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Development of the Domestic ESG bond Market and Points to Consider When Investing

Asset Management One, Investment Division
Fixed Income Investment Group
Fund Manager, Ryo Kakimoto (CMA)

- The ESG bond market in Japan has grown in recent years due to the development of various bond issuance frameworks encouraged by the government. Those frameworks require to ensure transparency and sustainability assessment when issuing ESG bonds. Meeting these requirements is consistent with investors' demand to expand sustainability investments.
- For ESG bonds such as transition bonds, which may become stranded assets in the future, it is necessary to assess the issuer's policy and attitude for sustainability initiatives at the investment consideration stage. This paper explains the results of our net zero alignment assessment as a method for evaluating issuers' sustainability initiatives.
- This paper ends by presenting the results of the downside suppression effect of ESG bonds on investments.

Steady Expansion of ESG Bond Issuance Market in Japan

ESG bond issuance in Japan in FY 2022 reached a record high of approximately 4.7 trillion yen (+50% YoY). (See Figure 1 on the next page)

The corporate bond market as a whole saw a decline in issuance compared to the previous three years due to the deteriorating bond issuance environment, but the ESG bond market maintained an upward trend. The features of FY 2022 include the issuance of bonds under new frameworks such as sustainability-linked bonds, transition bonds, SDG bonds and blue bonds. In particular, issuance of sustainability-linked bonds, which are issued without limiting the use of proceeds, and transition bonds, which support the steady transition of high-greenhouse gas emitting sectors to a low-carbon economy, have seen a significant increase in issuance amount compared to the previous fiscal year[1]. The potential issuance demand for these bonds is also large, and it is considered one of the factors that will drive future market expansion. In terms of diversity of issuers, the number of issuer types is steadily increasing. In particular, the amount of issuance in the electricity and gas industry and petroleum and coal products over the three-year period FY 2020-22 compared to FY 2018-19 changed significantly and characterized the transition bond market. The number of ESG bond issuers that were business corporations and investment corporations has increased along with the issuance amount, reaching 203 as of the end of March 2023. (See Figures 2 and 3 on the next page)

[1] In FY 2022, sustainability-linked bonds increased by 235% (+247 billion yen) and transition bonds (including linked bonds) by 712% (+356.2 billion yen) over the previous year.

