

Japan Macro Watch

BoJ preview: The Last Dance

How will the story end?

The BoJ board concludes its next monetary policy meeting (MPM) on Friday, 10 March. This will be the last MPM under Governor Kuroda. We expect no change in the BoJ's key policy targets, including the +/-50bp band around the zero% 10yr JGB long rate target.

At its last MPM, on 18 January, the BoJ doubled down on its defense of yield curve control (YCC) by expanding the rules around its Funds-Supplying Operations Against Pooled Collateral (see [BoJ review: Governor Kuroda's last stand](#), 18 January 2023). The move came in response to upward pressure on rates following the BoJ's surprise widening of the 10yr target band at its 20 December policy meeting (see [BoJ review: BoJ tweaks YCC, expands 10yr trading band](#), 20 December 2022).

Since then, the deterioration in Japan's bond market functioning—the sole reason¹ that the BoJ provided for its Dec '22 YCC modifications—has failed to improve, and have arguably worsened: the results of the BoJ's latest quarterly Bond Market Survey, showed market participants' perception of Japan's bond market functioning dropping further, to the lowest level since the survey began in 2015 (see rates section for more on this).

This, coupled with the likelihood that long-end yields/YCC is likely to remain under pressure over the coming months, reflecting 1) expectations of normalization around the BoJ leadership transition; and 2) on-going strength in both the domestic and overseas inflation data, have led to speculation that Governor Kuroda may flexibilize YCC further, or even abolish the framework altogether, as a “parting gift” to his successor before his term ends on 8 April (Exhibit 1).

While such a scenario cannot be ruled out, we think that the likelihood that Governor Kuroda delivers one last “surprise” policy change before his departure is low (see strategists' section for possible “tail-risk” March YCC scenarios and implications).

Although we think that the likelihood of a March policy change is low, we continue to think that further YCC adjustment is a matter of time, given the 1) rise in Japan's underlying inflation pressures; 2) operational limits to large-scale JGB buying under YCC and the negative impact on market functioning; and 3) the communications difficulties posed by the framework, which makes it risky to upgrade the inflation view substantially or telegraph rates changes in advance. We have been warning of the high risks of an early YCC adjustment in 2Q CY23, under the new BoJ governor, and now make a move at the 16 June MPM our base case.

¹ See, for example, this one page accompanying release: Bank of Japan, “Modification of the Conduct of Yield Curve Control (YCC), 20 December 2022.

Trading ideas and investment strategies discussed herein may give rise to significant risk and are not suitable for all investors. Investors should have experience in relevant markets and the financial resources to absorb any losses arising from applying these ideas or strategies.

>> Employed by a non-US affiliate of BofAS and is not registered/qualified as a research analyst under the FINRA rules.

Refer to “Other Important Disclosures” for information on certain BofA Securities entities that take responsibility for the information herein in particular jurisdictions.

BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Refer to important disclosures on page 9 to 11.

12526924

Timestamp: 06 March 2023 05:30PM EST

07 March 2023

Macro
Japan

Izumi Devalier
Japan and Asia Economist
BofAS Japan
+81 3 6225 6257
izumi.devalier@bofa.com

Shusuke Yamada, CFA
FX/Rates Strategist
BofAS Japan
+81 3 6225 8515
shusuke.yamada@bofa.com

Takayasu Kudo
Japan and Asia Economist
BofAS Japan
+81 3 6225 8592
takayasu.kudo@bofa.com

Tony Lin, CFA >>
Equity Strategist
BofAS Japan
+81 3 6225 8123
tony.y.lin@bofa.com

Tomonobu Yamashita
Rates Strategist
BofAS Japan
+81 3 6225 7950
tomonobu.yamashita@bofa.com

Three reasons why March policy change is unlikely...

We see at least three reasons why the BoJ would be reluctant to move in March:

1) Insufficient economic data: Even if the BoJ were to justify further YCC long-rate flexibilization or outright removal of the yield curve control on the grounds that the “side effects” are now exceeding the costs, we don’t think the decision can be divorced from an assessment of Japan’s economic fundamentals: to the extent that further YCC changes will likely result in a 30-50bp rise in 10yr JGB yields from current levels (see strategists’ section and Exhibit 2 below), the BoJ needs to be able to argue convincingly that the economy and underlying inflation has sufficient momentum to withstand the rise in interest rates.

