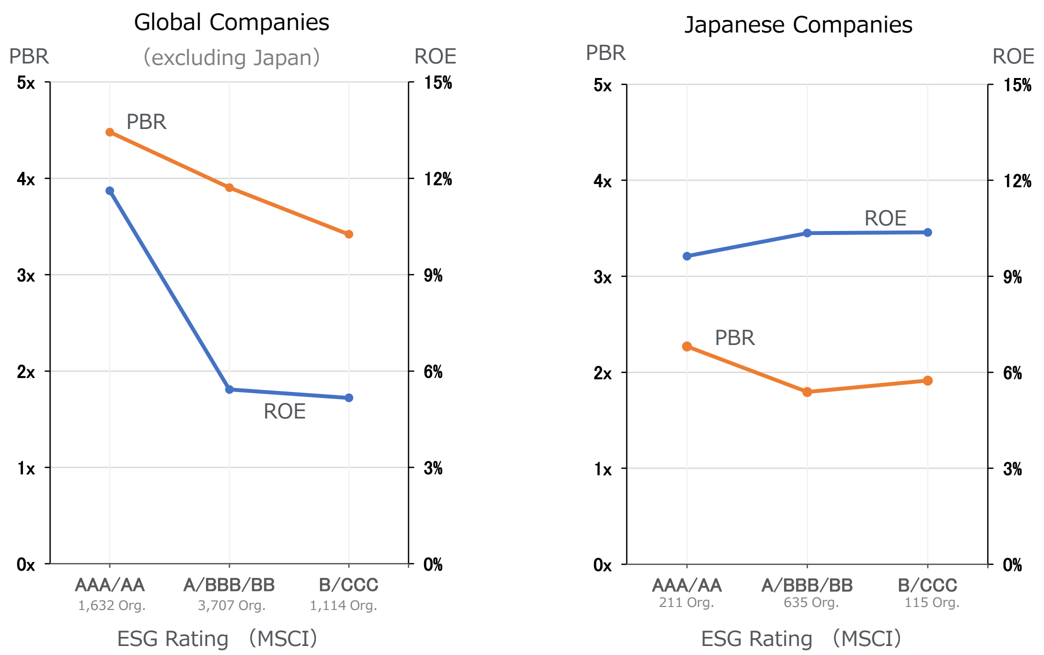
Investors demand ESG disclosures from companies because information about corporate

[2] Nippon Life Insurance Company, Sustainability Event "Sustainability Challenges and Systems Thinking," Panel Session 1, "Exploring the Root Cause of the CDP Paradox," December 2024. Moderated by Takeshi Kimura (Executive Officer, Nippon Life Insurance Company, PRI Board member). The CEO of PRI, David Atkin, gave a keynote speech at the event.

[3] See the end of this report for a list of panel discussion speakers, PRI signatories, and others who participated in the March 2025 event hosted by Nippon Life Insurance Company.

ESG efforts is crucial for evaluating their medium- to long-term financial performance. What is the actual relationship between ESG efforts and the financial performance of Japanese companies? Figure 2 shows whether there is a difference in average financial performance between companies with high ESG ratings and those with low ESG ratings. The ESG ratings are based on MSCI data.[4] In terms of corporate financial performance indicators, this report uses ROE as well as PBR, which also reflects stock market valuations (PBR = ROE × PER). The data collection timing is set so that ESG rating information precedes corporate financial performance.[5]

Figure 2: ESG Ratings and Corporate Financial Performance



Note 1: ESG ratings are based on MSCI (as of March 31, 2023). The rating categories are based on the MSCI "ESG Rating Methodology (December 2021)."

Note 2: PBR and ROE data are based on Bloomberg. The industry categories of "financials" and "government" are excluded from the compiled data. ROE covers data within the period from April 2023 to March 2024. PBR is as of March 31, 2024. For PBR and ROE, outliers are excluded from the sample as appropriate. (Companies outside the mean ±nσ range are excluded as outliers. No statistically significant difference was observed in the analysis whether n=3, 4, or 5).

Note 3: The sample sizes are 965 Japanese companies and 6,453 global companies (excluding Japan).

In the U.S., Europe, and other regions (excluding Japan), companies with higher ESG

[4] For more information on MSCI's ESG ratings, see "What is an MSCI ESG Rating?" and "What MSCI's ESG Ratings are and are not." See "Deconstructing ESG Ratings Performance" for an analysis example of the relationship between the ratings and financial performance.

[5] In Figure 2, the MSCI rating is based on the rating as of the end of March 2023, but it has been confirmed that the analysis results would not change if the rating were changed to the rating from the previous year, as of the end of March 2022.

ratings tend to have higher ROE and PBR than those with lower ESG ratings, but no such relationship is observed among Japanese companies. In Japan, there is no significant correlation between ESG ratings and financial performance.[6] This appears to be a paradoxical phenomenon, given the proactive ESG initiatives of Japanese companies and the widespread adoption of ESG integration in Japan's capital markets.

Of course, we should be cautious about exaggerating and labeling it as a "paradox" based solely on such a limited cross-sectional analysis. With the adjustment of industry sector comparison (Appendix 1), more sophisticated quantitative methods (panel data analysis), or changes to the ESG rating methodology used for the analysis,[7] a positive relationship between ESG performance and corporate financial performance may be identified, even among Japanese companies. However, the differences between global and Japanese companies are striking, as shown in Figure 2.

At the panel discussion held during the sustainability event hosted by Nippon Life Insurance Company last December, the above-mentioned issue was shared with the panelists. The panelists discussed the ESG paradox with the aim of preemptively considering what causes, if any, prevent ESG and sustainability initiatives from fully leading to improved financial performance among Japanese companies, and how the paradox can be resolved.

3 Causes of the ESG Paradox

The panelists identified three main causes of the ESG paradox in Japan: (1) strategies and plans that lack specificity in addressing sustainability issues; (2) an emphasis on risk management over opportunity creation; and (3) low sustainability awareness among Japanese consumers.

Strategies and Plans Lacking Specificity

Disclosure is important because it is the first step in a company's action plan. Through disclosure of information that serves as the foundation for decision-making by investors

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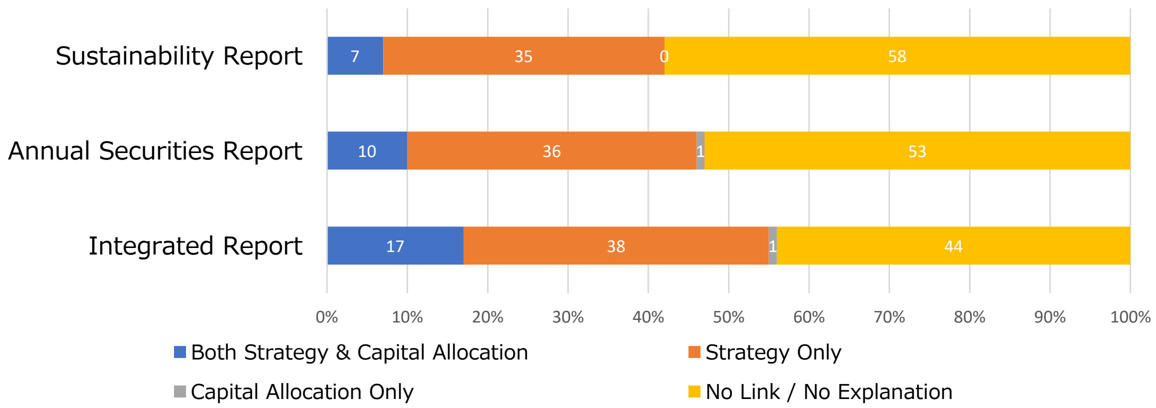
[6] Among the 6,453 global companies in the sample, 1,910 are U.S. companies and 1,397 are European companies. When focusing solely on U.S. and European companies, a more pronounced trend can be observed: the higher the ESG rating, the higher the PBR and ROE. On the other hand, in South Korean and Chinese companies, as with Japanese companies, no clear relationship can be observed between ESG ratings and corporate financial performance.
Note that many investors may perceive that U.S. companies have higher ROE than Japanese companies. However, this perception is based on the performance of U.S. companies in the S&P 500. In reality, the entire U.S. stock market universe comprises approximately 6,900 listed companies (the total of NYSE and NASDAQ), and the S&P 500 accounts for only 7% of them.

