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Why Bank of Japan Is Not Out of Options

INTRODUCTION

As the U.S. Federal Reserve and central banks around the world look to dial back their crisis-mode monetary expansion, the Bank of Japan appears stuck in a holding pattern, with no prospect of tightening and little likelihood of easing. A review of the BoJ's policy operations reveals a nuanced picture. We argue that the Japanese central bank has begun nudging towards a moderately tighter policy stance, even as it has maintained the broader parameters of its policy setting. There are many reasons to expect the BoJ to stay lower for longer over the remaining year and a half of Governor Haruhiko Kuroda's term, and under his eventual successor. But this does not mean that the bank is out of options. Indeed, our analysis of the BoJ's policy tool kit shows that easing remains an option.

Why Bank of Japan Is Not Out of Options

BY STEFAN ANGRICK

As the U.S. Federal Reserve and central banks around the world look to dial back their crisis-mode monetary expansion, the Bank of Japan appears stuck in a holding pattern, with no prospect of tightening and little likelihood of easing. A review of the BoJ's policy operations reveals a nuanced picture. We argue that the Japanese central bank has begun nudging towards a moderately tighter policy stance, even as it has maintained the broader parameters of its policy setting. There are many reasons to expect the BoJ to stay lower for longer over the remaining year and a half of Governor Haruhiko Kuroda's term, and under his eventual successor. But this does not mean that the bank is out of options. Indeed, our analysis of the BoJ's policy tool kit shows that easing remains an option.

More than meets the eye

When the COVID-19 pandemic hit in early 2020, the BoJ's response was swift. Shortly after the U.S. Fed's emergency meeting on 15 March, the BoJ unveiled a set of measures focusing on higher asset purchases and a new lending program to stem the economic and financial market fallout from the pandemic. It pledged to expand purchases of Japanese government bonds—going as far as to remove its previous soft target of ¥80 trillion for net annual purchases—and buy more exchange-traded funds, Japan real estate investment trusts, corporate bonds, and commercial paper. And yet, compared with its international peers, the BoJ's policy response seemed modest.

Unlike other central banks, the BoJ—a trailblazer of many unconventional policies—neither cut rates nor increased asset purchases as much as might have been expected following the removal of purchase targets and the BoJ's history of aggressive easing. Indeed, early in the crisis it was the BoJ's U.S. dollar funds supply operations—dollar swaps with the U.S. Fed and domestic financial institutions—which drove balance sheet growth. The BoJ's net annual purchases of JGBs flatlined as it focused on buying shorter-dated T-bills instead (see Chart 1). And while its purchases of private financial assets successfully backstopped equity and corporate debt markets, these were temporary and began to be phased out in early 2021. But what the BoJ lacked was not policy ammunition, but a clear case for going further.

Asset purchases not magic cure-all

In principle, nothing prevents the BoJ from expanding asset purchases. But in practice, there is no simple mapping from higher asset purchases to economic activity. This is in part because the stimulative impact of asset purchases is more indirect and subtle than commonly assumed.

Like most central banks, the BoJ does not directly interact with firms and households, but a limited number of financial institutions—mostly banks. When the BoJ buys government bonds as part of a quantitative easing program, it pays by marking up the respective banks' current account deposits, more generally known as reserves. Banks can use reserves to settle claims against each other or to fulfil regulatory requirements, but reserves cannot be "lent out" to the private sector and do not mechanically translate into higher retail lending.[1] Instead, QE eases financial conditions by changing the composition of the private sector's aggregate portfolio by swapping government securities for deposits. This incentivises lending and investment into assets with higher duration and risk characteristics. This "portfolio rebalancing effect" is relatively indirect and limited in its ability to stimulate activity when loan growth remains subdued for reasons beyond a central bank's control, like stagnating demand after a consumption tax hike or due to pandemic-related restrictions.

