

# Daiwa's View

## Does green premium exist?

- German gov't bond has green premium
- Issuance of green JGBs by Japan recommended

Fixed Income Research Section  
FICC Research Dept.

Senior Strategist  
**Shun Otani**  
(81) 3 5555-8764  
shun.otani@daiwa.co.jp



Daiwa Securities Co. Ltd.

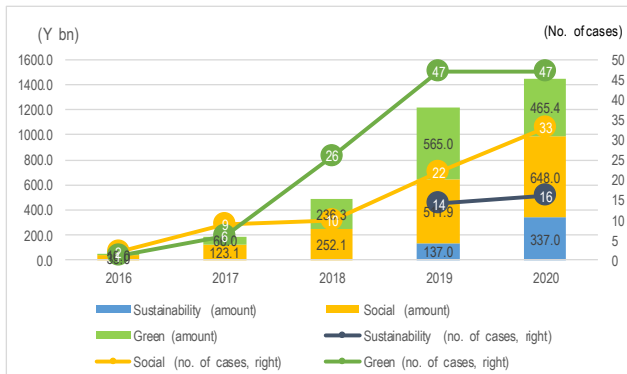
## Does green premium exist?

### German gov't bond has green premium

As a major tide of the bond market in 2020, we can point out the rapid increase in the issuance of SDG bonds, centering on green bonds (our senior credit analyst Takao Matsuzaka already [reported on issuance condition](#)). Regarding these green bonds, we think that the issue of whether there is a green bond premium—i.e., a clear yield spread between green bonds and other bonds—is an important theme for investors and issuers.

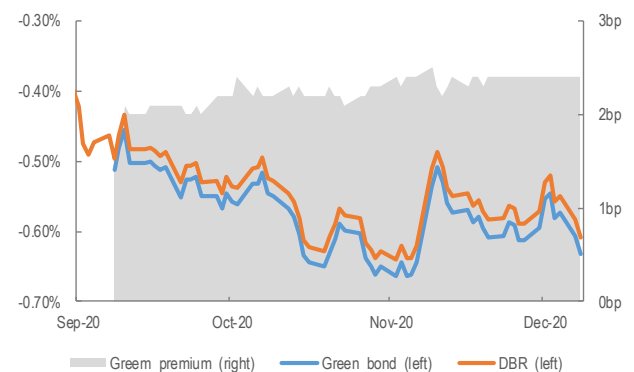
The issue of the green bond premium was highlighted by the issuance of the first green government bond by Germany. In Europe, green government bonds have already been issued by several nations starting from Poland in December 2016, then France, Belgium, and the Netherlands. In September 2020, Germany, which boasts the most liquidity in the European government bond market, launched its first green government bond (10-year). Of note is the pricing method. The coupon and the redemption date of the green government bond are exactly the same as those of the benchmark bond (DBR 0.0, 15 Aug 2030). It was priced around -1bp over DBR. In the secondary market, the yield of the green bond has been 2-3bp lower than that of the benchmark bond. It is rare for us to see the existence of bonds whose issuer and maturity are the same as those of green bonds. However, Germany plans to build a green yield curve by issuing green bonds in other maturities<sup>1</sup>, alongside clarification of the green premium by addressing the issue head-on. In addition, speculation on the start of green QE by the ECB, as shown by ECB President Christine Lagarde's frequent remarks/responses to the risk of climate change, is also contributing to the increase in issuance of green bonds and favorable performance in the secondary market.

### Issuance Amount and No. of Cases of Publicly Offered SDG Bonds in Japan



Source: Japan Securities Dealers Association; compiled by Daiwa Securities.

### Green Bond Premium (10Y German bond)



Source: Bloomberg; compiled by Daiwa Securities.

<sup>1</sup> 5-year green gov't bond already issued in Nov 2020.

◆ **ECB President Christine Lagarde (22 Jul 2020)**

- What directionally I hope we achieve is moving in the direction of being more active on the green bond sector that will itself be expanding.
- ◆ **ECB President Christine Lagarde (29 Jul 2020)**
- As part of our strategy review we will explore ways of taking the risk of climate change into account.

In the first place, green bonds are characterized by limitation of the use of its proceeds. But from the viewpoint of investors, there is no reason to justify the yield difference between green bond and conventional bond issued by the same issuer unlike ABS or covered bonds with collateral. Meanwhile, in the financing research field, various studies have already accumulated regarding the green premium. For example, according to *The effect of pro-environmental preferences on bond prices: Evidence from green bonds* (Olivier David Zerbib, 2019) published in the *Journal of Banking & Finance*, under the assumption that there was a difference in investors' investment behaviors, he clarified that return spreads can be generated against the same risk asset also under the efficient market hypothesis, and then confirmed the existence of a 2bp negative green premium via an experimental study targeting 110 globally issued green bonds.

