

### **MHRT Brief**

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# A JGB downgrade may be triggered by Bank of Japan's policy change

Worry that a slowdown in long-term government bond purchases may prompt a downgrade

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#### Japan's sovereign rating has not changed for more than eight years

Japan's fiscal crisis has long been called into question. The Japanese government's total debt (government bonds and outstanding borrowings) reached 1,257 trillion yen at the end of 2022. The size of the government's debt, which is more than twice the nation's GDP (557 trillion yen in 2022),<sup>1</sup> stands out among other countries. Furthermore, there are no signs of the debt's upward trend coming to a halt.

Assessments of the Japanese government's debt service capacity are also low. According to Moody's Investors Service, a major US rating agency, Japan's sovereign debt rating is A1, the second lowest after Italy among the seven major industrialized nations (G7).<sup>2</sup> Japan's sovereign rating is relatively low among developed countries as well (**Chart 1**). Japan's ratings from other major rating agencies, such as S&P and Fitch, are mostly similar.

The last change in Japan's sovereign rating by Moody's was on December 1, 2014, just after the Japanese government decided to postpone the consumption tax rate hike (from 8% to 10%). The downgrade of Japan's sovereign rating was triggered by increased uncertainty over the country's ability to achieve its fiscal consolidation target (i.e., return to a primary balance surplus<sup>3</sup>).<sup>4</sup> However, despite the subsequent rescheduling of the consumption tax hike<sup>5</sup> and a significant deterioration in the primary balance after 2020 due to the COVID-19 pandemic, Japan's sovereign credit rating has remained unchanged for a while (**Chart 2**).

<sup>&</sup>lt;sup>5</sup> Takata (2016) points out that, in addition to the expanding current account surplus and sustained improvement of the primary balance, lower nominal interest rates relative to the nominal growth rate due to continued monetary easing is the supporting factor for avoiding a JGB downgrade.



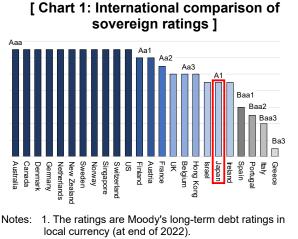


<sup>&</sup>lt;sup>1</sup> Nominal GDP (calendar year 2022) as of the October-December 2022 preliminary quarterly GDP (first preliminary report).

<sup>&</sup>lt;sup>2</sup> The A1 rating is fifth from the top after Aaa, Aa1, Aa2, and Aa3. According to Moody's, the A rating is described as an "upper-mediumgrade and is subject to low credit risk." Sovereign ratings are synonymous with JGB ratings.

<sup>&</sup>lt;sup>3</sup> The primary balance is the balance between tax revenues and non-tax revenues and expenditures excluding government bond expenditures (expenses allocated to the repayment of the principal of and interest on government bonds).

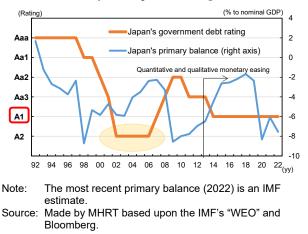
<sup>&</sup>lt;sup>4</sup> The Nikkei (April 13, 2015), "Worries about Proliferation of the 'Government-Made Market,' Overconfidence in Intervention, Delays Reforms," reported the view of Moody's head of Japanese government bonds that "the reason for the downgrade is the increased uncertainty in achieving the fiscal reconstruction targets due to the postponement of the consumption tax hike and the delay in implementing a growth strategy."



local currency (at end of 2022). 2. The bar charts are color-coded by rating for ease of reading.

Source: Made by MHRT based upon Bloomberg.

## [ Chart 2: Japan's sovereign rating and primary balance ]



#### Reasons to be wary of a Japanese sovereign downgrade in 2023

It is not that rating agencies no longer emphasize "fiscal soundness" in their sovereign ratings. It takes a reasonable period of time for rating agencies to determine whether a country's deteriorating fiscal balance is transitory or not. In the case of Japan, roughly four years elapsed between the time when its primary balance began to deteriorate and the time when its sovereign rating was downgraded. But looking at developed economies as a whole, the time lag between primary balance deterioration and sovereign downgrade is about three years (**Chart 3**).<sup>6</sup>

Three years have passed since 2020 when the entire world was severely impacted by the COVID-19 shock. The financial situation of countries around the world deteriorated sharply during the pandemic, and has yet to show clear signs of recovery. Japan, which had been in recession since 2019 prior to the outbreak of the COVID-19, is now in the fourth year of its primary balance deteriorating. Judging from the past track record, the timing for a downgrade of Japan's sovereign rating by the rating agencies based on their assessment of Japan's deteriorating finances will be in 2023.