The degree of wage hikes in the on-going spring wage negotiations will be a critical piece in the BoJ’s assessment of the FY23 growth/inflation outlook. At minimum, the BoJ will likely want to point to the initial Shunto results, but the first round of responses won’t be available until 17 March (see [Shunto update: Union pressure to drive 1.5% base pay increase](#), 6 March 2023).

2) Interplay with the US data/Fed outlook: The current global rates backdrop is also unfavorable for YCC policy change at Friday’s BoJ MPM.

Surprisingly strong January US data has prompted markets to re-price front-end rates, and put upward pressure on long-end yields (strong February inflation data out of Europe didn’t help).

In an ideal world, the BoJ would probably prefer to wait until US data weakens and long-end yields are in decline, pulling down 10year JGB yields below the 50bp cap.

Acknowledging that the BoJ may not have the luxury of time, Japanese officials will probably want to wait until US rates are at least back to trading in a stable range to minimize the risk of an overshoot in Japanese yields following further YCC flexibilization.

This week’s February US jobs report is likely to prove pivotal in this regard. A weak result could allay fears of a re-acceleration in US labor markets. On the other hand, another strong reading would bolster 2023 US “no-landing” views and risk another re-pricing of the terminal Fed Funds rate. Unfortunately for the BoJ, the release comes after the March MPM, making a move this week risky for Governor Kuroda and the policy board.

3) Japanese fiscal year-end timing: The timing of the Japanese fiscal year end (31 March), also makes a move at the 10 March MPM risky.

To be clear, domestic financial institutions as a whole have been making progress in preparing for a possible end to yield curve control (YCC) and further rise in JGB yields. According to our Bank analysts, large, Japanese banks have significantly reduced the duration exposure of their JPY portfolio over the past year, making them well positioned to withstand the rise in yields (see Japan Bank Industry: 3Q results ranking: Majors: Shinsei>SMFG> MUFG; Regionals: look to Chiba and Kyoto, 17 February 2023).

Meanwhile, on 27 January, Bloomberg reported that Japan’s Financial Services Agency (FSA) had been urging top management at regional banks to analyze the impact of rising domestic interest rates on their portfolio and credit costs, and to bolster their capacity to withstand increased volatility in both domestic and overseas bond markets.

However, we are concerned that there hasn’t been enough time for contingency planning and that an abrupt bond sell-off means that some domestic financial institutions—particularly smaller regional banks—may face a one-time hit to BPS (book value per share) from valuation losses on yen bonds, making YCC changes risky at fiscal year-end.

Governor Kuroda unlikely to bend

Finally, it’s worth mentioning that Governor Kuroda has spent the past decade in unwavering defense of the 2% price stability target and the benefits of monetary easing.

While it may be tempting to imagine an ending to this story where the hero declares partial victory on 2% inflation and rides off into the sunset having freed the bond markets of yield curve control, we think it is more likely that he will stress that the job is unfinished, and underscore that the battle to re-anchor inflation faces a long road ahead.

...but YCC adjustment still a matter of time

Although we think that the likelihood of YCC adjustment in March is low, we continue to think that further YCC adjustment is a matter of time, given the 1) rise in Japan's underlying inflation pressures; 2) operational limits to large-scale JGB buying under YCC and the negative impact on market functioning; and 3) the communications difficulties posed by the framework, which makes it hard to telegraph rates changes in advance or even upgrade the inflation view substantially.

BoJ governor nominee Kazuo Ueda's remarks in his Diet hearings also suggest that normalizing yield curve is likely the highest priority for the Bank of Japan (see [BoJ Watch: Ueda Diet hearing—quick take](#), 24 February 2023). Whereas Ueda sounded relatively sanguine about the side effects of negative interest rate policy (NIRP), he was much more explicit in acknowledging the side effects of yield curve control. He also set a lower bar for YCC changes, stating that even if the underlying inflation outlook does not improve, “the BoJ may need to consider a more sustainable format for monetary easing, taking into account the side effects [caused by current YCC policy]” (Exhibit 6).

Change in call: We now expect further YCC adjustments at the 16 June MPM

We have been warning of the high risks of an early YCC adjustment in 2Q CY23, under the new BoJ governor. However, given 1) the on-going deterioration in bond-market functioning; 2) Ueda's statements in the Diet, 3) the rise in domestic inflation risks (our inflation forecasts remain well above that of the consensus/BoJ²), and 4) likelihood of a solid Shunto result and expected resilience in domestic spending, we now make it our base case.