[7] Analysis of ESG ratings using CDP instead of MSCI also shows no positive correlation between ESG and financial performance for Japanese companies. See Nippon Life Insurance Company, Sustainability Event, "Sustainability Challenges and Systems Thinking," Panel Session 1, "Exploring the Roots of the CDP Paradox," December 2024.

and other stakeholders, companies are encouraged to compete on a more equal footing. As such, disclosure is expected to enhance corporate accountability and performance. However, if a company's voluntary disclosure efforts, such as sustainability reporting or CDP reporting, are undertaken as" disclosure for disclosure's sake" or for marketing purposes, without accompanying concrete actions that lead to improved business value, the desired impact is unlikely to be achieved.[8]

Looking at the current state of information disclosure by Japanese companies, it is evident that materiality-related statements have become widespread among a significant number of companies. However, the proportion of companies clearly explaining their responses to non-financial factors that they identified as material, such as strategy and capital allocation plans, remains low (Figure 3).

Figure 3: Disclosure of Strategies and Capital Allocation Plans Related to Materiality-Assessed Matters



Source: KPMG," Survey on Corporate Reporting in Japan 2023," April 2024

Sustainability promotion and environmental affairs departments are typically responsible for information disclosure, such as sustainability reports and voluntary disclosures such as CDP reporting. However, many companies appear to lack sufficient collaboration with other key departments, including corporate planning, finance, and investor relations departments. For instance, the low percentage of companies that quantify (in monetary terms) the financial impact of climate-related risks and opportunities in their TCFD disclosures may be attributed to insufficient coordination

[8] "Disclosure for disclosure's sake" is sometimes cited as an issue related to information disclosure by global companies. See the following documents.
S&P Global, "CDP CEO talks climate, nature and the future of sustainability disclosure," September 24, 2024
Robert Zafft, "Disclosure for Dummies," Forbes, November 23, 2022
Ameena Y. Majid, "Getting into the ESG Disclosure, Rating and Ranking Game," September 1, 2020

between the corporate planning and finance departments and the sustainability-related departments.[9]

Even if sustainability-related departments engage in information disclosure for marketing purposes, such as enhancing reputation or improving ESG ratings, it will not lead to improved corporate value unless it is linked to business plans, such as strategies and capital allocation plans. Without such linkage, efforts to address social challenges will not be sustainable, either. If companies are approaching voluntary disclosures, such as sustainability reporting and CDP reporting, with a superficial mindset or a lockstep mentality, this is likely one of the factors contributing to the ESG paradox.

Emphasis on Risk Management Over Opportunity Creation

In general, Japanese companies tend to prioritize risk reduction and management over opportunity creation when it comes to sustainability issues. In fact, an analysis of TCFD disclosures by Japanese companies shows that risk disclosure has been more emphasized than opportunity disclosure.[10] While Japanese companies identify and analyze climate-related risks (both physical and transition risks) in detail and take measures to address them, there are relatively few concrete efforts focused on the business opportunities arising from climate change. Even if robust risk management in relation to ESG factors may improve their ESG ratings, corporate profitability is unlikely to grow without risk-taking to create new opportunities.

The relationship between quantiles of a company's financial performance indicators and its ESG rating supports this argument. Figure 4 illustrates the relationship between ESG ratings and the quantile values of ROE and PBR, rather than average values. For global companies in the U.S., Europe, and other regions (excluding Japan), the interquantile range of financial performance indicators is significantly wider up and down, whereas for Japanese companies the interquantile range is narrower.

It has traditionally been observed that Japanese companies are more risk-averse than their U.S. and European counterparts, often exhibiting lower volatility in return metrics such as ROE and ROA.[11] In Japan, where companies are more risk-averse and less likely to experience obvious success or failure, the distribution of financial performance indicators tends to be closer to the median. In contrast, in the U.S. and Europe, there

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[9] PwC, "Analysis of Disclosure on TCFD Recommendations (March 2023 Annual Report)," October 2023

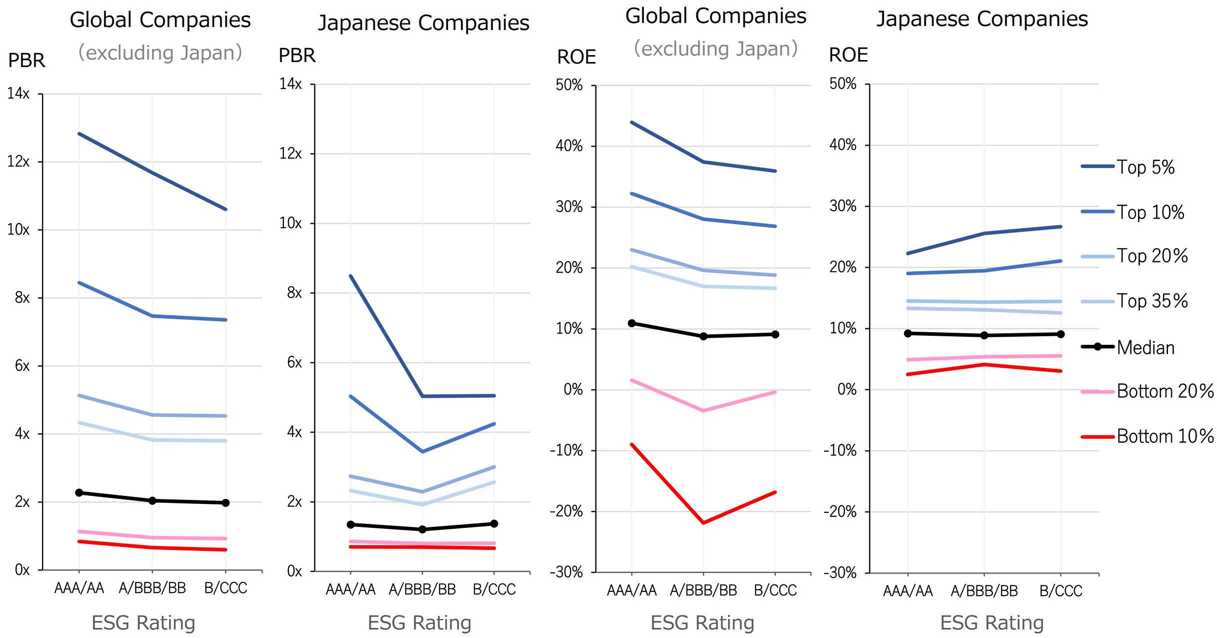
[10] For example, according to KPMG's "Survey on Corporate Reporting in Japan 2022," many companies only describe risks, out of the opportunities and risks. However, the 2023 survey shows more companies are describing opportunities.