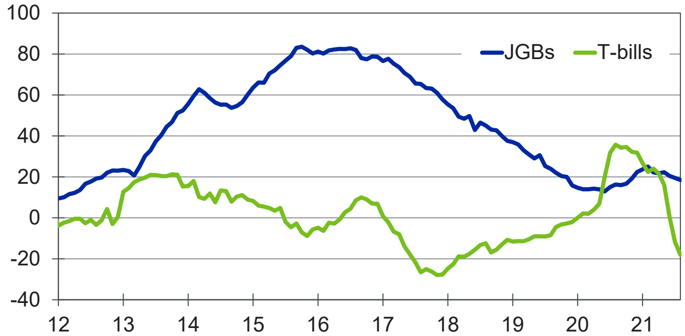
Liquidity considerations are another factor. Although a central bank's purchases of government bonds inject reserves into interbank markets, they simultaneously drain liquidity from government bond markets. Beyond a certain point, this can handicap financial markets as bonds are more widely traded than reserves and serve a broader range of functions in the financial system.[2] Since the introduction of Kuroda's Quantitative and Qualitative Easing framework in early 2013, nicknamed "Kuroda's bazooka", the BoJ has

1 https://www.bis.org/publ/work292.pdf

2 https://www.imf.org/en/Publications/WP/Issues/2018/05/09/Scarcity-Effects-of-Quantitative-Easing-on-Market-Liquidity-Evidence-from-the-Japanese-45820

Chart 1: BoJ Purchases of Gov. Securities

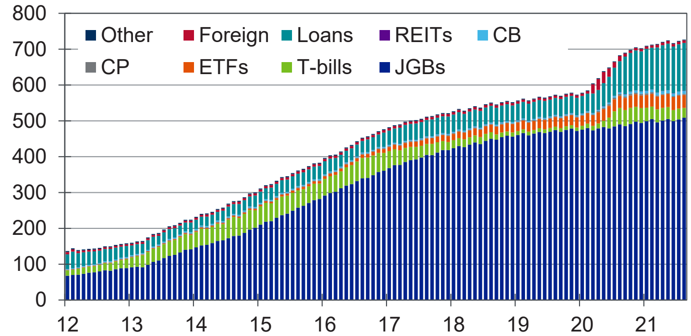
Net y/y purchases, ¥ tril



Sources: BoJ, Moody's Analytics

Chart 2: BoJ Balance Sheet: Assets

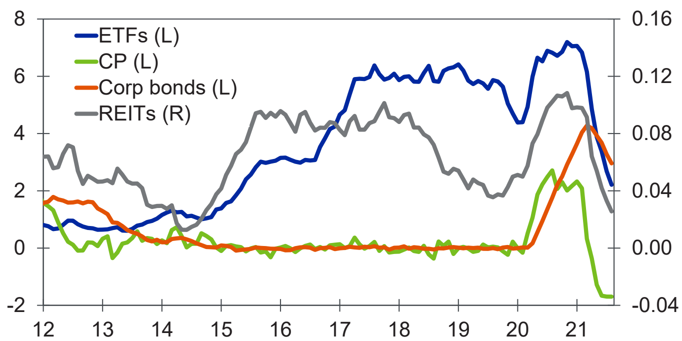
¥ tril



Sources: BoJ, Moody's Analytics

Chart 3: BoJ Purchases

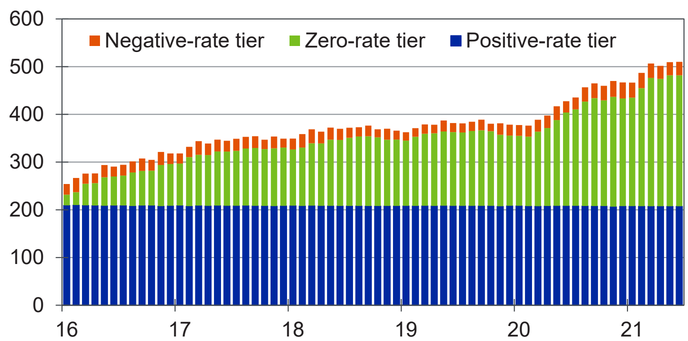
Net y/y purchases, ¥ tril



Sources: BoJ, Moody's Analytics

Chart 4: BoJ Reserve Tiers by Interest Paid

¥ tril



Sources: BoJ, Moody's Analytics

come to hold close to half[3] of all outstanding government bonds (see Chart 2).