Figure 1. Domestic ESG Bond Issuance Amount

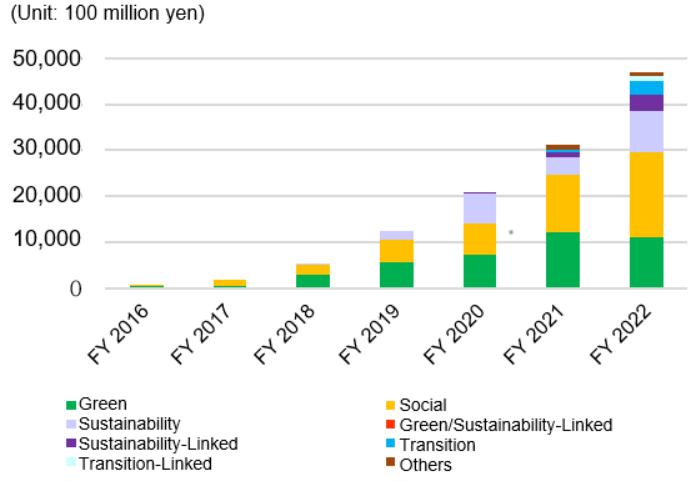
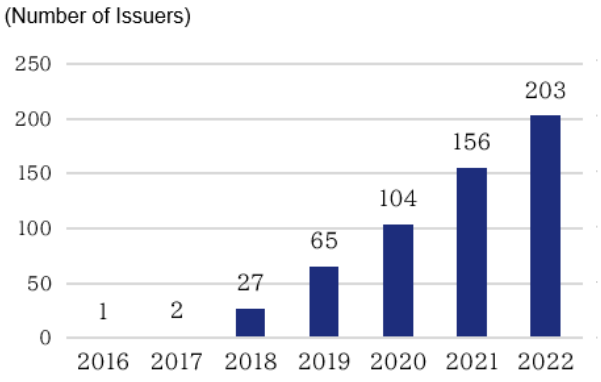
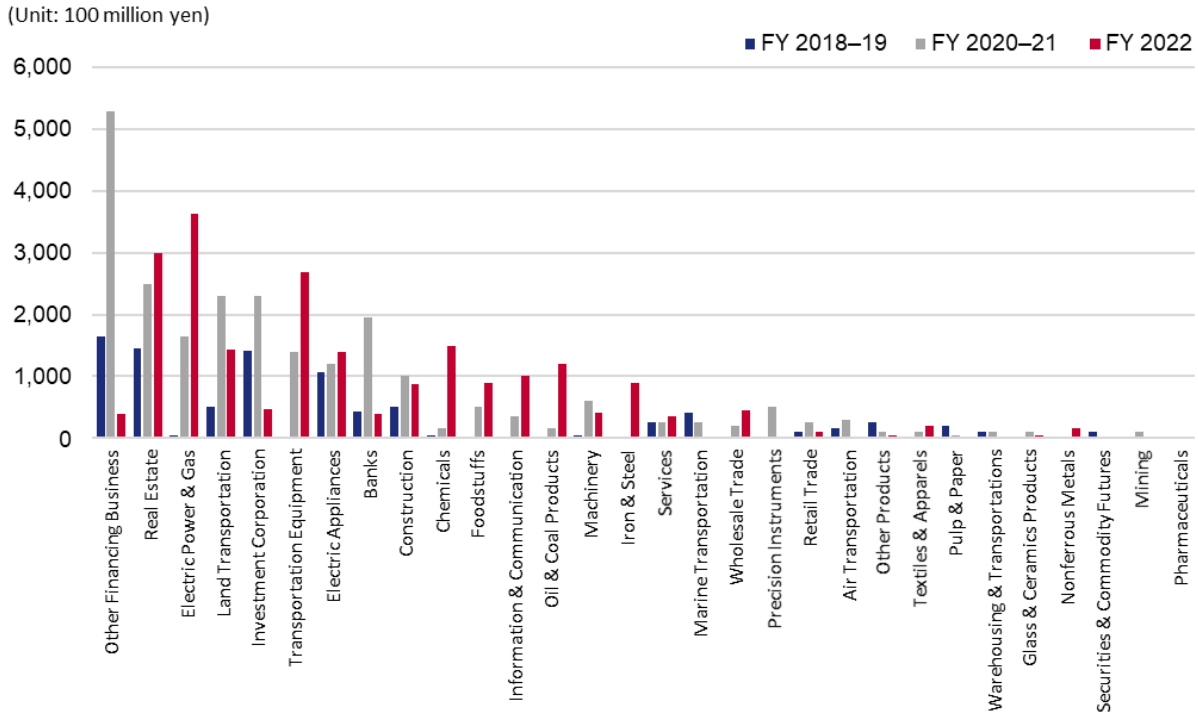


Figure 2. Number of Issuers of ESG Bonds (Cumulative)



As of the end of March 2023
Source: Prepared by Asset Management One based on data from Bloomberg, Japan Securities Dealers Association, Japan Exchange Group, etc.

Figure 3. Issuance of ESG Bonds and Other Securities by Industry



As of the end of March 2023
Source: Prepared by Asset Management One based on data from Bloomberg, Japan Securities Dealers Association, Japan Exchange Group, etc.

The expansion of the ESG bond market is considered largely attributable to the fact that the needs of issuers match those of investors, in addition to policy support from the government, such as the development of a framework for market expansion and fiscal support. On the investor side, the benefits are expected to include the promotion of ESG initiatives and appeal to stakeholders, a positive change in attitude and improved effectiveness during engagement as issuers are identified as investors who have purchased the ESG bonds, and market stability through the participation of a diverse range of investors. From the issuers' side, there will be benefits in the form of information dissemination about companies' efforts to solve environmental and social problems, improvement of corporate image and external reputation, and stabilization of market procurement through diversification and expansion of investor base.