**Issuance of green JGBs by Japan recommended**

Looking at the situation in Japan, BOJ governor Haruhiko Kuroda stated that the BOJ kept a degree of distance from green QE. According to the Japan Securities Dealers Association, however, the issuance amount of SDG bonds (green bonds, social bonds, sustainability bonds) has been expanding rapidly, as witnessed by the fact that the amount up to September 2020 exceeded the aggregate amount in 2019. Issuers also include various sectors, such as the public sector (FILP agencies) and subordinated bonds issued by financial institutions. In addition, the University of Tokyo issued a 40-year social bond in October 2020 as the first bond issued by a national university corporation in Japan. Although it is a 40-year superlong bond, the press releases about investment were issued by 45 investors, including financial institutions, non-financial corporations, local governments, school corporations, and religious corporations.

◆ **BOJ governor Haruhiko Kuroda (17 Sep 2020)**

- At this point, ECB appears to be actively considering the purchase of green bonds. ... However, we have not yet considered doing so.

Regarding the green premium issue, we have not observed the phenomenon that there is a clear spread in both the primary market and secondary market. However, given the need for social responsible investment by institutional investors and a high interest in SDGs among non-financial corporations and non-profitable organizations, it appears highly likely that the premium will be generated sooner or later in Japan as well. Recently, the Suga Cabinet announced that it would aim to be carbon neutral (reduction in greenhouse gas emissions to zero on net basis) by 2050 and that it would establish a green fund worth Y2tn in the economic package. Considering the compatibility of the use of proceeds and increasing investment needs, the issuance of green JGBs by Japan by reference to Germany's case is one option, in our view.

◆ **Advisory Council on Gov't Debt Management (53<sup>rd</sup> round, 4 Nov 2020)**

(Explanation from Financial Bureau)

- At this point, as we are able to procure the necessary amount of money via existing JGBs, we have not yet planned to issue green bonds immediately. Going forward, however, we think that we need to study the issue, carefully watching overseas trends.

## Explanatory Document of Unregistered Credit Ratings

In order to ensure the fairness and transparency in the markets, Credit Rating Agencies became subject to the Credit Rating Agencies' registration system based on the Financial Instruments and Exchange Act. In accordance with this Act, in soliciting customers, Financial Instruments Business Operators, etc. shall not use the credit ratings provided by unregistered Credit Rating Agencies without informing customers of the fact that those Credit Rating Agencies are not registered, and shall also inform customers of the significance and limitations of credit ratings, etc.

### ■ The Significance of Registration

Registered Credit Rating Agencies are subject to the following regulations:

- 1) Duty of good faith.
- 2) Establishment of control systems (fairness of the rating process, and prevention of conflicts of interest, etc.).
- 3) Prohibition of the ratings in cases where Credit Rating Agencies have a close relationship with the issuers of the financial instruments to be rated, etc.
- 4) Duty to disclose information (preparation and publication of rating policies, etc. and public disclosure of explanatory documents).

In addition to the above, Registered Credit Rating Agencies are subject to the supervision of the Financial Services Agency ("FSA"), and as such may be ordered to produce reports, be subject to on-site inspection, and be ordered to improve business operations, whereas unregistered Credit Rating Agencies are free from such regulations and supervision.

### ■ Credit Rating Agencies

#### [Standard & Poor's]

##### The Name of the Credit Rating Agencies group, etc

The name of the Credit Rating Agencies group: S&P Global Ratings ("Standard & Poor's")

The name and registration number of the Registered Credit Rating Agency in the group: S&P Global Ratings Japan Inc. (FSA commissioner (Rating) No.5)

##### How to acquire information related to an outline of the rating policies and methods adopted by the person who determines Credit Ratings

The information is posted under "Unregistered Rating Information" (<http://www.standardandpoors.co.jp/unregistered>) in the "Library and Regulations" section on the website of S&P Global Ratings Japan Inc. (<http://www.standardandpoors.co.jp>)

##### Assumptions, Significance and Limitations of Credit Ratings

Credit ratings assigned by Standard & Poor's are statements of opinion on the future credit quality of specific issuers or issues as of the date they are expressed and they are not indexes which show the probability of the occurrence of the failure to pay by the issuer or a specific debt and do not guarantee creditworthiness. Credit ratings are not a recommendation to purchase, sell or hold any securities, or a statement of market liquidity or prices in the secondary market of any issues.