Similar considerations apply with purchases of private financial assets. The BoJ's sizeable presence in ETFs has been a point of contention—its holdings were equivalent to 7% of Japan's equity market capitalisation as of early 2021—with domestic commentators frequently voicing concerns about distortionary market impacts. The bank sought to limit the side effects of its operations by focusing on ETFs tracking the value-weighted TOPIX index, which contains a broader and more diverse range of stocks than the price-weighted Nikkei 225 index. It also introduced an ETF lending facility. But the central bank's appetite for ETFs gradually waned and in March 2021, it announced that it would henceforth purchase ETFs and J-REITs only during downturns.

Meanwhile, the BoJ's corporate bond and commercial paper purchases successfully stemmed COVID-19-related financial market dislocations, but they remained temporary (see Chart 3). By nature, purchases of corporate debt are limited in reach, favouring larger corporations with access to capital markets but missing small and medium-size enterprises.

From quantities to interest rates

Where Kuroda's original QQE framework focused squarely on quantities, the BoJ has since 2016 been gradually nudging towards a framework structured more closely around interest rates.[4] In January 2016, the bank announced that it would follow some European central banks and introduce negative interest rates, much to the chagrin of Japan's banks. Compared with some of its peers, the BoJ's version of negative interest rate policy is relatively benign[5]: A -0.1% rate applies to only a small share of banks' reserve balances. The remainder falls into two separate tiers paid 0% and 0.1% interest (see Chart 4). Thus, the average deposit rate paid on reserves remains positive. Since banks aim to max out their 0% and 0.1% reserve tiers, it is the -0.1% policy rate which sets the price on reserves and thereby influences market rates. But it is the still-positive average deposit rate which more directly affects banks' profitability.

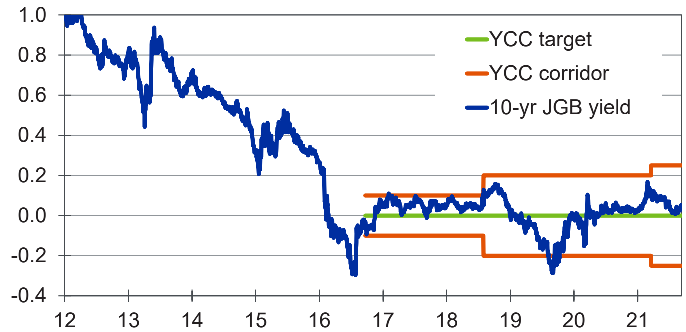
The introduction of negative interest rate policy was followed by a sharp decline in 10-year JGB yields, so the BoJ in September 2016 introduced QQE with Yield-Curve Control, a revamped version of its original QQE framework that pegged 10-year bond yields to a target of "around 0%", within a corridor of ±10 basis points. This was later widened to

3 https://www.mof.go.jp/english/policy/jgbs/publication/newsletter/jgb2021_09e.pdf

4 https://www.adb.org/sites/default/files/publication/225571/adbi-mission-incomplete-reflating-japan-economy.pdf

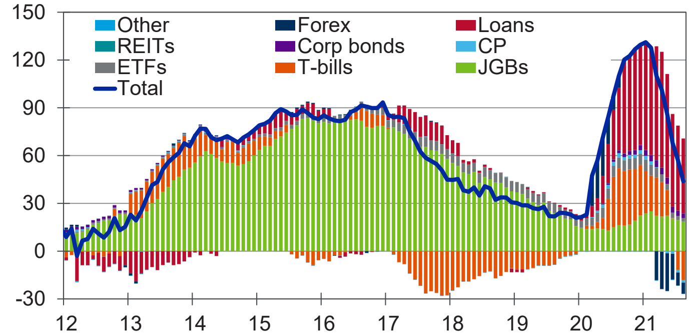
5 https://www.adb.org/sites/default/files/publication/317926/adbi-wp740.pdf

Chart 5: Bond Yields, Yield-Curve Control



Sources: BoJ, Moody's Analytics

Chart 6: BoJ Assets: Year-on-Year Change



Sources: BoJ, Moody's Analytics

±20 basis points and then ±25 basis points (see Chart 5). Whereas the -0.1% policy rate pinned down the short end of the yield curve, the 0% yield target set the 10-year point on the yield curve to ensure a small positive slope. Longer maturities floated freely.