[11] Seisaku Kameda and Izumi Takagawa, "An International Comparison of ROA: A Study of Return on Capital of Japanese Firms," Bank of Japan Working Paper Series, September 2003

Yusuke Kimura, "Corporate Governance and Risk Taking," Financial Policy Institute, November 2018

Mikiharu Noma, "Why Are Japanese Companies Risk-Averse?" Hitotsubashi University Web Magazine, July 2021 is typically a larger profitability gap between companies that have taken risks and succeeded and those that have either not taken risks or have taken risks and failed.

Figure 4. Quantiles of ESG Ratings and Corporate Financial Performance



Note: See Figure 2.

These differences in corporate characteristics are also evident when it comes to creating opportunities related to sustainability issues.[12] In other words, in the U.S. and Europe, companies that have identified growth opportunities related to sustainability have taken risks and capitalized on new business prospects, resulting in higher ROEs. In some cases, stock markets have recognized these risk-taking efforts, reflected in higher PBR. In general, companies that identify growth opportunities in sustainability and integrate them into their business plans tend to have higher ESG ratings. On the other hand, companies that fail to see opportunities in sustainability tend to have lower ESG ratings. Companies that avoid taking risks for growth opportunities (or consistently fail to do so) are likely to fall behind in market competition, leading to a decline in financial performance as resources—such as labor and capital—leave these companies. In this context, the quantiles of financial performance indicators show a wider spread for global companies in the U.S., Europe, and other regions, with upper quantiles

[12] Regarding climate-related disclosures, companies tend to be more reluctant to disclose strategies related to opportunities than those related to risk management. This tendency, to varying degrees, is observed not only in Japanese companies but also in global companies (see *EY Global Climate Risk Barometer 2023*). Therefore, the more fundamental issue here may lie in the differing approaches to risk-taking between Japanese companies and their counterparts in Europe and the United States.

demonstrating a positive correlation with ESG ratings.

On the other hand, in Japan, even if companies improve their ESG rating through effective management of ESG-related risks, few companies take risks to create opportunities. As a result, the range between the quantiles of financial performance indicators is narrower, and the correlation between each quantile and the ESG rating is weak. Looking at the top quantile of PBR (the top 5%), companies with high ESG ratings tend to have higher PBR, but no such relationship is observed for the top quantile of ROE. This implies that although corporate ESG initiatives have not led to actual improvements in profitability, the stock market has seen an inflow of funds in anticipation of companies with high ESG ratings, which may have driven higher PBR. In other words, while ESG integration by investors is occurring, it appears that it is not fully linked to companies' profitability performance due to insufficient risk-taking.

The microeconomic differences between Japanese and Western companies in their approach to risk-taking have significant implications for the macroeconomy. In Japan, where few companies engage in risk-taking, it is difficult to distinguish between companies in terms of profitability, leading to fewer market exits and slower economic metabolism. In contrast, in the U.S. and Europe, a higher number of companies take risks, making it easier to identify winners and losers. Companies that avoid risk or repeatedly fail in their risk-taking efforts tend to exit the market, resulting in a faster economic metabolism. In fact, the rate of business openings and closures in Japan remains consistently lower than in the U.S. and Europe. These differences in corporate dynamics are believed to contribute to disparities in the potential growth rates of the macroeconomy as a whole.

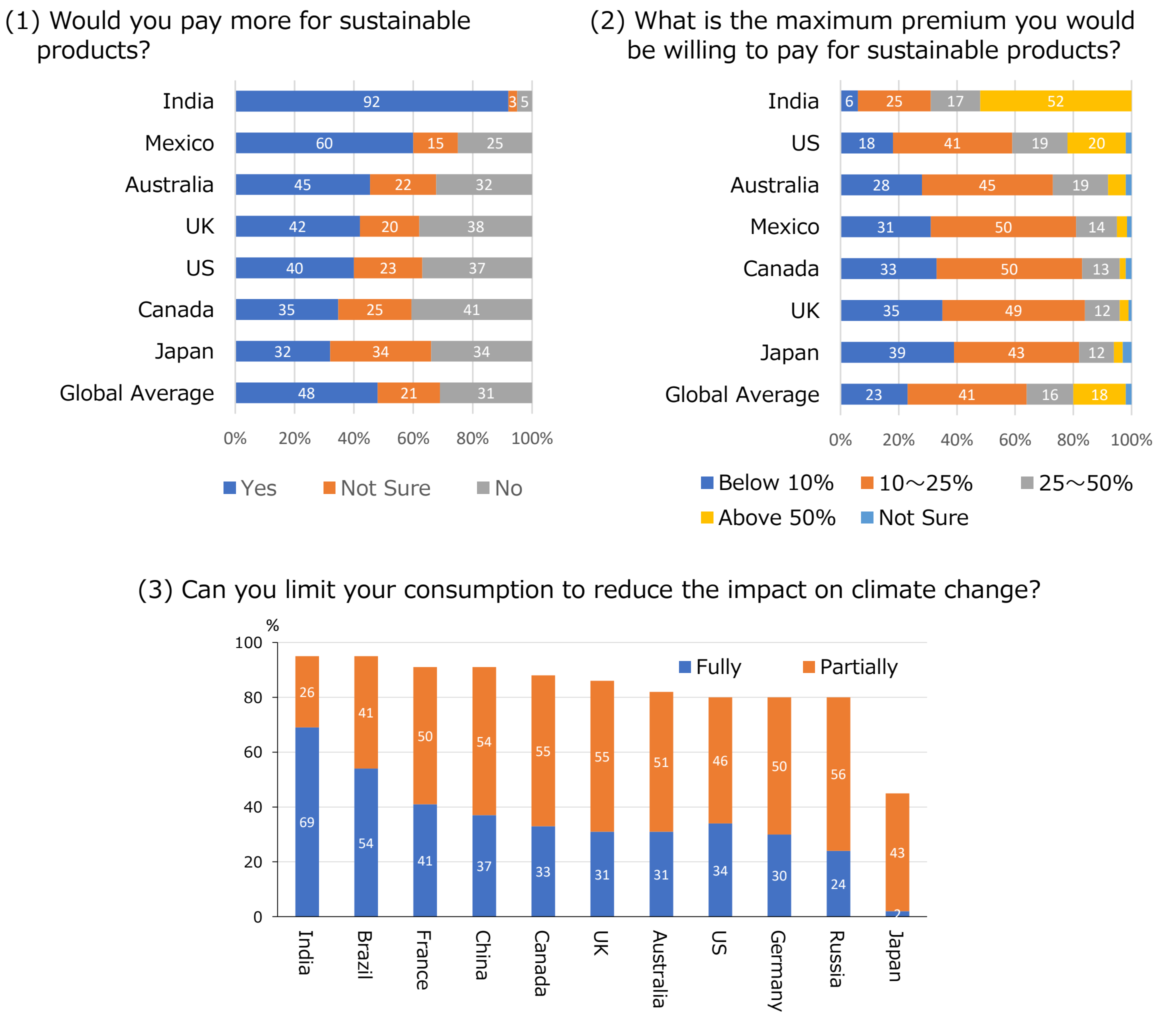
Furthermore, the differing approaches to risk-taking between Japanese companies and their U.S. and European counterparts could affect the achievement of the SDGs, including the transition to net-zero. If companies do not take risks to create new profit opportunities during the transition, the shift to net-zero will be hindered from the outset. As a result, the overall progress toward achieving the SDGs, including decarbonizing the economy, will be delayed. If Japan's potential growth rate remains low and the sustainability of the economy is not ensured, institutional investors will find it challenging to fulfill their fiduciary duties. Therefore, Japan's ESG paradox should be recognized as a system-level risk for institutional investors.