In terms of the content of the adjustment, we expect either 1) another widening of the 10yr target permissible trading band, to +/-100bp; or 2) shortening the duration of the YCC long-rate target from the current 10year point to 5years, while keeping the level of the target and the permissible unchanged at zero% +/-50bp. Though we lean towards the latter (duration shortening to 5years), we do not have a super strong conviction.

Why not April?

In terms of the timing, our base case is for the changes to be announced at the 16 June MPM. While a move at incoming Governor Ueda's first meeting certainly cannot be ruled out, we attach a lower probability than June due to the following reasons:

- 1) The meeting comes immediately before the long, Golden Week holiday period (29 April – 5 May), causing the risk that thin liquidity amplifies the volatility following the YCC changes.
- 2) In his Diet hearings, Professor Ueda stated that there'd be ample time between the start of his potential term as BoJ governor (from 10 April) and the 28 April to conduct the required assessment of current policy settings and make changes, if necessary, at the April MPM (Exhibit 6). But he also shared his desire to have “careful discussions” with the policy board regarding the outlook for the economy/prices and conduct of YCC, pointing to slightly later changes, in our view.
- 3) Though we should get a clearer picture of momentum in the FY23 Shunto by the 28 April MPM, we should get an even better read in June, when the negotiations will be largely complete. Meanwhile, the expected acceleration in inbound tourism in the coming

² For details, please see Japan Watch: February CPI: Slowing on government subsidies but price pressures remain, 3 March 2023).

months will provide the BoJ with more confidence in the resilience of FY23 growth (see also [Japan Watch: Chartbook #71: Continued reopening momentum](#), 2 March 2023).

4) A change at the new BoJ leadership's very first policy meeting—even if warranted—may create the sense that policy is moving on a pre-set agenda and is not data dependent, an impression that Professor Ueda may want to avoid.

Having said this, we see the April MPM as very much “live” and also wouldn't rule out the possibility that the Ueda BoJ announces the changes at an emergency MPM between the April and June meetings. We find it notable that Professor Ueda acknowledged the possibility of surprise YCC adjustments in his Diet hearings stating that, while “dialogue with the markets is extremely important, it is inevitable that policy revisions may come as a surprise from time to time.”

Either way, we see a high chance that the BoJ, under the new leadership, flexibilizes YCC further by the middle of the year (i.e. by the 28 July MPM). Please see Exhibit 4 – Exhibit 5 in the Appendix for a calendar of the BoJ's policy meetings in 2023 and their interplay with Fed/ECB meetings.

NIRP/YCC removal likely to be delayed till 2024 or later

Finally, we have not changed our view that bigger changes to the policy framework, including the removal of NIRP and YCC, will be delayed until mid-2024 or later as we think it will be 1) contingent on further improvements to the output gap and underlying inflation or 2) require a much lengthier review process if the changes are to be justified on side effect/sustainability concerns.

Normalizing YCC and NIRP in steps, as opposed to making the move in one shot, will also allow the BoJ an opportunity to assess the impact of its policy changes, ensuring that they do not derail the recovery in growth and inflation.

Exhibit 1: Calendar of BoJ-related events through June 2023

We expect the new BoJ leadership to deliver adjustments to YCC by July 2023

| Date | Event |
|----------------|---|
| Mar 9 | Lower house approval of BoJ leadership nominations (expected) |
| Mar 10 | Upper house approval of BoJ leadership nominations (expected) |
| Mar 10 | March MPM (last meeting for Governor Kuroda and deputy governors) |
| Mar 17 | FY23 Shunto spring wage negotiations 1st response round |
| Mar 19 | End of term for deputy governors Amamiya and Wakatabe |
| Mar 20-22? | Inaugural press conference of new deputy governors |
| Apr 8 | End of term for Governor Kuroda |
| Apr 9 | New BoJ governor's term starts |
| Apr 10-11? | Inaugural press conference of the new governor |
| Apr 9 & Apr 23 | Unified local elections |
| Apr 28 | April MPM, Outlook Report (new BoJ leadership's first MPM) |
| Apr 29 - May 5 | Golden Week Holidays (Apr 29 & May 3-5 are public holidays) |
| May 11 | Summary of Opinions for the 27-28 April MPM |
| May 19 | G7 Summit (Hiroshima) (PM Kishida's hometown) |
| Jun 6 | June MPM |
| Jun 21 | Release of the 27-28 April MPM minutes |
| Jun 26 | Summary of Opinions for the 15-16 Jun MPM |
| Jul 28 | July MPM, Outlook Report |