On the other hand, one of the hurdles to issuing ESG bonds is the need to meet the requirements stipulated in the Green Bond Principles and other guidelines. For example, the Green Bond Principles define four core elements: (1) use of proceeds, (2) process for project evaluation and selection, (3) management of proceeds, and (4) reporting. The Principles also define (i) Green Bond Framework and (ii) external evaluation as important recommendations for improving transparency[2]. There is a risk of a deterioration in supply and demand if investors promoting sustainability investments sell relevant bonds in the event of diversion of funds to projects other than originally designated projects, a change in society's evaluation of target projects (from dark green to light green), or a deterioration in the evaluation by third-party evaluation organizations, as applicable. In the case of sustainability-linked bonds, failure to meet the Sustainability Performance Targets (SPTs) set by companies or setting difficulty levels that are deemed insufficient by investors could cause bond prices to decline through investor sales. When investing in ESG bonds, investors also need to analyze the appropriateness of the goals set and the certainty that the goals can be met. In Japan, many sustainability-linked bonds are donation-type fixed material that set up donations to related NGOs or purchase of emission credits when targets are not met[3]. However, in the case of bonds that set up a penalty through a coupon increase, some investors are of the opinion that the step-up range of coupons set at the time of issuance may be insufficient due to the recent rise in global government bond interest rates[4], which may become a risk factor in the future.

Evaluation of Transition Bonds

In order to meet Japan's GHG emission reduction targets, it is essential to finance transitions[5] toward a steady low-carbon transition, such as accelerating energy conservation and energy conversion. ESG bonds issued to make this transition realized are called Transition Bonds (see Figure 4). The Financial Services Agency, the Ministry of Economy, Trade and Industry, and the Ministry of the Environment jointly developed the scheme for Transition Bonds, and the first bonds were issued in July 2021[6], and the amount of issuance has been increasing in recent years[7].

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2 International Capital Market Association (ICMA) "Green Bond Principles 2021 Voluntary Guidelines for Issuance of Green Bonds" https://www.jsda.or.jp/sdgs/files/Japanese_GBP202106.pdf (Ref: 2023-8-15)

3 Of the 34 sustainability-linked bonds issued, 28 were in the form of donations, and 6 were in the form of coupons and other variable types. (End of March 2023)

4 Views based on the writer's interviews.

5 The Ministry of Economy, Trade and Industry website "Transition Finance." https://www.meti.go.jp/policy/energy_environment/global_warming/transition_finance.html (Ref: 2023-8-15)

6 NYK Line 43-44 bonds issued by July 29, 2021. https://www.nyk.com/news/2021/20210702_01.html (Ref: 2023-8-15)

7 50 billion yen in FY 2021, 406.2 billion yen in FY 2022. Compiled by Asset Management One from Japan Exchange Group data and other sources.