Low Sustainability Awareness among Consumers

Just as electric vehicles (EVs) are more expensive than internal combustion engine vehicles, sustainability-conscious goods and services are generally priced higher than conventional alternatives, as they internalize the costs of negative externalities. The demand for higher-priced, sustainability-focused goods and services largely depends on consumers' preferences for sustainability. Since a company's sales are driven by supply and demand, its financial performance and corporate value are affected by how much consumers value and purchase its sustainable products.

Survey results show that a smaller percentage of Japanese consumers, compared to those in other countries, are willing to pay a premium for sustainability-conscious products (Figure 5). Japanese consumers also seem to be relatively reluctant to limit their consumption to reduce their impact on climate change.

Figure 5. Consumer Sustainability Awareness: International Comparison



Sources (1) and (2): American Express, "SDGs Consumption Attitude Survey," survey date: March 2022
Source (3): Boston Consulting Group, "Survey on Consumer Awareness Toward a Sustainable Society," June 2022

Given these sustainability preferences, even if companies make the necessary capital investments to contribute to achieving the SDGs, such as implementing climate change countermeasures, it may not generate sufficient consumer demand, making it difficult to recover the investment costs. In this context, it might be more accurate to say that Japanese companies are unlikely to find opportunities to contribute to the SDGs within the Japanese market, rather than that they are hesitant to take risks to create such opportunities.

Therefore, the external environment, particularly consumer preferences for sustainability, may contribute to companies' emphasis on risk management over opportunity creation. Under these conditions, ROE and PBR are unlikely to improve, even if ESG ratings increase as a result of robust ESG risk management.

4 Resolving the ESG Paradox

Based on the three causes of the ESG paradox identified in the panel discussion—namely, the lack of concrete strategies and plans, an emphasis on risk management over opportunity creation, and low sustainability awareness among Japanese consumers—the panelists identified three measures to address the paradox: (1) strengthening board oversight, (2) enhancing the reliability of sustainability information, and (3) adopting a systems thinking approach.

Strengthening Board Oversight

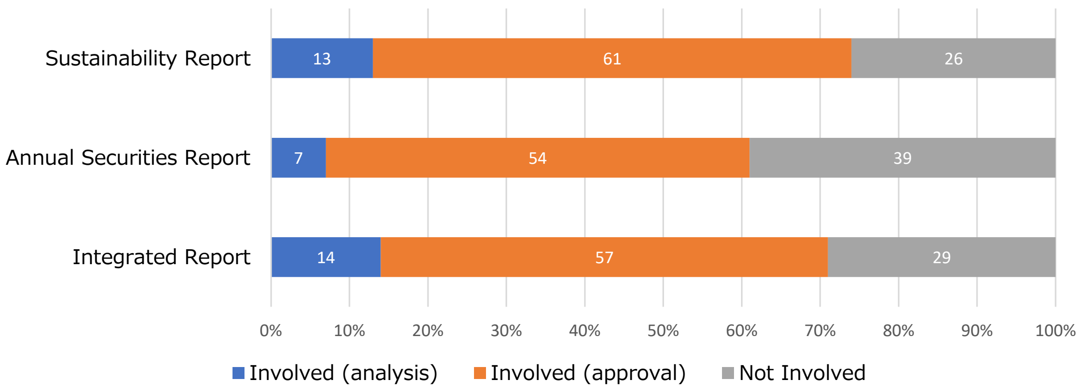
The board of directors is expected to set the overall direction for a company's sustainable growth and oversee management in executing business strategies to achieve this goal. When strategies and capital allocation plans are not properly aligned with a company's materiality priorities, the board should encourage management to improve them. However, in Japan, few companies still have boards actively involved in the materiality assessment process (Figure 6). While it is only natural for the board to give final approval to the materiality assessment, what truly matters is the extent to which the board is substantively involved in and oversees the discussions of sustainability-related risks and opportunities. There remains considerable room for improvement in this regard.

If sustainability disclosure is treated merely as a compliance obligation or a marketing tool to enhance corporate reputation, with sustainability-related departments performing it as a box-checking exercise, it will not contribute to long-term corporate value. It is crucial for boards to engage fully in discussions on sustainability-related risks and opportunities and to promote sound risk-taking by management.[13] Encouraging risk-

[13] Ajinomoto Co., Inc. serves as a model case of a company that views addressing sustainability issues as a risk-taking opportunity and has established a system to sustainably enhance corporate value. In its *Basic Policy on Corporate Governance*, Ajinomoto explicitly defines the role of the board of directors as "providing overall direction by discussing and reviewing key management matters that significantly affect corporate value, supporting risk-taking

taking to create positive impacts, rather than just reducing negative impacts, is expected to strengthen corporate initiatives in ESG and sustainability, ultimately leading to higher ROE and PBR.[14]

Figure 6: Disclosure of Board Involvement in Materiality Assessment



Source: KPMG, "Survey on Corporate Reporting in Japan 2023," April 2024

Linking management compensation to sustainability and ESG performance could be an effective way to foster such risk-taking behavior. As demonstrated by examples from overseas companies, ESG-linked compensation schemes tend to improve corporate value.[15] However, their adoption in Japan remains limited.[16] If sustainability outcomes and compensation are tied to a well-defined Theory of Change (TOC) for addressing sustainability issues and enhancing corporate value, it could encourage more proactive risk-taking by management and improve corporate performance. On the other hand, a compensation system that places more emphasis on risk management than on creating ESG opportunities, or that sets short-term achievable outcomes as targets, may have the opposite effect. Careful design will be needed when introducing such a compensation system.

in execution, and appropriately supervising execution by verifying the appropriateness of processes and outcomes." Ajinomoto has also established a Sustainability Advisory Council as a subcommittee of the board of directors. This council, composed of external experts, discusses the implementation of materiality decisions made by the board, oversees disclosure and dialogue on progress, and strengthens relationships with stakeholders to enhance the board's monitoring functions.

[14] Some have high expectations for "avoided emissions," an indicator used to properly assess a company's contribution to GHG reduction in society as a whole. Unlike Scope 1, 2, and 3, which are used as risk assessment indicators, avoided emissions is an indicator that evaluates a company's ability to solve problems, or in other words, its opportunities for growth (innovation).

[15] PRI, "ESG-linked pay: What does the research say?" June 2021

PRI, "ESG-linked pay: Recommendations for investors," June 2021

[16] KPMG, Survey on Corporate Reporting in Japan 2023, April 2024

Enhancing Reliability of Sustainability Information

For investors, information on a company's sustainability-related risks and opportunities is essential for evaluating its future cash flows, making the reliability of such information crucial.[17] While investors can adequately hedge corporate risk-taking in the stock market by diversifying their portfolio companies, effective diversification requires access to reliable sustainability data. For companies, reliable information is equally important for developing appropriate strategies and taking actions based on identified risks and opportunities. Enhancing the reliability of this information will also help foster more constructive dialogue between investors and companies.

To enhance the reliability of non-financial information, it is essential to establish a robust governance structure to oversee a data collection and aggregation system that can accommodate third-party assurance. However, it appears that few companies, even those on the CDP A-list, have sufficiently developed internal controls for non-financial information.[18] This represents a significant area for improvement, as reliable information is a prerequisite for effective board oversight and constructive dialogue between companies and investors.

In terms of non-financial information, it is preferable to use quantitative data wherever possible, as it offers greater comparability and usability than qualitative information. However, as mentioned earlier, the percentage of companies quantifying (in monetary terms) the financial impact of risks and opportunities remains low. Developing robust internal controls is essential for promoting the disclosure of quantitative information. Yet, many companies are concerned that disclosing highly uncertain quantitative data may become a distraction, leading investors and other stakeholders to focus on the numbers and demand unnecessary explanations or even label the disclosure as "sustainability washing." To facilitate constructive dialogue between investors and companies, it is crucial to strike a balance between quantitative and qualitative information. When providing quantitative data is difficult, companies should clarify their Theory of Change (TOC) for addressing sustainability issues and complement it with milestone management tied to relevant sustainability outcome KPIs. Strengthening such initiatives is likely to contribute to better ROE and PBR.

