

Outlook for 40Y JGB Auction

Most likely driven by dealers to cover their positions

- ✓ Tomorrow's auction is expected to go smoothly or well, driven by primary dealers to cover their positions, but the upside of 40Y JGBs in the secondary market may be limited in comparison with 20Y and 30Y JGBs

Strategic Memorandum DSTE392
FICC Research Dept.

Senior JGB Strategist
Keiko Onogi
+813 5555 8788
keiko.onogi@daiwa.co.jp
Daiwa Securities Co. Ltd.

Auction Details

Auction Date: July 28, 2020
Issue Date: July 29, 2020
Maturity Date: March 20, 2060
Offering Amount: About 500 billion yen

* New 40Y JGBs will be the first reopening of JU13 carrying a 0.5% coupon.

** On July 27, JU13 traded at 0.590-0.600% (-1.0bp - unch v. previous day's close; 0.581-0.590% on compound yield) and closed at 0.595% (-0.5bp; 0.586%).

Exp. Rating on Auction Results

1	2	3	4	5
Failed	Poor	Average	Good	Outstanding

Tomorrow's auction to be held at the highest bidding yield level since the auction in March 2019

Since the previous 40Y JGB auction went smoothly at the 0.480-0.500% level (vs. WI closing at 0.495% on previous day) on May 26, market sentiment on superlong JGBs had worsened because (1) Japan determined to substantially increase the issuance amount of superlong JGBs to fund the second supplementary budget and (2) regarding the BOJ's purchases of JGBs with maturities of more than ten years, it was confirmed that the Bank intends to leave them controlled by the market. Amid such weak sentiment, the 40Y JGB yield (JU13 on conventional basis) temporarily rose to 0.685% on intraday basis on July 2. Then, the 40Y JGB yield declined to 0.570% at one point amid the firmness of superlong JGBs following the good result of the 30Y JGB auction with the increased issuance amount. In mid-July, the 40Y yield momentarily rose to 0.650%, but it has been on a downtrend as the 20Y JGB auction went well amid the solid performance of the JGB market. As of 14:00 today (Jul 27), the yield temporarily fell to 0.590% (-1.0bp vs. previous day's close, 0.581% on compound yield basis). There is a high possibility that tomorrow's auction will be held at the highest bidding yield level since the auction in March 2019.

Upward pressure on yields unlikely to increase partly because of escalating US-China tension etc. amid the pandemic

Let's check the environment surrounding the JGB market. In the US, it is highly likely that calls to suspend operations in the services sector and refrain from non-essential/non-urgent activities will be strengthened in the regions with growing number of COVID-19 infections. As the US administration's measures to address the pandemic are approaching the deadline of the end of July, we are unable to become completely optimistic about the economic outlook (despite improvement in some economic indicators). Also given growing caution about escalating US-China tensions, we see that upward pressure on yields is unlikely to increase especially in the near term. In Japan as well, the number of COVID-19 infections has been increasing mainly in the Tokyo metropolitan area. At this juncture, there is a very slim chance that the government will declare another state of emergency. However, Minister of State for Economic and Fiscal Policy/Economic Revitalization Yasutoshi Nishimura said on July 26 that the government would ask the business community to ensure the teleworking rate of at least 70% at each company. In such an environment, we summarize key points to think about the bidding stance at tomorrow's auction as follows:

- ✓ **Short-covering by primary dealers would serve as strong support:** As primary dealers seem to be short in the 40Y sector, their covering their positions at the auction will likely support the primary sale well;
- ✓ **A certain level of demand is expected from investors:** Potential demand for 40Y JGBs appears strong, ahead of the introduction of capital regulations based on an economic value. As 40Y JGBs are issued bimonthly in relatively small amounts, such demand can be expected to some extent;
- ✓ **Not cheap on the curve:** Our analysis based on data since the previous 40Y JGB auction and that in the past month show that the 40Y sector is not cheap on the curve at the current level. Rather, it is noticeably overvalued vs. the 30Y sector. Among 40Y JGBs, JU13 is considerably overvalued vs. JU3 and JU4 as well (Appendix 5). It is difficult to expect demand related to building of new curve positions.