Figure 4. Positioning of Transition Finance

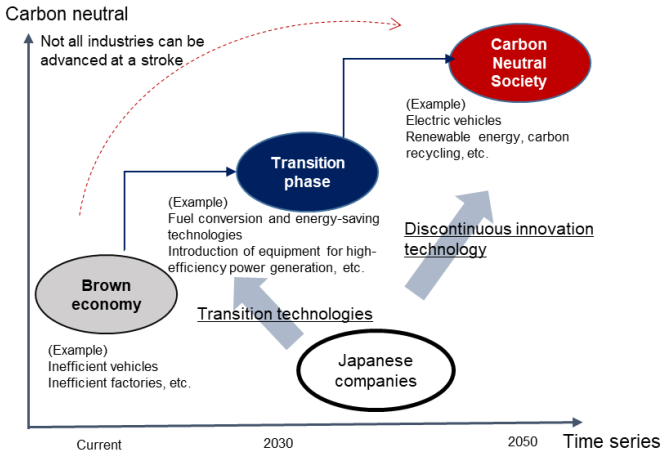
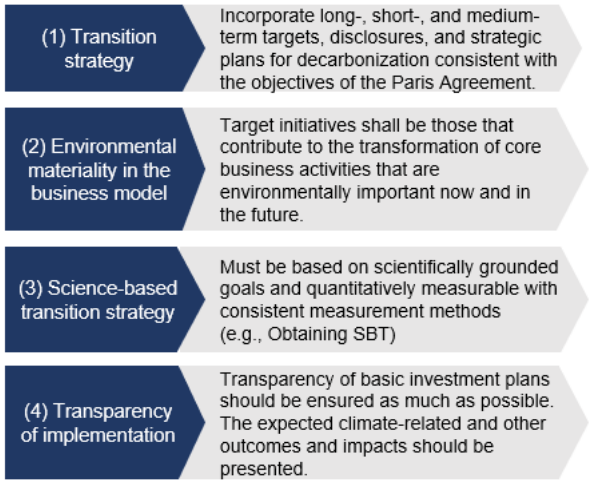


Figure 5. Disclosure Factors Expected of Transition Bonds (Four Factors)



Source: The Ministry of Economy, Trade and Industry, Prepared by Asset Management One based on illustrations posted on the Transition Finance website.
https://www.meti.go.jp/policy/energy_environment/global_warming/transition_finance.html

In addition to the use of the proceeds and whether the funds are managed in the same way as green bonds, it is important to comprehensively judge the company's transition strategy toward decarbonization and the credibility and transparency of implementing that strategy, which is one of the factors that must be analyzed at the time of investment as a risk inherent in Transition Bonds. As shown in Figure 5, "Disclosure Factors Expected of Transition Bonds (Four Factors)[8]," the disclosure requirements are set higher than those for green bonds. This is because the projects are less green than green bond-eligible projects, such as the construction of a sustainable power generation facility, and therefore require a sustainability rationale for the company's overall medium- to long-term efforts. Investors can reduce the risk of their invested assets becoming stranded assets by evaluating issuers' medium- to long-term transition strategies and level of disclosures when considering investing in transition bonds.

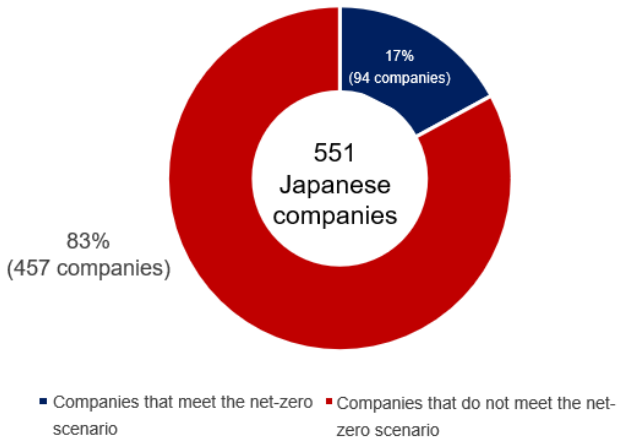
Since its establishment in December 2020, Asset Management One has participated in the Net Zero Asset Managers initiative (NZAM), a global asset management company initiative aimed at achieving net zero GHG emissions. As part of the activities of NZAM's participating managers, we evaluates the climate change initiatives of the companies in which the firm invests and works through engagement to help them transform their business models toward decarbonization, moving society as a whole and the market as a whole toward net zero. The evaluation framework for this purpose is the net zero alignment assessment framework[9]. Figure 6 shows the results of the net zero alignment assessment for companies in Japan in FY 2023, with 17% of all companies[10] assessed as being consistent with the net zero scenario.