Adopting a Systems Thinking Approach

If the ESG paradox is caused by the external factor of low sustainability awareness among

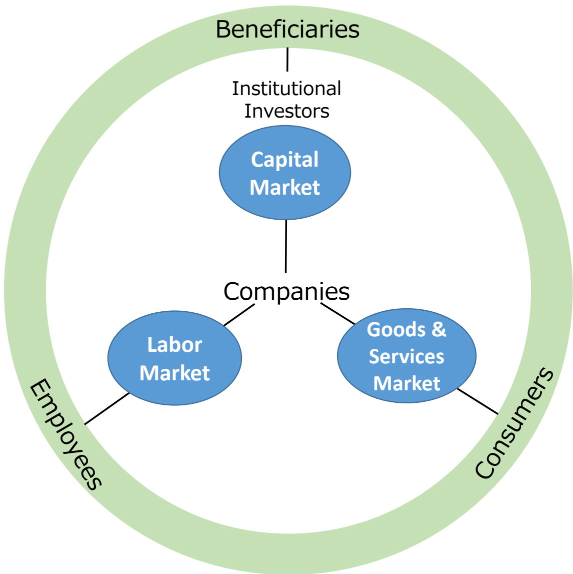
[17] Avoided emissions (Footnote 14) is an indicator that is strongly related to corporate value among non-financial information. However, since it is highly flexible in its calculation and involves the risk of greenwashing, it is extremely important to ensure the reliability of avoided emissions.

[18] See Footnote 16.

Japanese consumers, it is inappropriate to view the paradox solely as a problem of the capital markets. Capital markets are closely linked to markets for goods and services as well as labor markets. Beneficiaries and policyholders at the top of the investment chain are not only indirect shareholders of companies through the asset management of institutional investors, but they are also consumers and employees. As key stakeholders, they interact with companies through the goods and services markets and the labor market (Figure 7), not just capital markets.

Suppose a company claims to be running a sustainable business but hires employees on a non-regular employment basis at wages below a living wage. In that case, those employees are too busy trying to make ends meet today to think about future sustainability.[19] They cannot afford more expensive sustainable products. In such cases, even if companies try to produce sustainable goods and services, their sales and profits will not increase. When companies focus solely on environmental (E) issues and do not address social (S) issues such as income inequalities, they are unlikely to increase their corporate value over the medium to long term. To avoid this, companies should adopt a systems thinking approach that takes into account the interconnectedness of environmental and social issues.

Figure 7. The Relationship Between Companies and Stakeholders Across Three Markets



There are also issues that Japanese investors need to address. Not only in the EU, where

[19] For more information on living wages, see the following document.
Takeshi Kimura, "Low Wages Are an ESG Risk, Recommendation for De-emphasizing Environmental Measures," Nissay Research Institute, November 2024

the European Sustainability Reporting Standard (ESRS) is now in effect, but also in the U.S., investors are beginning to position living wages as a key theme in their engagement with investee companies. In 2023, 136 U.S. institutional investors, representing a total of $4.5 trillion in assets under management (AUM), jointly issued a statement on living wages.[20] Given that companies that do not pay a living wage are exposed to ESG risks, and that living wage issues can impact investors (and their beneficiaries) as a system-level risk that reduces productivity throughout the economy, investors are urging companies to address income inequalities. Regarding social issues, there have been no quantitatively measurable indicators like greenhouse gas (GHG) emissions for environmental issues, making it difficult for investors to assess differences among companies. However, a living wage, like GHG emissions, is a quantifiable indicator that investors can easily track. Therefore, global interest in this issue among investors is expected to grow further.[21] Japanese institutional investors should deepen their understanding of living wages to stay aligned with these global trends.

It is also important for governments to address social issues such as living wages. If companies are trapped in a prisoner's dilemma, competing for short-term profits by reducing wage costs, raising the minimum wage would be a desirable step to narrow the gap with living wages. At the same time, it is crucial to create an environment that allows SMEs in the supply chain to pass labor costs on to prices. A broader "Scope 3 lens" perspective should be applied to environmental issues like GHG emissions as well as to social issues such as income inequalities.[22] The *Grand Design and Action Plan for a New Form of Capitalism 2024 Revised Version*, approved by the Cabinet in June 2024, highlights government initiatives to raise the minimum wage (though it does not mention a living wage) and promote price pass-through for SMEs. Looking ahead, the government should address social issues such as income inequalities from a broader perspective that integrates welfare policy and the labor system.[23] Rather than implementing separate policies for social and environmental issues, governments should adopt a systems thinking approach (i.e., a "whole-of-government" approach) to leverage synergies between policies and achieve more comprehensive solutions.[24]

To resolve the ESG paradox, it is essential that corporate sustainability initiatives are appropriately priced in Japan's capital markets to enhance the sustainability of society and the economic system. This requires a systems thinking approach by companies,

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[20] Interfaith Center on Corporate Responsibility, "Investor Statement of Support for a Living Wage for U.S. Workers," November 2023

[21] PRI, "Why system-level thinking is required of responsible investors in an inflationary environment," October 2024

[22] TISFD, "People in Scope," October 2024

[23] Akane Enatsu and Takahiro Kato, "Initiatives to Reduce Inequality and Finance," Nomura Sustainability Quarterly, 2022 Spring

[24] PRI, "Investing for the economic transition: Japan," September 2024

investors, and the government. Unlike the siloed approach, which treats sustainability issues in isolation, a systems thinking approach takes into account their interconnectedness. While this approach is more complex and may take longer to reach an optimal solution, it addresses the root causes of problems and is expected to deliver a more significant and lasting impact. A more multifaceted analysis of the underlying factors shaping Japanese consumers' sustainability preferences would also be necessary based on a systems thinking perspective (Appendix 2).

5 Conclusion

If Japanese companies' efforts to address sustainability issues do not fully lead to improved corporate value, it poses a serious problem for institutional investors. This not only delays the overall achievement of the SDGs, including the decarbonization of the economy, but also keeps Japan's potential economic growth rate low, resulting in stagnant market returns. When companies focus solely on formal disclosure without taking real action to resolve issues, or if they remain risk-averse and insufficiently committed to creating sustainability-related opportunities, institutional investors' (universal owners') portfolios will be trapped in a high-risk, low-return scenario. If the economy remains sluggish and worker incomes fail to improve, consumers will prioritize making ends meet today over thinking about future sustainability. As a result, corporate sustainability efforts will go increasingly unrewarded. Once the entire economy falls into this bad equilibrium, it becomes difficult to escape, and this creates an undiversifiable system-level risk for investors.

On the other hand, it should be noted that risk and opportunity are two sides of the same coin. If the ESG paradox is resolved, system-level opportunities will be created through the optimal allocation of resources in the markets, thereby increasing the potential growth rate of the economy and improving the sustainability of the economy and society. The key is how to turn system-level risks into opportunities.

Addressing system-level risks cannot be effective if tackled by a single investor alone. It is essential for all investors to share an awareness of these issues and collaborate to resolve them based on a systems thinking approach. This report was developed by Nippon Life Insurance Company as part of its field-building efforts. Field building is an approach where investors share their awareness of issues with corporate stakeholders (such as the investor community, policy makers, and the media) and work together to change the norms, assumptions, and rules that shape corporate behavior and drive sustainable changes in companies.[25] In addition to the measures presented in Section 4, numerous

[25] For more information, see the documents below.

other approaches could be taken to resolve the ESG paradox. This report is intended to serve as a catalyst for further discussion within the investor community.