Placing bids only to cover shorts

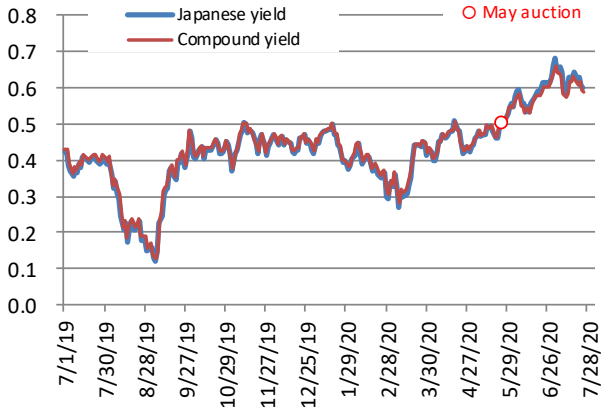
All in all, tomorrow's auction is expected to go smoothly or well, driven by primary dealers to cover their positions. However, the upside of 40Y JGBs in the secondary market may be limited in comparison with 20Y and 30Y JGBs. In addition to the lack of attractiveness in terms of carry (Appendix 6), the 20Y/40Y spread appears to be at the level rather flattening from a longer-term perspective, and the 30Y/40Y spread, which is currently narrower than 2bp (Appendix 7), has little room for a further flattening. We would like to think about placing bids only to cover shorts.

40Y JGB Auction Results

Offer Date	Issue#	Nominal Coupon (%)	Maturity Date	Issue Size (100M yen)	B/C	Highest Accepted Yield (%)	Allotment (%)	Issue Price (yen)	Yield on the previous day (%)***	30Y/40Y on the previous day (bp)**:	Yield at close on the auction day (%)**	30Y/40Y at close on the auction day (bp)**	
7/28/20	13R	0.5	3/20/60	500*					0.590	1.8			
5/26/20	13	0.5	3/20/60	509.9	3.06	0.505	93.4959	99.82	0.465	2.3	0.504	2.9	Avg
3/26/20	12R	0.5	3/20/59	415.1	2.66	0.450	30.5135	101.79	0.439	2.5	0.453	3.5	Avg
1/28/20	12R	0.5	3/20/59	404.2	2.86	0.400	95.9031	103.62	0.371	3.0	0.406	3.0	Avg
11/25/19	12R	0.5	3/20/59	455.0	3.50	0.460	73.5926	101.44	0.472	3.9	0.444	3.5	Good
9/25/19	12R	0.5	3/20/59	455.6	2.69	0.435	46.0000	102.36	0.401	5.4	0.425	6.8	Poor
7/23/19	12R	0.5	3/20/59	399.6	3.02	0.425	25.1445	102.73	0.415	3.9	0.415	4.9	Poor
5/28/19	12	0.5	3/20/59	404.5	3.87	0.535	84.4117	98.75	0.560	5.6	0.541	5.1	Good
3/26/19	11R	0.8	3/20/58	413.3	3.50	0.610	8.9655	106.58	0.584	7.2	0.617	7.2	Poor

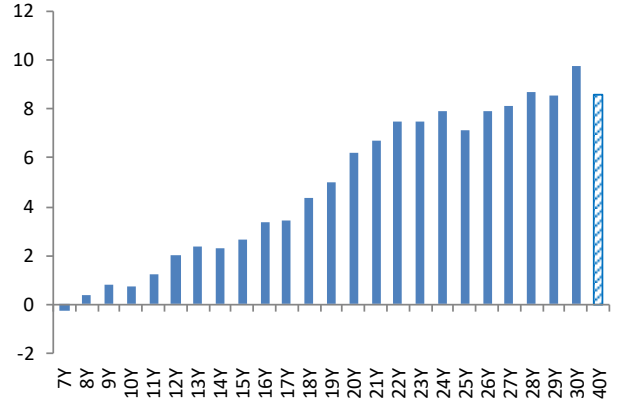
* Issue amount planned by Ministry of Finance ** Based on WI for new JU series; as of July 22 close for the July-2020 auction
Source: Ministry of Finance (MOF), Daiwa Securities.

Appendix 1: 40Y JGB Yield (%)



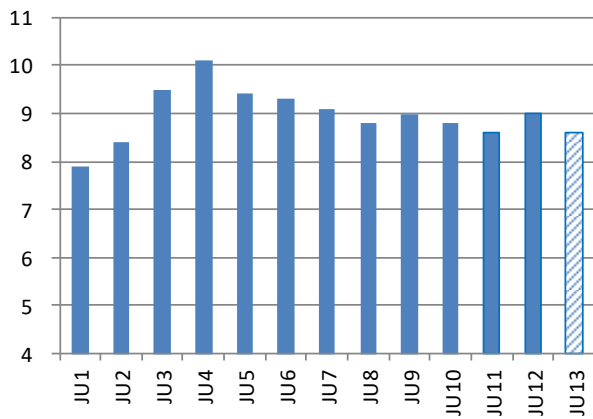
Source: Daiwa Securities.

Appendix 2: JGB Yield Change (bp): May 26 v. July 22



Source: Daiwa Securities.

Appendix 3: 40Y JGB Yield Change: May 26 v. July 22



Source: Daiwa Securities.