Credit ratings may change depending on various factors, including issuers' performance, changes in external environment, performance of underlying assets, creditworthiness of counterparties and others. Standard & Poor's conducts rating analysis based on information it believes to be provided by the reliable source and assigns credit ratings only when it believes there is enough information in terms of quality and quantity to make a conclusion. However, Standard & Poor's does not perform an audit, due diligence or independent verification of any information it receives from the issuer or a third party, or guarantee its accuracy, completeness or timeliness of the results by using the information. Moreover, it needs to be noted that it may incur a potential risk due to the limitation of the historical data that are available for use depending on the rating.

This information is based on information Daiwa Securities Co. Ltd. has received from sources it believes to be reliable as of March 7th, 2017, but it does not guarantee accuracy or completeness of this information. For details, please refer to the website of S&P Global Ratings Japan Inc. (<http://www.standardandpoors.co.jp>)

#### [Moody's]

##### The Name of the Credit Rating Agencies Group, etc

The name of the Credit Rating Agencies group: Moody's Investors Service ("MIS")

The name and registration number of the Registered Credit Rating Agency in the group: Moody's Japan K.K. (FSA commissioner (Rating) No.2)

##### How to acquire information related to an outline of the rating policies and methods adopted by the person who determines Credit Ratings

The information is posted under "Unregistered Rating explanation" in the section on "The use of Ratings of Unregistered Agencies" on the website of Moody's Japan K.K. (The website can be viewed after clicking on "Credit Rating Business" on the Japanese version of Moody's website ([https://www.moody.com/pages/default\\_ja.aspx](https://www.moody.com/pages/default_ja.aspx)))

##### Assumptions, Significance and Limitations of Credit Ratings

Credit ratings are Moody's Investors Service's ("MIS") current opinions of the relative future credit risk of entities, credit commitments, or debt or debt-like securities. MIS defines credit risk as the risk that an entity may not meet its contractual, financial obligations as they come due and any estimated financial loss in the event of default. Credit ratings do not address any other risk, including but not limited to: liquidity risk, market value risk, or price volatility. Credit ratings do not constitute investment or financial advice, and credit ratings are not recommendations to purchase, sell, or hold particular securities. No warranty, express or implied, as to the accuracy, timeliness, completeness, merchantability or fitness for any particular purpose of any such rating or other opinion or information, is given or made by MIS in any form or manner whatsoever.

Based on the information received from issuers or from public sources, the credit risks of the issuers or obligations are assessed. MIS adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MIS considers to be reliable. However, MIS is not an auditor and cannot in every instance independently verify or validate information received in the rating process.

This information is based on information Daiwa Securities Co. Ltd. has received from sources it believes to be reliable as of April 16<sup>th</sup>, 2018, but it does not guarantee accuracy or completeness of this information. For details, please refer to the website of Moody's Japan K.K. ([https://www.moody.com/pages/default\\_ja.aspx](https://www.moody.com/pages/default_ja.aspx))

#### [Fitch]

##### The Name of the Credit Rating Agencies group, etc

The name of the Credit Rating Agencies group: Fitch Ratings ("Fitch")

The name and registration number of the Registered Credit Rating Agency in the group: Fitch Ratings Japan Limited (FSA commissioner (Rating) No.7)

##### How to acquire information related to an outline of the rating policies and methods adopted by the person who determines Credit Ratings

The information is posted under "Outline of Rating Policies" in the section of "Regulatory Affairs" on the website of Fitch Ratings Japan Limited (<https://www.fitchratings.com/site/japan>)

##### Assumptions, Significance and Limitations of Credit Ratings

Ratings assigned by Fitch are opinions based on established criteria and methodologies. Ratings are not facts, and therefore cannot be described as being "accurate" or "inaccurate". Credit ratings do not directly address any risk other than credit risk. Credit ratings do not comment on the adequacy of market price or market liquidity for rated instruments. Ratings are relative measures of risk; as a result, the assignment of ratings in the same category to entities and obligations may not fully reflect small differences in the degrees of risk. Credit ratings, as opinions on relative ranking of vulnerability to default, do not imply or convey a specific statistical probability of default.

In issuing and maintaining its ratings, Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The assignment of a rating to any issuer or any security should not be viewed as a guarantee of the accuracy, completeness, or timeliness of the information relied on in connection with the rating or the results obtained from the use of such information. If any such information should turn out to contain misrepresentations or to be otherwise misleading, the rating associated with that information may not be appropriate. Despite any verification of current facts, ratings can be affected by future events or conditions that were not anticipated at the time a rating was issued or affirmed.

For the details of assumption, purpose and restriction of credit ratings, please refer to "Definitions of ratings and other forms of opinion" on the website of Fitch Rating Japan Limited.