Appendix 1: ESG Rating and Financial Performance by Industry

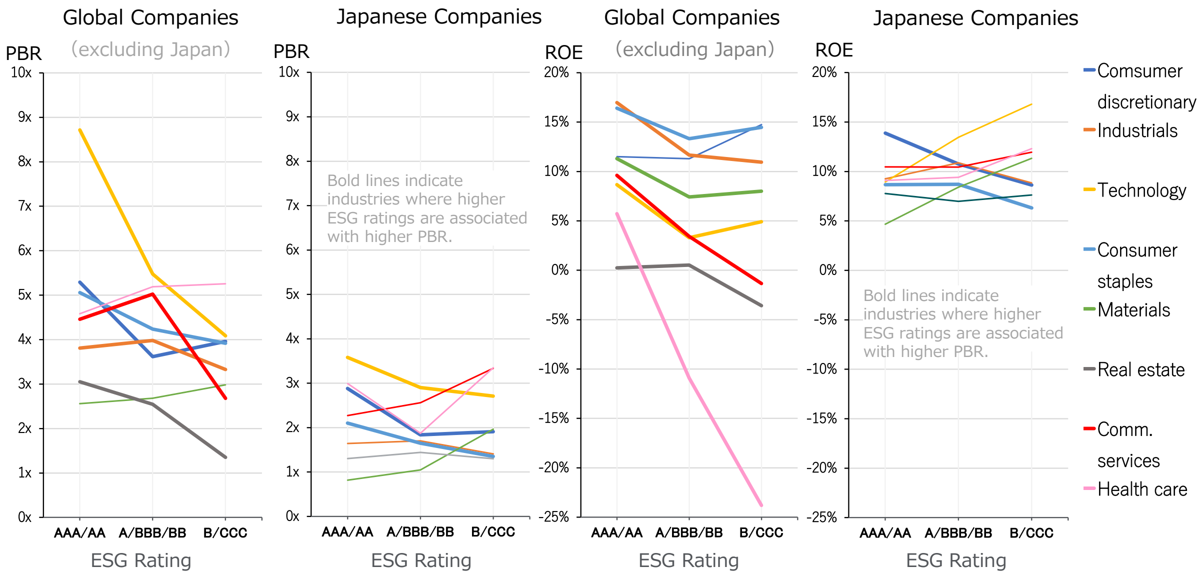
When analyzing the relationship between average industry-wide financial indicators and ESG ratings (Figure 2), a correlation may be distorted by differences in industry composition, as PBR and ROE levels vary across industries. To address this issue, it is crucial to examine the relationship between financial performance and ESG ratings within each industry sector. In other words, it is preferable to conduct apples-to-apples comparisons within the same industry, rather than apples-to-oranges comparisons across different industries. It is important to compare the "taste" (financial performance) of a high-rated apple with that of a low-rated apple, rather than comparing the taste of a high-rated apple with that of a low-rated orange.

Among global companies (excluding Japan), there are relatively many industry sectors where companies with higher ESG ratings tend to have higher average ROE and PBR values (Appendix Figure 1-1). Specifically, PBR or ROE is positively correlated with ESG ratings in all industry sectors: technology, communication services, health care, industrials, materials, real estate, consumer staples, and consumer discretionary. In contrast, in Japan, sectors where higher ESG ratings correspond to improved financial performance are limited to consumer staples, consumer discretionary, and technology. Furthermore, in sectors where a positive correlation is observed, the extent of change (difference) in financial performance in response to differences in ESG ratings is greater for global companies compared to Japanese companies. Therefore, it can be concluded that in Japan, compared to the U.S. and Europe, the ESG paradox trend is observed even in apples-to-apples comparisons within the same industry.

These analysis results indicate that the "Best-in-Class" approach—selecting top-performing companies within each industry sector based on ESG criteria—can be an effective investment strategy when targeting global companies (excluding Japan). On the other hand, the findings indicate that the effectiveness of the Best-in-Class approach may be lower when applied to Japanese companies.

Emilio Marti et al., "A More Impactful Strategy for Sustainable Investing," Harvard Business Review, September 2023TIIP, "(Re)Calibrating Feedback Loops: Guidance for Asset Owners and Institutional Investors Assessing the Influence of System-level Investing," December 2023

Appendix Figure 1-1. ESG Rating and Financial Performance by Industry



Note: See Figure 2. PBR and ROE are corporate averages by ESG rating. Industry classification is based on Bloomberg. Of the industry categories, utilities and energy are not shown in the figure as a positive correlation between ESG ratings and financial performance cannot be identified for either global or Japanese companies.

Appendix Figure 1-2. Industry Composition and ESG Ratings of Sample Companies

Global Companies (excluding Japan)	Composition			
		AAA/AA	A/BBB/BB	B/CCC
Consumer Discretionary	13%	4%	7%	2%
Industrials	17%	5%	9%	3%
Energy	6%	2%	3%	1%
Technology	13%	3%	8%	3%
Consumer Staples	8%	2%	4%	1%
Materials	12%	2%	7%	3%
Utilities	4%	1%	2%	1%
Real Estate	9%	2%	6%	1%
Communication Services	6%	2%	3%	1%
Health Care	12%	2%	8%	2%
Total	100%	25%	57%	17%

Japanese Companies	Composition			
		AAA/AA	A/BBB/BB	B/CCC
Consumer Discretionary	19%	4%	12%	4%
Industrials	24%	5%	16%	3%
Energy	1%	1%	1%	0%
Technology	13%	4%	8%	2%
Consumer Staples	11%	2%	8%	1%
Materials	11%	2%	8%	1%
Utilities	2%	0%	2%	0%
Real Estate	7%	1%	6%	1%
Communication Services	5%	1%	3%	0%
Health Care	6%	2%	4%	1%
Total	100%	22%	66%	12%

Note: See Figure 2. Industry classification is based on Bloomberg.

There is no significant difference between Japanese companies and global companies (excluding Japan) in the composition of industry sectors where higher ESG ratings are associated with improved financial performance (Appendix Figure 1-2). Therefore, it is unlikely that the differences between global and Japanese companies in the relationship between average industry-wide financial performance and ESG ratings shown in Figure 2 are influenced by industry composition (i.e., the distortion caused by apples-to-oranges comparisons).

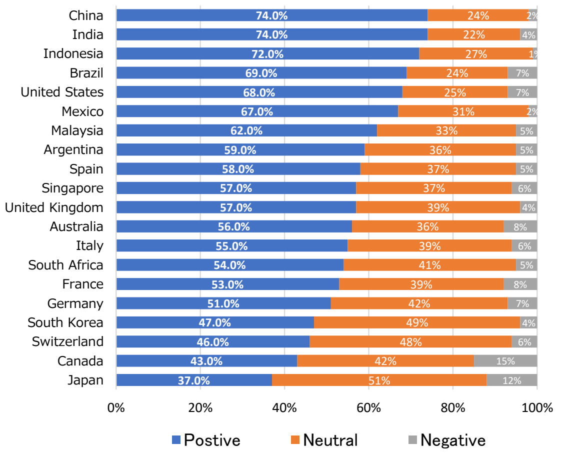
Appendix 2: Public Awareness of Sustainability in Japan

Rising prices, including the surge in energy costs, have had conflicting effects on public awareness of the SDGs across countries. On the one hand, they raise public awareness of the importance of renewable energy and global environmental issues. On the other hand, declining purchasing power—especially among low-income households—may lead to the perception of the SDGs as a luxury, causing disengagement from sustainability efforts. Given that this decline in purchasing power affects consumers worldwide, not just in Japan, it suggests that the relatively low sustainability awareness among Japanese citizens may be influenced by factors other than income.