Furthermore, "correction of monetary easing" may also be added in 2023 as a negative factor prompting a sovereign rating downgrade.

Since the appointment of Haruhiko Kuroda as BOJ governor in 2013, the Bank of Japan has continued its socalled "unprecedented quantitative and qualitative monetary easing" centered on massive purchases of long-term government bonds. Without this "unprecedented quantitative and qualitative monetary easing," long-term interest rates would have risen higher and rating agencies would have further downgraded Japan's sovereign rating between 2015 and 2017, since the government's increased interest payment burden would delay Japan's fiscal consolidation (**Chart 4**).<sup>7</sup>

Governor Kuroda is scheduled to step down in 2023 with Kazuo Ueda taking the helm as new governor. A

<sup>&</sup>lt;sup>6</sup> Using panel data (1990-2022) for the 24 developed economies shown in **Chart 1**, we performed a single regression analysis of sovereign ratings as a ratio of the primary balance to nominal GDP. The test results reject the null hypothesis of no individual effects at the 1% level for all lags. Although a serial correlation exists in the residuals, and the Hausman test cannot be performed, **Chart 3** shows the results of the fixed effects model because the coefficient of determination is higher. Sensitivity is significant at the 1% level for all lags.

<sup>&</sup>lt;sup>7</sup> The Probit model was selected based on log-likelihood. The estimation period for the Probit model with the primary budget balance as the only explanatory variable is the annual data from 1992 to 2012. The estimation period for the Probit model that includes the balance of long-term JGBs held by the Bank of Japan (year-on-year difference) as an explanatory variable is the annual data from 1992 to 2022. All coefficients are significant at 5%.

large number of market participants are espousing the view that Governor Ueda will revise the monetary policy at an early stage out of concerns over the market mechanism.<sup>8</sup> If the Bank of Japan curtails its purchases of long-term JGBs, there is a reasonable chance that the rating agencies will downgrade Japan's sovereign credit rating.<sup>9</sup>

A sovereign rating downgrade in itself will not immediately impact the real economy in a serious way, but we cannot ignore the risk that the Japanese government, alarmed by any such downgrade, may adopt a more austere fiscal stance, such as raising taxes and cutting government spending, putting downward pressure on the Japanese economy.

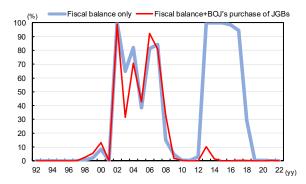
#### [ Chart 3: Primary balance and sovereign rating sensitivity and coefficient of determination ]

Lag (year)	Sensitivity	Coefficient of determination
1	0.15	0.62
2	0.19	0.64
3	0.22	0.65
4	0.20	0.65

Notes: 1. The lag indicates how many years the primary balance precedes the sovereign rating.
2. The sensitivity represents the number of notches improved when the primary balance rises by 1%pt relative to GDP. See footnote 6 for details on the estimation methodology.

Source: Made by MHRT based upon the IMF and Bloomberg.

#### [ Chart 4: Probability of Japan's sovereign rating falling below the current A1 ]



Note: Calculated using the Probit regression equation. The explanatory variables are the nominal GDP ratio of the primary balance (4-year forward) and the year-to-year difference in the nominal GDP ratio of the outstanding balance of long-term government bonds held by the Bank of Japan. Both variables are significant at 5%. Source: Made by MHRT based upon the IMF's "WEO," the Bank

#### Reference

#### Refer to the original Japanese report by clicking the URL below for the reference material.

https://www.mizuho-rt.co.jp/publication/report/2023/pdf/express-mk230310.pdf

of Japan, and Bloomberg

<sup>&</sup>lt;sup>8</sup> According to the QUICK Monthly Bond Survey (February 2023 survey) conducted by QUICK, a financial information service company, among bond market participants, the largest percentage of respondents (56%) expected the Bank of Japan to revise its monetary policy in "April to June 2023." In a similar survey of foreign exchange market participants (February 2023 survey), 57% of all respondents expected the Bank of Japan to revise its monetary policy in "April-June 2023."

<sup>&</sup>lt;sup>9</sup> A credit analyst covering Japanese government bonds at S&P Global Ratings reportedly said, "The monetary policy framework has a strong link to the rating of government bonds" (Nikkei (February 10, 2023), "BOJ's Monetary Policy Normalization 'Also Negative on Ratings,' S&P analyst"). In addition, Fitch Ratings' director of sovereign ratings for the Asia-Pacific region is reported to have said that the Bank of Japan's large-scale purchases of JGBs in conjunction with yield curve control (YCC, or long-term and short-term interest rate operations) "play an important role" in supporting Japan's rating (Bloomberg News (November 28, 2022), "BOJ's JGB Purchases Support Rating, Next Governor Will Know - Fitch").