The new framework allowed the BoJ to scale back the amount of its bond purchases while the 10-year remained close to the target, but it was not without contradictions: With the BoJ holding on to quantitative purchase targets for JGBs, it all but ruled out net sales of bonds. This meant that the bank's ability to stem a drastic decline in yields was limited, like in the fall of 2019 when the 10-year fell outside of the YCC corridor amidst heightened U.S.-Chinese trade tensions.

Loans now key pillar of BoJ policy

When COVID-19 hit the Japanese economy in early 2020, the BoJ began focusing on loans, which came to be the dominating factor driving balance sheet growth through 2020 (see Chart 6). The bank introduced a lending program that tied into the government's relief measures to provide SMEs with effectively interest-free, uncollateralised loans. SMEs were amongst the hardest-hit businesses during the pandemic and beyond the reach of traditional asset purchase programmes.

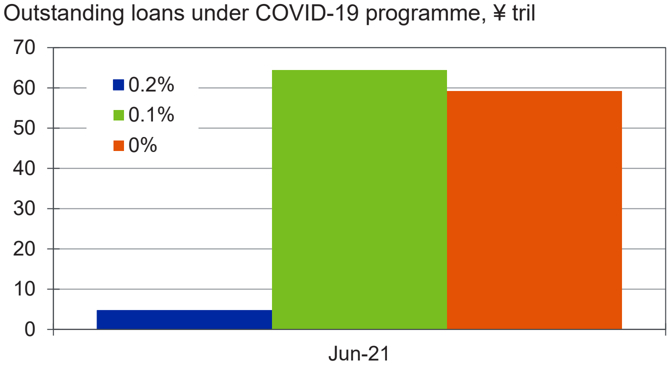
At a technical level, the program built upon the BoJ's existing Loan Support Program. This comprises two schemes that provide banks that meet retail lending targets, such as lending towards growth sectors or for emergency relief after natural disasters, with preferential access to the BoJ's loan and deposit facilities, similar to schemes by the European Central Bank and the Bank of England. Piggybacking on the tiering system, the program allows banks to borrow from the BoJ at 0% interest and deposit reserves in the 0% reserve tier rather than the negative policy-rate tier. This raises banks' interest income by reducing the amount of money 'earning' -0.1%, thereby incentivising lending.

The BoJ's COVID-19 lending program was a natural extension of this approach. It follows the same model of paying banks participating in the program indirect interest (see Chart 7). The BoJ, unlike the ECB, was always reluctant to lend at negative rates for fear of being seen as subsidising banks, so higher deposit rates had more favourable optics, despite being functionally equivalent. Notwithstanding its wonky mechanics, the program proved effective and retail lending accelerated notably (see Chart 8).

The BoJ has since used similar measures to achieve other policy objectives. In November 2020, the central bank announced it would pay extra interest to regional banks if they merged or improve profitability. The BoJ's climate finance program introduced in 2021 uses the same incentives by boosting banks' 0% reserve tier by twice the amount of green financing provided. We expect these

Chart 7: COVID-19 Loans Indirect Interest

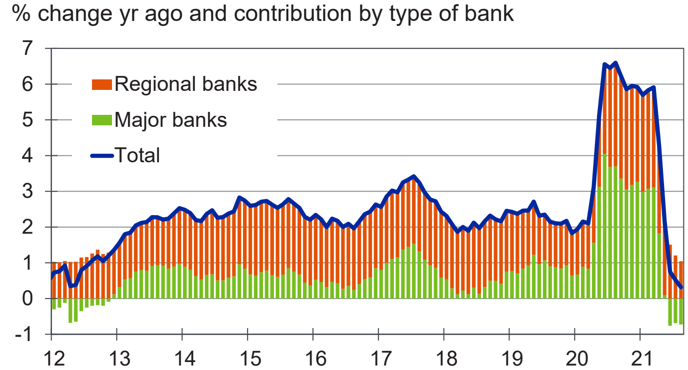
Outstanding loans under COVID-19 programme, ¥ tril



Sources: BoJ, Moody's Analytics

Chart 8: Bank Loan Growth

% change yr ago and contribution by type of bank



Sources: BoJ, Moody's Analytics

measures to continue to play a key role in BoJ policy going forward.