8 The Financial Services Agency, the Ministry of Economy, Trade and Industry, and the Ministry of the Environment "Basic Guidelines on Climate Transition Finance." May 2021, page 7

9 Our net zero alignment assessment is based on our ambition to go net zero, targets, emissions performance, disclosure, decarbonization strategy, and capital allocation alignment. For details, please refer to the Sustainability Report published by the Company. Asset Management One, "SUSTAINABILITY REPORT 2022," 2022, page 20

10 Asset Management One's net zero alignment assessment is based on companies that fall into the 95% Financed Emissions of each index (stocks and bonds) to which the main passive funds managed by the company are linked. Asset Management One. "SUSTAINABILITY REPORT 2022," 2022, page 20

Figure 6. Percentage of Companies with Net Zero Alignment Assessment Results (FY 2023)



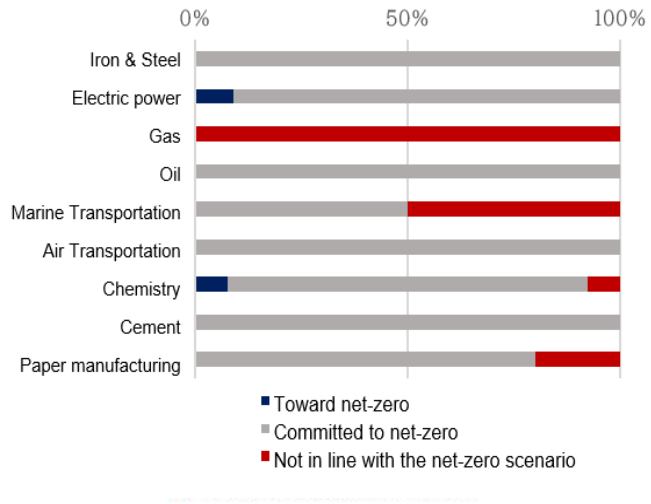
Source: Asset Management One

In Japan, many organizations have endorsed the Task Force on Climate-related Financial Disclosures (TCFD)[11], and the overall trend among Japanese companies is toward proactive climate change-related disclosure. However, according to our judgment, few companies have yet set targets or developed decarbonization strategies consistent with the goal of net zero greenhouse gas emissions in 2050.

Net Zero Alignment Status of High-emitting Sectors

The greenhouse gas high emitter sectors in need of transition (hereinafter referred to as "transition sectors")[12] are sectors that are required to transition through technological innovation and capital investment. However, only two companies in these transition sectors were determined to be moving toward net zero by our net zero alignment assessment: Kyushu Electric Power in the electric power sector and Air Water in the chemical sector. Since many companies in the transition sector are currently only at the stage of committing to achieving net zero in 2050[13], it is desirable to set decarbonization targets and effective decarbonization strategies at a level consistent with a net zero scenario when financing through transition bonds issuances in the future. (Figure 7)

Figure 7. Transition Sector Net Zero Alignment Level



Source: Asset Management One

Figure 8 (next page) shows the number of companies that have issued transition bonds (denoted in the graph as having issued GX bond) to finance decarbonization in the period through March 2023. Transition bonds have been issued in the steel, power, gas, and oil sectors.

In these transition sectors, goals to achieve commitments are important for companies to increase their alignment to the net zero scenario. It is particularly important to set target values for present steady transitions in the short- and medium-term periods. Our net zero alignment assessment

[11] As of July 2023, there were 1,416 TCFD disclosure supporter organizations in Japan, a large number compared to the number of supporter organizations in other developed countries. At the same time, the United Kingdom had the second largest number of supporters with 521, and the United States had the third largest number with 490. TCFD Consortium https://tcfd-consortium.jp/ (Ref: 2023-8-15)

[12] The economic and industrial sectors covered by the roadmap formation that provides a specific direction for the transition toward achieving carbon neutrality in 2050 for GHG-intensive industries prepared by the Ministry of Economy, Trade and Industry (METI). Ministry of Economy, Trade and Industry. See the Transition Finance website. https://www.meti.go.jp/policy/energy_environment/global_warming/transition_finance.html (Ref: 2023-8-15)

[13] In our net zero alignment assessment, commitment to net zero (demonstrating ambition) is not enough to be determined as aligning to a net zero scenario.