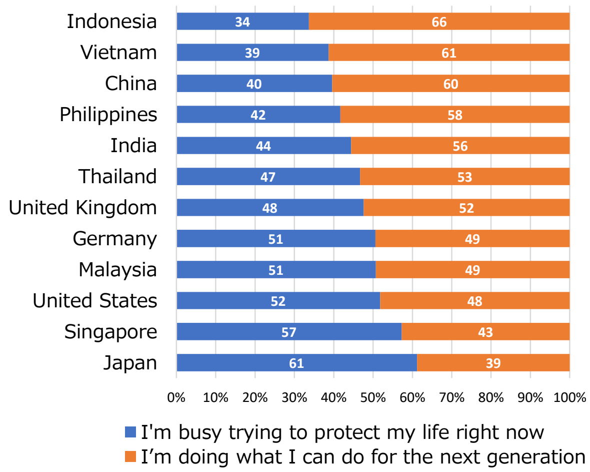
Public awareness of sustainability in Japan tends to be low not only in terms of consumption (Figure 5) but also in investment. For example, a global survey of retail investors (Appendix Figure 2-1) shows that Japanese investors are the most reluctant to "fully switch their portfolios to sustainable investments while maintaining the same level of risk and diversification."

Appendix Figure 2-1. Public Sustainability Awareness: An International Comparison

(1) As a retail investor, how would you consider replacing your entire portfolio with sustainable investment funds if the diversification risk level is maintained?



(2) Are you doing all you can to maintain your life now, or are you doing what you can do for the next generation?

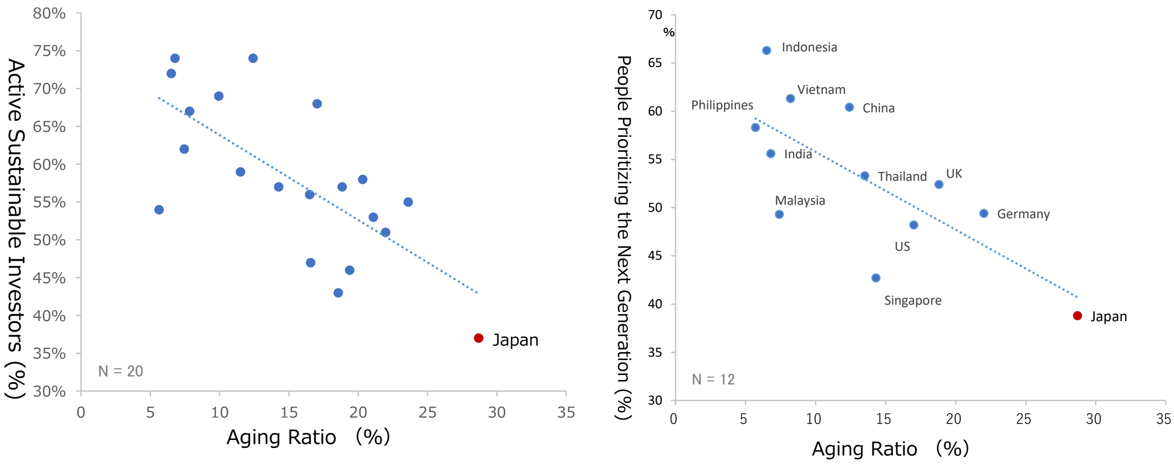


Source (1): Schroders, "Global Investor Study 2021," 23,950 individual investors from 33 countries surveyed (including 1,000 Japanese)

Source (2) Dentsu Inc. and Dentsu Research Institute, "Sustainable Lifestyle Awareness Survey 2021," survey date: July 2021

Such low awareness of sustainability in both consumption and investment reflects a broader tendency in Japan to prioritize "maintaining the current standard of living" over "doing what can be done for the next generation." It is beyond the scope of this report to explore the root cause of this low awareness of sustainability among Japanese citizens, but one factor may be the impact of an aging population (Appendix Figure 2-2). As the proportion of elderly individuals increases—many of whom have a shorter remaining life expectancy and therefore a higher discount rate for the future—the average national awareness of long-term sustainability inevitably declines.

Appendix Figure 2-2: Public Sustainability Awareness and Aging Population Ratio



Sources: Schroders, "Global Investor Study 2021"; Dentsu/Dentsu Research Institute, "Sustainable Lifestyle Awareness Survey 2021"
Aging ratio (2021) is sourced from the World Bank database

However, it is hard to believe that Japanese elderly people are inferior to those in other countries in terms of cherishing their children and grandchildren or valuing connection with society. More thorough research is needed to find out how the sustainability awareness of Japanese people is formed.

Reference 1: Experts Involved in the Report Development

In December 2024, Nippon Life Insurance Company held a sustainability event themed "Sustainability Challenges and Systems Thinking" including a panel discussion on the relationship between ESG performance and corporate financial performance. This report is compiled based on the key points raised by the panelists (listed below). We would like to extend our sincere gratitude to all the panelists for their valuable contributions.

Joji Iguchi	Executive Officer, Nissay Asset Management Co.
Akane Enatsu	Director, Nomura Institute of Capital Markets Research, Nomura Center for Sustainability Research
Chika Morishima	Executive Vice President, Ajinomoto Co.
Masanori Yoshida	Executive Officer, Japan Exchange Group
Takeshi Kimura (Moderator)	Executive Officer, Nippon Life Insurance Company; Director, PRI (United Nations Principles for Responsible Investment)

At the workshops held in March 2025 with the support of PRI, we also received valuable feedback from the following experts, primarily Japanese PRI signatories. Note that all responsibility for the text of this report rests solely with Nippon Life Insurance Company.

Masaaki Amma	Japan Impact Driven Financing Initiative
Akira Ishiwata	Rating & Investment Information
Seiichiro Uchi	Invesco Asset Management
Taro Egami	Nikko Asset Management
Akane Enatsu	Nomura Institute of Capital Markets Research
Tamami Ota	Daiwa Institute of Research
Kenichiro Ono	Sumitomo Mitsui Trust Asset Management
Motohiko Kawada	National Pension Fund Association
Eri Kawana	Unison Capital
Yukie Shibano	MSCI
Junichi Tanaka	Sumitomo Life Insurance Company
Shunsuke Tanahashi	Investcorp
Hatsuki Nemoto	Alternative Investment Capital
Hiroko Hamahara	Institutional Shareholder Services
Msanori Mizuno	Sumitomo Mitsui DS Asset Management
Yoko Monoe	Mercer Japan
Tatsuro Yuzawa	Principles for Responsible Investment
Minako Yoneyama	Principles for Responsible Investment

Reference 2: Feedback from Experts

The main feedback (including written and email comments) received from the experts at the March 2025 Workshops is as follows:

- It is an important corporate responsibility to reduce negative impacts of GHG emissions, but at the same time, creating positive impacts is equally important. Positive impacts extend beyond the value chain to create good impacts for society as a whole. Avoided emission is truly an indicator for evaluating positive impacts, and can be linked to both the creation of growth opportunities for companies and GHG reduction in society as a whole. In a company's business operations, reducing negative impacts alone often increases costs and makes it difficult for the company's PL, but creating positive impacts is truly an opportunity and a business in itself. Therefore, business divisions can be excited to work on it and have a vision for it. It is important to do both together.
- Aging population in Japan is one factor behind the low consumer awareness on sustainability in Japan, but it will be difficult to change the consciousness of the elderly generation in practical terms. Rather, it is important for society as a whole (including education and the media) to work toward changing the awareness of the young generation who will be responsible for the future of society. In order for society to truly change, it is necessary to continue efforts until the time when the main segment of the population is replaced.
- It is important to change the underlying values, not simply a superficial change in awareness to understand the importance of sustainability and to accept a premium for it. It is important to change the values of what is important in life, such as happiness and spiritual wealth, rather than economic and material wealth, and to change the consciousness of society as a whole.
- The consumer awareness on sustainability in Japan is not an independent external factor, but is strongly influenced by the fact that Japanese workers' real wages have not increased and they do not see prospects for the future as the underlying background. According to a Nippon Foundation survey, only 10% of young Japanese (18 years old) believe that their country will improve in the future, and only 20% believe that they can contribute to solving social issues by themselves (compared to 60-80% in other countries). In other words, with no dreams, hopes, or pride, it is impossible for people to have a high preference for sustainability. Therefore, it is necessary to take a systems thinking approach in viewing consumer awareness as described in Chapter 3. Specifically, (1) the lack of proper corporate governance has resulted in (2) a bias in risk management and a reluctance to create new opportunities, along with (3) a lack of clarity and growth potential in strategy. Consequently, this leads to (4) companies being unable to afford to raise real wages, ultimately resulting in (5) a vicious cycle where companies cannot increase real wages, consumer awareness of sustainability is discouraged, and young

people's willingness to work, go abroad, and explore new fields is inhibited. The Japan's capital market has so far been sitting on its hands and doing nothing in response to this vicious cycle, and because of this, a virtuous cycle will not be created in Japan. The root of this vicious cycle (lack of corporate governance) should be corrected by capitalists who seek returns and the investment chain.

- Living wage is an important element of a systems thinking approach, but there are many other systemic connections that are causing problems. Diversity, declining birthrate, aging population, concentration in Tokyo, lack of innovation, etc. are all systemically related issues that should be untangled.
- I agree with the report's observations. With that in mind, I would like to comment based on the characteristics of the Japanese financial system. Japan's financial system places a higher weight on indirect finance rather than direct finance through capital markets. As long as banks continue to provide loans to companies regardless of their ESG efforts, the differences in companies' ESG initiatives are unlikely to make differences in financial performance. Unless banks carefully assess the long-term cash flow of companies from an ESG perspective and allocate funds to those with growth potential, corporate ESG efforts will not be fully reflected in the stock market. From this perspective, the oversight role of bank boards is crucial. It is essential to encourage bank executives to incorporate ESG factors into their lending policies and credit assessments.
- Regarding the relationship between ESG ratings and corporate financial performance, if the analysis adjusts for factors such as region and company size, it is possible that, similar to the U.S. and Europe, companies with higher ESG ratings in Japan may also show better financial performance.[26]
- I strongly agree with the report's content. However, I would like to point out that when discussing corporate financial performance, ROE and PBR should be examined separately. ROE is a comprehensive measure of a company's "earning power," and explaining ROE purely through sustainability or ESG factors is inherently difficult. What matters is whether a company's sustainability activities align with its overall management strategy. On the other hand, PBR is related to investor valuation, which means its correlation with sustainability is likely to be stronger. The key issue is to what extent investors integrate sustainability and ESG perspectives into their cash flow analysis. In this regard, there is still significant room for improvement in the analytical approaches of Japanese investors.
- I agree with the overall content of the report. I would like to highlight the issue of diversity among capital providers in Japan's capital markets. In Japan, major financial institutions are leading impact investment and other forms of sustainable finance. In contrast, overseas markets involve a diverse range of capital providers, including public pension

[26] See, for example,
MSCI, "Long-Term Performance of MSCI ESG Ratings in Japan's Equity Market", March 2025.

funds and foundations, which have strong preferences for impact and sustainability. The difference in the depth of these layers may be contributing to Japan’s ESG paradox in some way.

- Japanese companies tend to follow behind their U.S. and European counterparts in terms of sustainability. They often determine materiality based on their current circumstances. When board members engage in materiality assessments, they need to incorporate a perspective that considers "how society should be" rather than just their companies’ present status.
- I generally agree with the report. Japanese investors have primarily engaged with companies through the lens of “E” (environment), while the “S” (social) aspect has been relatively overlooked. Moving forward, it is essential to deepen the focus on the “S” factor and consider the interconnectivity between various sustainability issues.
- This is a thought-provoking report, and frankly, I was surprised by the survey results showing that Japanese consumers' sustainability awareness with regard to ESG is lower than that of other countries. In addition to consumers' sustainability awareness, Japan also has low incentives for companies to decarbonize, and this may also contribute to the ESG paradox. For example, in Europe, a carbon tax has been in place since the 1990s, providing economic incentives for emission reductions. In Japan, on the other hand, fossil fuels are taxed under the framework of the Act on Promotion of Global Warming Countermeasures, but the tax rate per unit is low and the country has limited experience, making it more difficult to create economic incentives for decarbonization than in Europe. As a result, European companies will naturally take climate change countermeasures regardless of consumers' sustainability awareness, while Japanese companies are unlikely to actively take risks such as capital investment for decarbonization.
- Of the three causes of the ESG paradox identified by the report, I agree that the “lack of specificity in strategy” is one of them. Some Japanese listed companies still consider their CSR activities as part of their ESG efforts. Concrete strategies to link ESG factors with the enhancement of corporate value have not yet become sufficiently widespread among Japanese companies.
- I agree with the report's point (Appendix 2) that aging population is one of the factors contributing to Japanese consumers' low sustainability awareness. It is also understandable that consumers’ sustainability awareness is higher in emerging markets with a high portion of young generations than in Japan.
- While “disclosure for the sake of disclosure” is a problem, starting with disclosure efforts, even just a formality, can gradually lead to specific ESG activities with outcomes. Although Japan has less experience of disclosure than the U.S. and Europe, in a long-term perspective, it may lead to improved financial performance. Also, there may be a difference in sustainability awareness between Japan and the Christian culture where

social activities are deeply rooted in their culture. It is more effective to change corporate strategies than changing consumer awareness in Japan.

- Japanese companies should disclose more in English. Communication with foreign investors can increase opportunities to think more seriously about the relationship between ESG and corporate value.
- While the report discusses corporate strategy and consumer awareness, I think investor roles should also be considered. ESG ratings are not perfect indicators and they do not sufficiently take into account forward-looking perspective. When discussing the relationship between the ESG ratings and financial performance, investors need to be able to evaluate companies based on their in-depth knowledge and ability to assess the materiality of each company. It is expected that evaluations and useful advice from investors will be sufficiently conveyed to companies, which will also help them set specific strategies and improve corporate value.
- It would be more appropriate to consider the relationship between the financial performance and E, S and G separately rather than overall ESG score. Company size should also be taken into the analysis factor.
- I have heard from consumer goods manufacturers that putting consumer goods into eco-friendly packaging has little or no impact on sales. In addition to sustainability awareness, financial sensibility (choosing products that are even one yen cheaper) may also influence on consumers' behavior pattern.
- The UK Stewardship Code aims to help investors consider systems thinking while it is not in the Stewardship Code in Japan. It seems to me that Japanese investors have not yet sufficiently developed their sense of systems thinking. Investors are also required to clearly define and consider where they should place materiality when they are based on a systems thinking.
- This session has given me an opportunity to recognize the importance of engagement for investors. It is very important for investors to participate in such workshops to exchange ideas among themselves.