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Japan’s Sovereign Rating in the Post-Pandemic Era: Quo Vadis?




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We assess the drivers of Japan’s sovereign credit rating and its rating outlook based on three economic scenarios. Our model foresees sovereign rating downgrades of up to three notches in the next decade, primarily due to further fiscal deterioration and sub-par economic growth. The pandemic has drastically impacted Japan’s fiscal metrics and raised again questions on its fiscal sustainability. However, Japan might be able to withstand downgrades for some time thanks to its strong external financial position, broad domestic investor base, and governance, as well as the yen’s role as a reserve currency. To avoid the adverse scenario of a three-notch rating downgrade, policymakers need to strengthen fiscal consolidation and accelerate structural reforms to boost post-pandemic growth potential.

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I. Covid-19 pandemic and Japan's sovereign rating

The Covid-19 pandemic has inflicted tremendous impacts on the global economy and Japan. In 2020, Japan's real GDP contracted sharply by 4.5%, reflecting the severe impact of the Covid-19 pandemic. The Japanese government adopted unprecedented large economic stimulus packages amounting to about 52 percent of gross domestic product (GDP), including three supplementary budgets in the 2020 fiscal year.[1] Japan's economic relief measures mainly focused on providing financial support to affected firms, including small and medium-sized enterprises, subsidies for employment retention programs, and ways to extend direct cash handouts to all households. Not surprisingly, Japan's fiscal deficit widened sharply from 3.1% of GDP in the 2019 fiscal year to 11.0% of GDP in the 2020 fiscal year. For the 2021 fiscal year, the government announced its largest initial budget of JPY106.6 trillion, including JPY5 trillion for a Covid-19 contingency fund. In November 2021, the government announced another sizable economic stimulus package amounting to JPY78.9 trillion, of which government spending would contribute JPY49.7 trillion.

Rating agencies responded to the possible ramifications of the Covid-19 pandemic for Japan in 2020. In July 2020, Fitch changed the outlook on Japan's long-term foreign currency and local currency A ratings from 'stable' to 'negative'. The outlook was revised back to 'stable' in March 2022 (Fitch Ratings, 2022). In June 2020, Standard & Poor's (S&P) revised the outlook on its A+ foreign currency and local currency ratings for Japan from 'positive' to 'stable' (S&P, 2020). In contrast, Moody's did not take any rating action over this period, and in their refreshed credit opinions maintained its 'stable' outlook for Japan's A1/A+ credit ratings in 2020 and in 2021 (Moody's, 2021).

Lasting scars from the prolonged health and economic crisis on Japan's economy may increase downside risks to Japan's sovereign rating outlook. This may further complicate the country's strong commitment to pushing the debt ratio along a downward path over the medium term. Rating agencies also note that Japan has a mixed record with debt consolidation, including the decade from 2010 to 2020 (Fitch Ratings, 2020). The gross and net government debt ratio did not decline materially in the post-global financial crisis years despite favorable conditions such as low interest rates that helped reduce the interest burden on government debt, positive real and nominal GDP growth, and smaller government deficits. Scars from the Covid-19 pandemic across the economy will amplify the negative impacts on potential growth arising from an aging population and the consequent declining workforce.

II. Long-term outlook for Japan's sovereign rating

Against this backdrop, we use a fundamental rating model to establish long-term projections for Japan's sovereign ratings (Choi et. al., 2022). Using annual data from 1990 to 2020 for the 41 EU27 and OECD countries, we explain the average sovereign rating of S&P, Moody's, and Fitch through the logarithm of GDP-per-capita in purchasing power parity terms, general government debt as a percentage of GDP, government effectiveness, the interaction between government debt and governance effectiveness, the spread of 10-year government bonds relative to U.S. Treasury bonds, and the unemployment rate. Government effectiveness refers to the World Bank Worldwide Governance Indicators. Overall, our model closely tracks the official credit ratings of Japan historically. We also build scenarios to obtain long-term projections for Japan's macroeconomic and fiscal performance. In this way, we can build long-term projections for Japan's sovereign ratings by applying the model estimates to our forecasts on Japan's GDP-per-capita, unemployment rate, government debt, bond yield spreads, and governance efficiency.

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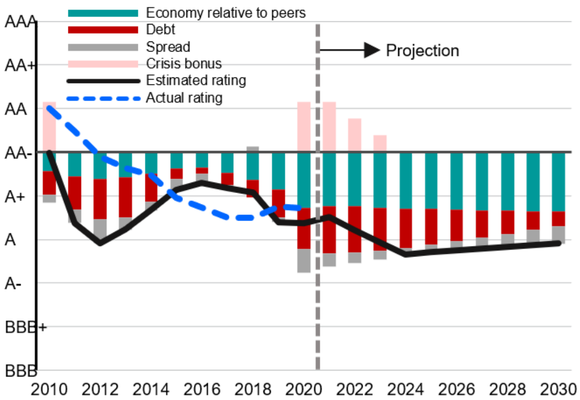
[1] Japan's fiscal year runs from April 1 to March 31, starting one quarter later than the calendar year.