utilizes the CDP Temperature Ratings ("CDP temperature score")[14] provided by CDP to determine whether steady-state targets for current reductions are consistent with the net zero scenario. Figure 9 compares the average CDP temperature score for the group of companies with GX bond issuance within the transition sector with the average score for the group without GX bond issuance using the CDP temperature rise score. At the time of the analysis, there was no difference in the average CDP temperature increase with or without GX bond issuance status. This indicates that the GHG reduction targets aimed at creating a 1.5 °C net zero society have not been sufficiently set for many of the companies issuing transition bonds. In addition, some issuers, such as Nippon Steel Corporation and ANA Holdings, which have issued green bonds, and Mitsui O.S.K. Lines[15], which has issued sustainability bonds, are taking a positive approach to climate change without issuing transition bonds, and the fact that this is a transitional period when issuance is beginning to increase as a bond type is thought to be the reason why there is no significant difference in CDP temperature scores by issuance status.

It is expected that in the future, the issuance of transition bonds will be an opportunity for issuers to develop scientifically based strategies to fulfill the four disclosure factors in Figure 5 above, thereby improving the evaluation of issuers toward net zero and paving the way for transitions. As a NZAM participant institution, we believe we can reduce the future stranded asset risk inherent in transition bonds by encouraging transition strategy development and implementation by engaging with companies, utilizing net zero suitability determinations, and taking other measures. In addition, we intend to actively invest in transition bonds in order to contribute to the creation of a decarbonized society.

Figure 8. Number of GX bond Issuers in the Transition Sector

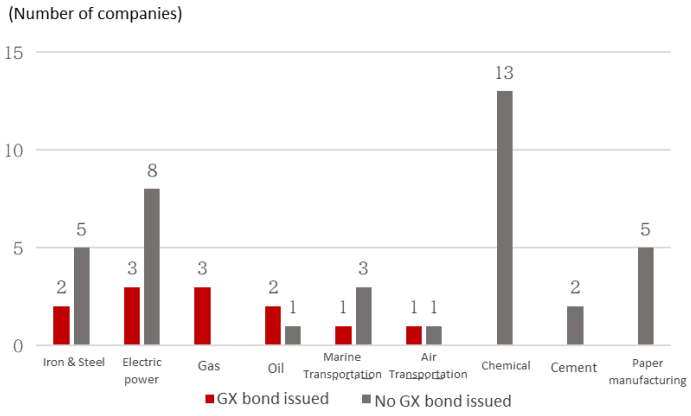
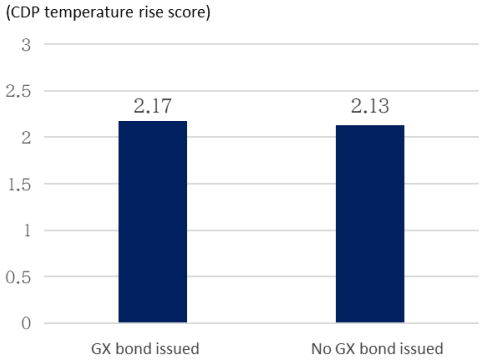


Figure 9. Average CDP Temperature Score (Comparison of GX Bond Issuers)



As of the end of March 2023 Source: Prepared by Asset Management One based on data from the Ministry of Economy, Trade and Industry, CDP, and Japan Exchange Group. CDP data was as of August 15 2023.

*This assessment is based on an analysis of the past performance over a certain period of time and is not a guarantee of future performance.

[14] CDP Temperature Ratings is part of the corporate climate change response assessment information provided by CDP, which evaluates each company's level of compliance with its net zero carbon emissions reduction targets. If the CDP temperature rise score is 1.5 °C, the company's disclosed carbon emissions reduction target is assessed as being aligned with the net zero scenario.