Source: BofA Global Research, Nikkei Shimbun, Bloomberg

BofA GLOBAL RESEARCH

- Izumi Devalier and Takayasu Kudo, Japan Economists

Market implications

As we head into this week's BoJ MPM, we summarize the expected reaction in yen markets under our base case scenario of "no policy change" as well as tail risk scenarios of another surprise YCC change (read on further for detailed views by asset class):

Exhibit 2: Scenarios for the 10 March MPM

We expect USD/JPY at 136, 10yr JGB yield at 0.5%, and TOPIX flat to mildly positive on base case of no YCC change at the March MPM

| | Base case | Tail risk scenarios – "Surprise" YCC change | | |
|----------------|----------------------------------|---|--|--------------------------------|
| | No change | YCC target shortened from 10yr to 5yr | Raising 10yr target band ceiling to +1% from +0.5% | YCC abolished |
| USD/JPY | 136 | 133-135 | 131-133 | 128-130 |
| 10yr JGB Yield | 0.50% | 0.70% | 0.80% | 0.80% |
| TOPIX | flat to mildly positive (-2,100) | up to 1% dip (2,000) | up to 3% decline (1,975) | 3-5% correction (around 1,950) |

Source: BofA Global Research

BofA GLOBAL RESEARCH

Rates: Possible change to rules on BoJ's Securities Lending Facility

As noted above, monetary policy revision at the March MPM is not our main scenario. That said, the BoJ's quarterly Bond Market Survey released on 1 March (survey period: 1-7 February) showed the diffusion index (DI) for each survey item had deteriorated further from the November survey.

Particularly worth noting is the deterioration in the DI for determining the degree of bond market functioning, which fell to a record low of -64. In December-2022, the BoJ expanded its tolerable band for the 10yr JGB yield to ± 50 bp as a response to the decline in bond market functioning. From that perspective, it can be said that there remains some risk of policy revisions at the March MPM meeting. Our expectations for the impact on the rates market from a potential YCC revision are as follows.

• **10yr JGB yield band extended to ± 100 bp:** The yield on the 10yr JGB may rise to the new upper limit of 1.0%, but then would probably fall to 80bp, which we see as the fair value for 10yr JGB. The impact on superlong JGBs, for which BoJ holdings account for a rather small share, would likely be relatively light, with the yield on the 30yr JGB likely to rise to only around 1.6%. We think the impact of band expansion on 5yr JGBs would be greater than the impact on the 30yr bond and lesser than that on the 10yr bond. Accordingly, we would expect the 5yr yield to rise to about 0.4%. As a result, the curvature for 5-10-30yr JGB yield curve would likely increase.

• **Shortening YCC target maturity from 10yr JGBs to 5yr JGBs:** If the JGB maturity targeted by YCC is shortened to the 5yr bond, the current tolerable band of ± 50 bp from 0% for the 10yr yield would be applied to the 5yr yield. In that case, we would expect the yield on the 5yr JGB to rise temporarily to +0.5%, as investors factor in further policy revisions in the future. Meanwhile, the yield on 10yr JGBs, which would no longer be subject to YCC, would likely rise to around 0.8%, which we regard as an appropriate level. The 30yr JGB yield would likely rise to around 1.6%, same as in the band expansion scenario above. The result would be a bear-flattening of the 10-30yr JGB curve.

The above scenarios are our estimates of the financial market's reaction to a revision of BoJ's YCC. Alternatively, the BoJ could respond to the deterioration in bond market functions by revising the rules for its Securities Lending Facility (SLF) without changing the current monetary policy framework. The SLF is used as a supplementary secondary source of Japanese government securities. On 16 February, the BoJ revised the Minimum Fee Rate for the three current on-the-run issues of 10yr JGBs and lowered the upper limit on the amount of sales for each issue, which makes it difficult for delivering JB367 and JB368. Therefore, the BoJ may tweak rules on its SLF at the March MPM.

- Tomonobu Yamashita, Rates Strategist



FX: a move by Kuroda will be a surprise

For the upcoming MPM, based on our discussion with investors, the consensus is no change although minority of investors appear to be expecting policy adjustments by Kuroda at his last MPM. We think policy adjustments by Kuroda would be seen more hawkish than by Ueda as Kuroda's policy shift would be seen as a set up for something more from Ueda – if Kuroda makes policy adjustments at his departing MPM, we must assume it has been agreed by Ueda. It would be challenging for Kuroda to make adjustments to YCC and credibly sound dovish on the front end at the same time while it would be possible for Ueda (see: JPY – structural headwinds limiting JPY's cyclical rebound 16 February 2023).