We formulate a set of three scenarios — *reform*, *baseline*, and *adverse* — on key macroeconomic and financial variables through 2030. The *reform* scenario assumes Japan's economy can gain post-pandemic growth momentum by successfully transforming into a digitalized economy using fully integrated information and communication technology. Accordingly, potential growth rates increase, mainly driven by higher total factor productivity and capital stock accumulation. Under the *reform* scenario, by 2030 government revenue is expected to increase to 36.4 percent of GDP, while expenditure is likely to moderate to about 39.1 percent of GDP. The *baseline* scenario assumes the economic impact of the Covid-19 pandemic is short-lived and Japan's potential growth reverts to a pre-crisis downward trend as the working-age population shrinks. Under this scenario, real GDP growth is expected to gradually slow to 0.8 percent by 2030, while unemployment rates slowly increase to 2.7 percent. Under the *baseline* scenario, the fiscal deficit is projected to widen gradually to 5.9 percent of GDP by 2030, after recovering from 16 percent of GDP in the 2020 fiscal year to 3.4 percent of GDP in the 2021 fiscal year. The *adverse* scenario assumes that scars from the Covid-19 pandemic persist, which implies negative supply shocks and permanent damage to Japan's growth potential. Under this scenario, real GDP growth will converge to zero, and consumer price index inflation drops to 0.1 percent by 2030. The 10-year Japanese Government Bond (JGB) yields are assumed to remain at around zero due to the Bank of Japan's prolonged monetary easing, widening the spread over the U.S. Treasury significantly from the 2020 level – and government efficiency is assumed to gradually decline. Under the *adverse* scenario, the fiscal deficit is projected to deteriorate to 6.5 percent of GDP by 2030.

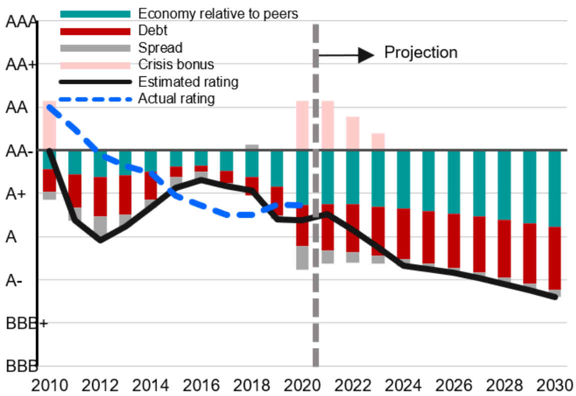
Our fundamental rating model forecasts sovereign rating downgrades of one to three notches for Japan in the coming decade, depending on the scenarios considered. Our fundamental rating model suggests that two main drivers of sovereign rating adjustments are a country's economic performance relative to peers, and its government debt stock. Under the *reform* scenario, we expect Japan's sovereign rating to be downgraded by one notch to A, and under the *baseline* scenario by two-notches to A-. However, our *adverse* scenario would lead to a three-notch sovereign rating downgrade to BBB+. Our long-term projections for fundamental model-implied ratings point to the downside risk that Japan's sovereign ratings could fall into the BBB range. This highlights the importance of strengthening Japan's post-pandemic fiscal consolidation and stepping up policy efforts to conduct structural reforms to boost potential growth.

Figure 1. Fundamental model-implied rating under the *reform* scenario



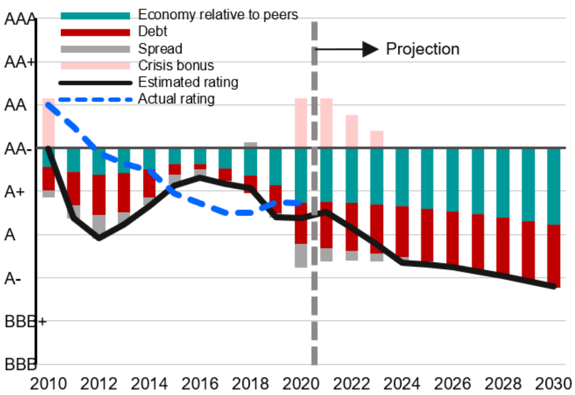
Sources: Rating agencies, World Bank, OECD, International Monetary Fund, Cabinet Office Japan, Haver Analytics, and authors' estimations

Figure 2. Fundamental model-implied rating under the *baseline* 1 scenario



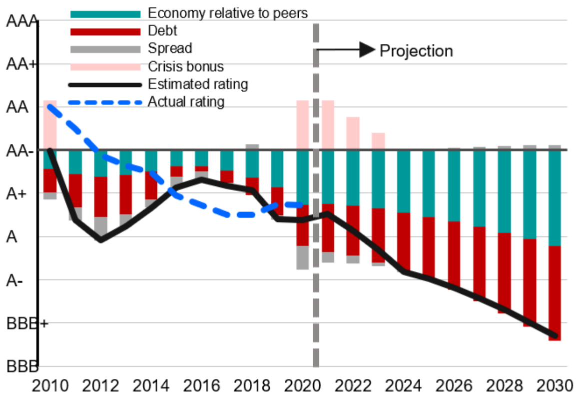
Note: Baseline 1 assumes long-term projection of 10-year JGB yields in line with market expectations.
Sources: Rating agencies, World Bank, OECD, International Monetary Fund, Cabinet Office Japan, Haver Analytics, authors' estimations