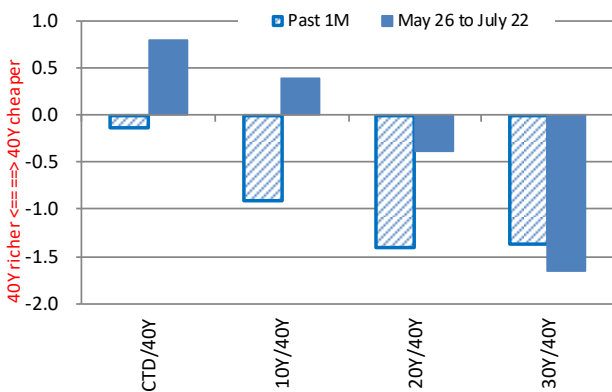
Appendix 4: BOJ Holding and Market Outstanding of 40Y JGBs

(Yen billions)

	MOF Issue Size	BOJ Holding	% of BOJ Holding	Market Outstanding
JU1	1,058.1	267.7	25.3%	790.4
JU2	1,343	77	5.8%	1,266
JU3	1,384	200	14.5%	1,184
JU4	1,963	232	11.8%	1,731
JU5	1,962	146	7.5%	1,816
JU6	2,003	934	46.6%	1,070
JU7	2,175	1,066	49.0%	1,109
JU8	2,324	1,262	54.3%	1,062
JU9	3,707	1,539	41.5%	2,168
JU10	3,429	1,178	34.3%	2,252
JU11	2,710	486	17.9%	2,225
JU12	2,682	92	3.4%	2,590
JU13	510	0	0.0%	510

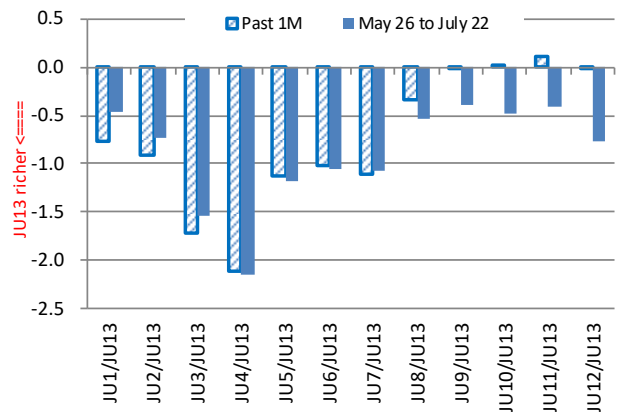
Source: Bank of Japan, Daiwa Securities.

Appendix 5a: Z-score I



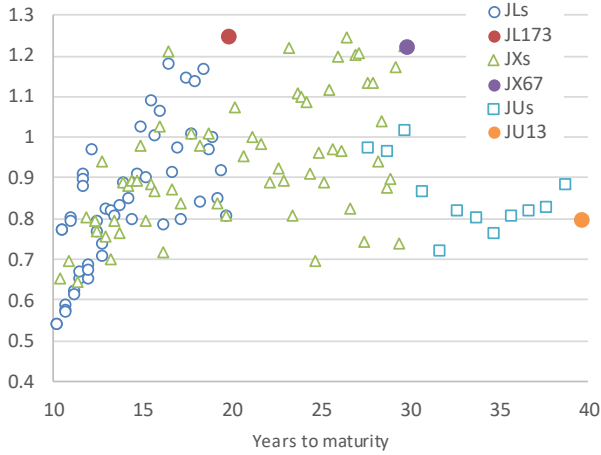
Note: On-the-run and CTD basis
Source: Daiwa Securities.

Appendix 5b: Z-score II



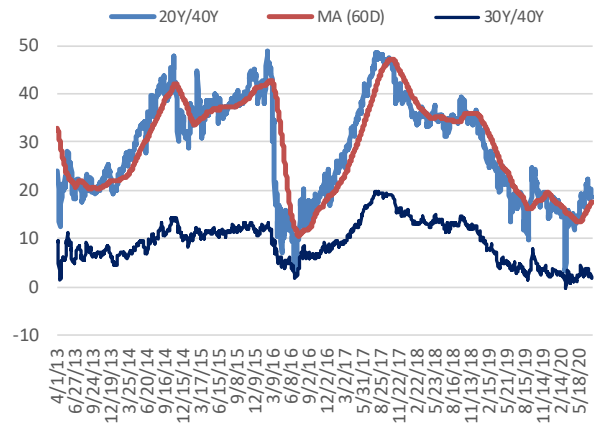
Source: Daiwa Securities.