This information is based on information Daiwa Securities Co. Ltd. has received from sources it believes to be reliable as of September 27th, 2019, but it does not guarantee accuracy or completeness of this information. For details, please refer to the website of Fitch Rating Japan Limited (<https://www.fitchratings.com/site/japan>)

## **IMPORTANT**

This report is provided as a reference for making investment decisions and is not intended to be a solicitation for investment. Investment decisions should be made at your own discretion and risk. Content herein is based on information available at the time the report was prepared and may be amended or otherwise changed in the future without notice. We make no representations as to the accuracy or completeness. Daiwa Securities Co. Ltd. retains all rights related to the content of this report, which may not be redistributed or otherwise transmitted without prior consent.

Conflicts of Interest: Daiwa Securities Co. Ltd. may currently provide or may intend to provide investment banking services or other services to the company referred to in this report. In such cases, said services could give rise to conflicts of interest for Daiwa Securities Co. Ltd.

Daiwa Securities Co. Ltd. and Daiwa Securities Group Inc.: Daiwa Securities Co. Ltd. is a subsidiary of Daiwa Securities Group Inc.

### Other Disclosures Concerning Individual Issues:

- 1) As of 26 April 2016, Daiwa Securities Co. Ltd., its parent company Daiwa Securities Group Inc., GMO Financial Holdings, Inc., and its subsidiary GMO CLICK Securities, Inc. concluded a basic agreement for the establishment of a business alliance between the four companies. As of end-December 2017, Daiwa Securities Group Inc. owned shares in GMO Financial Holdings, Inc. equivalent to approximately 9.3% of the latter's outstanding shares. Given future developments in and benefits from the prospective business alliance, Daiwa Securities Group Inc. could boost its stake in GMO Financial Holdings, Inc. to up to 20% of outstanding shares.
- 2) Daiwa Real Estate Asset Management is a subsidiary of Daiwa Securities Group Inc. and serves as the asset management company for the following J-REITs: Daiwa Office Investment Corporation (8976), Daiwa Securities Living Investment Corporation (8986).
- 3) Samty Residential Investment became a consolidated subsidiary of Daiwa Securities Group Inc. effective 10 September 2019.
- 4) On 30 May 2019, Daiwa Securities Group Inc. formalized an equity/business alliance with Samty, and as of 14 June 2019 it owned 16.95% of shares outstanding in Samty along with convertible bonds with a par value of ¥10bn. Conversion of all of said convertible bonds into common shares would bring the stake of Daiwa Securities Group Inc. in Samty to 27.28%.
- 5) Daiwa Securities Group Inc. and Credit Saison Co., Ltd. entered into a capital and business alliance, effective 5 September 2019. In line with this alliance, Daiwa Securities Group Inc. is to acquire up to 5.01% of Credit Saison's total common shares outstanding (excl. treasury shares; as of 31 Jul 2019).

### Notification items pursuant to Article 37 of the Financial Instruments and Exchange Law

(This Notification is only applicable to where report is distributed by Daiwa Securities Co. Ltd.)

If you decide to enter into a business arrangement with our company based on the information described in this report, we ask you to pay close attention to the following items.

- In addition to the purchase price of a financial instrument, our company will collect a trading commission\* for each transaction as agreed beforehand with you. Since commissions may be included in the purchase price or may not be charged for certain transactions, we recommend that you confirm the commission for each transaction. In some cases, our company also may charge a maximum of ¥2 million per year as a standing proxy fee for our deposit of your securities, if you are a non-resident.
- For derivative and margin transactions etc., our company may require collateral or margin requirements in accordance with an agreement made beforehand with you. Ordinarily in such cases, the amount of the transaction will be in excess of the required collateral or margin requirements\*\*.
- There is a risk that you will incur losses on your transactions due to changes in the market price of financial instruments based on fluctuations in interest rates, exchange rates, stock prices, real estate prices, commodity prices, and others. In addition, depending on the content of the transaction, the loss could exceed the amount of the collateral or margin requirements.
- There may be a difference between bid price etc. and ask price etc. of OTC derivatives handled by our company.
- Before engaging in any trading, please thoroughly confirm accounting and tax treatments regarding your trading in financial instruments with such experts as certified public accountants.

\* The amount of the trading commission cannot be stated here in advance because it will be determined between our company and you based on current market conditions and the content of each transaction etc.

\*\* The ratio of margin requirements etc. to the amount of the transaction cannot be stated here in advance because it will be determined between our company and you based on current market conditions and the content of each transaction etc.

When making an actual transaction, please be sure to carefully read the materials presented to you prior to the execution of agreement, and to take responsibility for your own decisions regarding the signing of the agreement with our company.

Corporate Name: Daiwa Securities Co. Ltd.

Registered: Financial Instruments Business Operator, Chief of Kanto Local Finance Bureau (Kin-sho) No.108

Memberships: Japan Securities Dealers Association, The Financial Futures Association of Japan, Japan Investment Advisers Association, Type II Financial Instruments Firms Association