Figure 3. Fundamental model-implied rating under the *baseline* 2 scenario



Note: Baseline 2 assumes the long-term projection of 10-year JGB yields with the Bank of Japan's yield curve control policy unchanged.
Sources: Rating agencies, World Bank, OECD, International Monetary Fund, Cabinet Office Japan, Haver Analytics, authors' estimations

Figure 4. Fundamental model-implied rating under the *adverse* scenario



Sources: Rating agencies, World Bank, OECD, International Monetary Fund, Cabinet Office Japan, Haver Analytics, authors' estimations

Nevertheless, credit rating agencies may still recognize Japan's unique characteristics when assessing its sovereign credit rating. This will depend on Japan's ability to maintain its strengths as circumstances change. Japan's strengths include its strong capacity to finance government debt, supported by a very broad domestic investor base and high domestic savings. Furthermore, the position of the Japanese yen as an international reserve currency (International Monetary Fund, 2021) benefits Japan, contributing to Japan's status as an international safe haven. The three main credit rating agencies maintain an uplift for Japan in their credit assessment because the yen is a reserve currency (see, for example, Moody's (2013)). Their rationale is that a country with a reserve currency benefits from stable international demand for its currency, so liabilities and assets denominated in that currency benefit from such demand. In addition, Japan has an exceptionally strong external position, thanks to Japan's sizable current account surpluses (Fitch Ratings, 2021). Finally, but certainly not least, Japan's robust institutions and overall governance are very strong and comparable to countries with AA and AAA ratings when comparing Japan's Worldwide Governance Indicator scores with those of other countries.

Even within a drastic rating downgrade scenario, JGB interest rates may not rise significantly if the Bank of Japan continues to employ its ultra-easy monetary policy. Even if Japan's sovereign ratings were downgraded to BBB+ under the *adverse* scenario, domestic investors' strong home-bias and historically low interest rates would continue to help the government maintain its debt financing capacity with low borrowing costs. However, any continuation of the ultra-easy monetary policy in the *adverse* scenario would be an ominous sign that the economy might well continue losing growth momentum.

However, a downgrade to BBB+ in the *adverse* scenario might further dampen international investor demand for JGB securities. Many official institutional investors have minimum credit rating requirements for eligible sovereign issuers (see, for example, Sveriges Riksbank, 2020). In the *adverse* scenario, investors with credit rating requirements above BBB+ would no longer be able to undertake new investments in JGB securities. They might also have to reduce existing JGB holdings. Moreover, index investors, such as those tracking the popular Financial Times Stock Exchange World Government Bond Index, would have to reconsider their JGB portfolio if the *adverse* scenario were to occur because the inclusion criteria include a minimum entry above BBB+.

The ramifications of any rating downgrades to Japanese sovereign debt could materialize in increased foreign currency funding costs and lower private sector credit ratings. Sovereign rating downgrades for Japan might eventually bring about a rise in foreign currency funding costs, as occurred in past episodes. And any government-debt credit rating downgrades could negatively impact the credit ratings for Japanese firms. This credit rating spillover effect, from sovereign to corporates, tends to be more significant for firms with a pre-downgrade rating equal to or above the sovereign rating, as Almeida et al. (2016) show empirically.

III. Conclusions

The risk of further sovereign downgrades highlights the need for the government to recalibrate its fiscal consolidation plan and secure long-term fiscal sustainability once the pandemic subsides. In the short term, the active role of fiscal policy will continue to be pivotal to combat any prolonged economic impact from the Covid-19 pandemic and the conflict between Ukraine and Russia. At the same time, our analysis suggests that the Japanese government should begin preparing for a new medium-term fiscal consolidation plan to ensure long-term fiscal sustainability. The considerable fiscal stimulus rolled out in FY2020 means the government's target to achieve a primary balance surplus by FY2025 is no longer feasible, so a recalibration is required to avoid a fiscal cliff in coming years. Fiscal spending should be directed toward supply-side reforms to boost productivity by accelerating digitalization, rather than to provide demand support, with the Japanese government mindful of difficulties in shrinking fiscal expenditure once it is allocated – as demonstrated after the global financial crisis.

Structural reforms, including measures toward digitalization, should be further accelerated to boost Japan's long-term growth potential. To cope with chronic labor shortages in a rapidly aging population, Japan should continue to expand its scope to receive foreign workers. Furthermore, the Covid-19 pandemic has revealed weaknesses in the capabilities of the Japanese economy to deal with the crisis. Structural reforms should be accelerated, particularly in the realm of digitalization where Japan lags behind the world. The promotion of digitalization throughout the economy should be a policy priority, helping to encourage telecommuting, remote medical consultations, and online services activities such as e-shopping, e-learning, and e-banking. Changes to telecommuting working styles would help reduce labor shortages by mobilizing Japan's capable female workforce at home. The government should also upgrade the public sector through digital transformation, while preserving its institutional strength compared to its peer rating group.

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