Appendix 6: JGB Total Return Curve (3M, %)



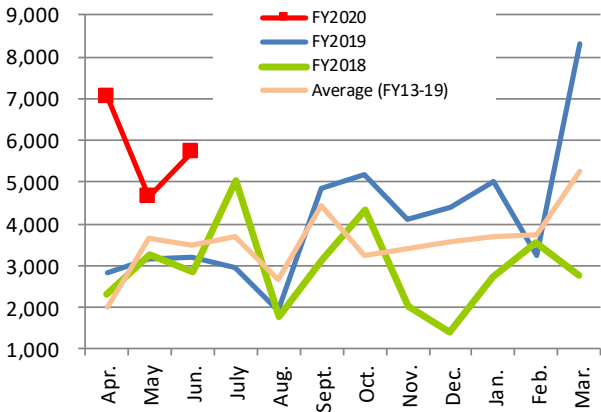
Note: Based on the July-22 JGB yield curve; factoring in roll-down effect etc.
Source: Daiwa Securities.

Appendix 7: JGB 20Y/40Y and 30Y/40Y Spreads (bp)



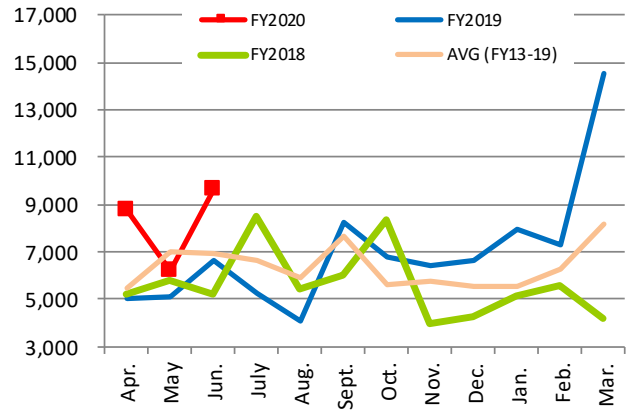
Note: On-the-run basis
Source: Daiwa Securities.

Appendix 8a: Trend of Life and Non-life Insurers' Net Purchase of Superlong JGBs (Yen 100M)



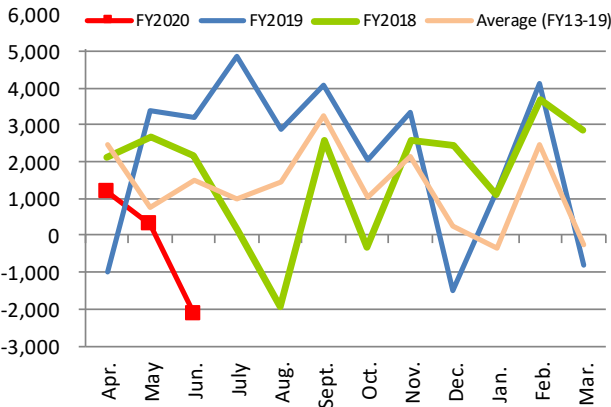
Source: JSDA

Appendix 8b: Trend of Life and Non-life Insurers' Gross Purchase of Superlong JGBs (Yen 100M)



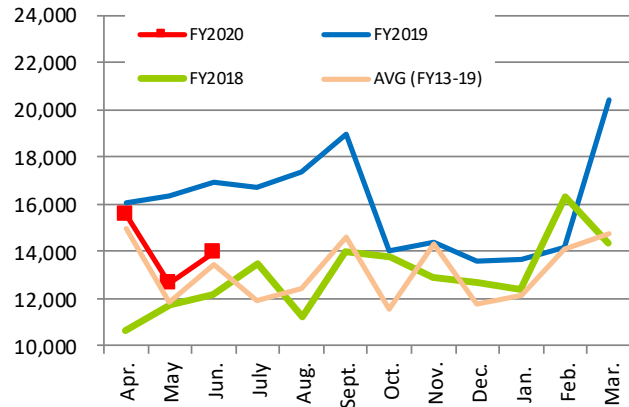
Source: JSDA

Appendix 9a: Trend of Overseas Accounts' Net Purchase of Superlong JGBs (Yen 100M)



Source: JSDA

Appendix 9b: Trend of Overseas Accounts' Gross Purchase of Superlong JGBs (Yen 100M)



Source: JSDA

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))

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 16th, 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)

[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>)

February 2020

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), Nippon Healthcare Investment Corporation (3308), Japan Rental Housing Investments (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).
- 6) NEC (6701): NOTICE REGARDING U.S. PERSONS: This report is not intended for distribution to or use by any person in the United States. Securities issued by NEC Corporation have been suspended from registration in the U.S. and are subject to an order of the U.S. Securities and Exchange Commission dated June 17, 2008, pursuant to Section 12(j) of the Securities Exchange Act of 1934. This document is not a recommendation or inducement of any purchase or sale of such securities by any person or entity located in the U.S. Daiwa Securities Co. Ltd. disclaims any responsibility to any such person with respect to the content of this document. Any U.S. person receiving a copy of this report should disregard it.

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