[15] Nippon Steel Corporation 7th and 8th series of unsecured straight bonds (issued on 3/3/2023, green bonds), ANA Holdings 36th yen-based bond (issued on 10/18/2018, green bonds), 42nd yen-based bond (issued on 6/2/2021, sustainability-linked bonds), MOL 22nd, 23rd and 24th series unsecured corporate bonds (7/12/2019, sustainability bonds)

Expects the Effect of Suppressing the Downside of ESG Bonds

Finally, we would like to analyze the expected benefits of investing in ESG bonds. On the qualitative side, (1) if the issuing company is regarded as a company that is proactive in sustainability initiatives, it is expected to contribute to the stability of portfolio performance through the enhancement and stabilization of corporate value over the medium-to long term, and (2) by forming a diverse investor base, it is expected to provide downward price resistance by supporting investor buying in the event of market deterioration.

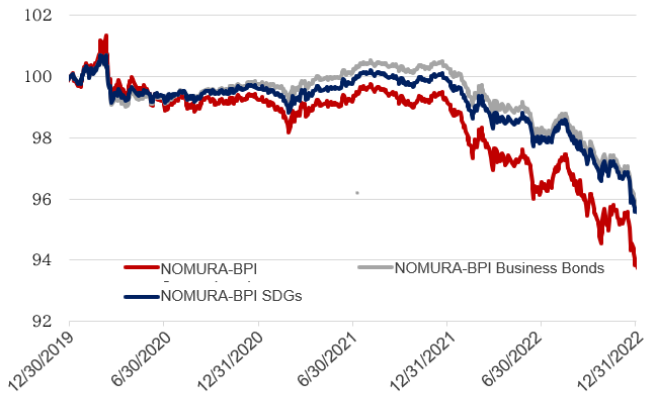
On the quantitative side, Figure 10 and 11 show an analysis of the NOMURA-BPI SDGs, which have been published since November 2019 as a subcategory of the NOMURA-BPI index.

The NOMURA-BPI Comprehensive has a duration of about 9 years, while the NOMURA-BPI Business Bonds and NOMURA-BPI SDGs have a duration of about 7 years, so the impact of the interest rate rise in 2022 has a large impact on the performance difference. Focusing on the risk-off phase, comparing the drawdown of BPI Business Bonds and BPI SDGs with the same level of interest rate risk, NOMURA-BPI SDGs is more suppressed. As mentioned in the qualitative factors, it is considered that the characteristics of the issue composition are defensive and that investor trends toward ESG bond are a factor.

Summary

The ESG bond market in Japan is expected to grow steadily in terms of issuance against the backdrop of corporate issuance needs and investor demand for investment, and the government is scheduled to issue GX transitional bonds in the second half of FY 2023, further expanding the market size. We expect that a market formed by a diverse investor base will provide a stable income stream by controlling ESG-related risks through the risk control effect from a liquidity perspective and sustainability initiatives by investors such as the net zero alignment assessment. We will continue to support investors' sustainable asset formation and corporate sustainability efforts through various activities.

Figure 10. Comparison of Bond Index



Indexed as of the end of December 2019 Source: Created by Asset Management One based on NOMURA-BPI data

Figure 11. Period Return Summary with Focus on Risk-off Phase

	NOMURA-BPI Comprehensive	NOMURA-BPI Business Bonds	NOMURA-BPI SDGs
(1) COVID-19 pandemic (end of December 2019 to end of April 2020)			
Return	-0.09%	-0.53%	-0.39%
Draw-down	-2.11%	-1.67%	-1.54%
(2) Risk-off through global monetary tightening (end of December 2021 to end of June 2022)			
Return	-2.78%	-2.04%	-1.93%
Draw-down	-3.17%	-2.26%	-2.16%

Source: Created by Asset Management One from NOMURA-BPI data

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Author's profile

Ryo Kakimoto
Bond Management Group and Sustainable Investment Strategy Group
Japanese bond fund manager.
In April 2002, he joined DLIBJ Asset Management Co., Ltd. (currently Asset Management One Co., Ltd.). He has actively managed Japanese bonds since July 2005. He promoted ESG initiatives in bond management, including the establishment of our first ESG product in bond management in August 2017. He concurrently serves in the Sustainable Investment Strategy Group, which was established in April 2023.

Disclosures

About NOMURA-BPI Index

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