Lower for longer

Our baseline is for the BoJ to keep short-term and long-term interest rates unchanged for the foreseeable future. The key reason is that fundamentally, there is little prospect for inflation to rise sufficiently to allow the BoJ to hike rates. While the backdrop of current elections and the end of Governor Kuroda's term in April 2023 lends itself to speculation about change, it is worth recalling that Japanese interest rates have remained close to 0% since the late 1990s, throughout different policy regimes, prime ministers, BoJ governors, and a number of global tightening cycles.

In absence of higher inflation, raising rates would require de-emphasising the BoJ's inflation target. This runs counter to global trends at a time when the U.S. Fed's new Average Inflation Targeting framework arguably reaffirms the centrality of inflation to monetary policy. It would be a difficult balance to strike after the central bank committed so emphatically to inflation. It also runs the risk of triggering an appreciation of the currency just when foreign demand is providing a crucial source of growth. On the other hand, holding rates steady would take pressure off the exchange rate once the Fed begins to lift rates, improving the potency of the BoJ's current policy stance.

The BoJ's current policy has side effects, but the central bank needs to consider whether these outweigh the benefits at the macro level. This is a more difficult question, but technical factors suggest side effects can be managed. The tiering system provides the BoJ with a means to raise average deposit rates for banks without moving the policy rate explicitly, for example. This gives it all the benefits of higher rates without the drawbacks. We also know that the BoJ wants to maintain a modest positive slope along the yield curve, which makes higher short-term rates impractical so long as the 0% yield target, reaffirmed in March 2021, remains unchanged. Though we will not rule out marginal adjustments over the medium term, such as minor rate bumps or tweaks to the 10-year target, we do not see material rate changes on the horizon.

More substantial tightening, including significantly higher short-term and long-term rates, as well as an end of asset purchases will become possible only when demand, wage growth and inflation become sufficiently firm. For this, fiscal and monetary policy would have to work hand in glove. Indeed, it is the recognition that fiscal policy will have to do more of the heavy lifting that is underpinning the lack of political pressure on the BoJ to do more.

What to watch

This is not to say that the Japanese central bank will stand still. Looking ahead, we expect the bank to nudge towards a moderately tighter policy stance as it tweaks measures to ensure financial sustainability. This includes gradually dialling back pandemic-related asset purchases—a process already well underway—and technical tweaks like adjustments of the operational details of its asset purchase operations.

A complete phaseout of all asset purchase and lending operations will prove difficult so long as the BoJ remains committed to monetary base growth. Its pledge to continue expanding the monetary base until inflation "exceeds 2% and stays above the target in a stable manner" effectively requires asset purchases or positive loan growth.

A key item to watch over the medium term will be the BoJ's course on climate. Its green financing program introduced in summer 2021 is a first step, but more will be required to bring the BoJ in line with other central banks. Although we expect the BoJ to continue to push forward on climate, this will require supportive government policy.

Despite our baseline outlook of "lower for longer", easing remains an option in the case of a large shock to the economy and yen appreciation. In such a situation, the BoJ would likely cut the policy rate and conduct targeted asset purchases of ETFs, corporate bonds, or commercial paper, depending on the nature of the shock. Although the BoJ's COVID-19 response has underscored that the bank is not exactly fond of rate cuts, the tweaks to the tiering system adopted in March 2021 have laid the necessary groundwork, making this a conceivable option.

About the Author

Stefan Angrick is an Associate Director and Senior Economist for Moody's Analytics in Tokyo covering the Japanese economy. His expertise lies in applied macroeconomics, time series econometrics, and quantitative computational analysis. Stefan holds a Master's degree from Leipzig University and a PhD from the National Graduate Institute for Policy Studies in Tokyo. He also spent a year studying at Shanghai Jiao Tong University. Stefan has previously held positions with Oxford Economics, the Asian Development Bank Institute, the Bank of Finland, and Keio University, among others. He has also published in leading international journals like the Cambridge Journal of Economics and the International Journal of Central Banking.

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