For this reason, we doubt the BoJ would make policy adjustments at the March MPM even though these are long due. That said, anything cannot be ruled out given precedence. We summarize expected market reactions to tail risks:

- No change: the market to awaits Ueda (USD/JPY 136)
- Shortening target from 10yr to 5yr: It could eventually be bearish for JPY if Ueda confirms dovish stance on the front-end as a 5yr ceiling can work as forward guidance (USD/JPY 133-135).
- Raising 10yr target band ceiling to 1% from 0.5%: Policy uncertainty to remain high (USD/JPY 131-133).
- YCC removal: Market may price in earlier and faster rate hikes on the front-end (USD/JPY 128-130).

- Shusuke Yamada, FX/Rates Strategist

Equity: neutral-to-positive if no policy changes; medium-term value upside

We expect our base case -- no policy change at this week's BoJ MPM -- to be neutral-to-positive for equities. The passage of event, coupled with the yen depreciation bias as we have highlighted above, should underpin the market in the near term as some market participants still expect further YCC twists given the deterioration in market functioning.

Also, we see more upside in value stocks over the medium term (Japan Equity Strategy: The changing landscape for value stocks in Japan 24 February 2023). While the value momentum is likely to slow in mid-March due to the waning dividend yield factor from a seasonality perspective, we think both the TSE policies (Exhibit 3) and labor shortage should help incentivize value investments in Japan over time.

Lastly, we conduct a scenario analysis on the near-term market impact following Mar BoJ MPM. In our base case, the market focus will likely shift to US job data, such as nonfarm payrolls, following the BoJ's status-quo policy decision. In a risk scenario of YCC adjustment (note this is our base case in June), we think the near-term knee-jerk market selloff (down 1-3% for TOPIX) should be bought medium-term, especially in the absence of sustained inflationary pressures³.

Exhibit 3: Motivate efforts to enhance medium- to long-term corporate value

These efforts should help sustain TSE market reforms and corporate governance reforms

| Actions | Purpose |
|---|--|
| Raise Awareness and Literacy regarding Cost of Capital and Stock Price | Encourage listed companies to raise awareness and literacy regarding cost of capital and stock price/market capitalization and promote efforts to improve them |
| Improve the Quality of Corporate Governance | Promote listed companies' efforts to improve the "quality" of corporate governance |
| Further Expansion of English Disclosure Practices | Encourage companies listed in the Prime Market to expand the coverage of English disclosure practices and eliminate the time lag between the publication of documents in Japanese and English, with a view to making English disclosure of |

³ Okubo and others. "Summarizing the key points regarding the wage dynamics in Japan". February 15, 2015.

Exhibit 3: Motivate efforts to enhance medium- to long-term corporate value

These efforts should help sustain TSE market reforms and corporate governance reforms

| Actions | Purpose |
|---|---|
| | necessary information mandatory as the transitional measures expire |
| | Promote voluntary English disclosure practices in the Standard Market and Growth Market as well |
| Improve the Effectiveness of Dialogue with Investors | 1) Promote constructive dialogue with investors in the Prime Market |
| | 2) Encourage independent directors to fully understand their role |
| | 3) Expand the base of investors who are responsible for dialogue, while maintaining their quality |

Source: BofA Global Research, JPX

BofA GLOBAL RESEARCH

- Tony Lin, Equity Strategist

Appendix

Exhibit 4: Schedule of BoJ monetary policy meetings and key releases

2023

| Date of MPM (start & end dates) | Outlook Report | Summary of opinions | MPM Minutes |
|---------------------------------|----------------|---------------------|--------------|
| 17 Jan (Tue) | 18 Jan (Wed) | 18 Jan (Wed) | 26 Jan (Thu) |
| 9 Mar (Thu) | 10 Mar (Fri) | - | 20 Mar (Mon) |
| 27 Apr (Thu) | 28 Apr (Fri) | 28 Apr (Fri) | 11 May (Thu) |
| 15 Jun (Thu) | 16 Jun (Fri) | - | 26 Jun (Mon) |
| 27 Jul (Thu) | 28 Jul (Fri) | 28 Jul (Fri) | 7 Aug (Mon) |
| 21 Sep (Thu) | 22 Sep (Fri) | - | 2 Oct (Mon) |
| 30 Oct (Mon) | 31 Oct (Tue) | 31 Oct (Tue) | 9 Nov (Thu) |
| 18 Dec (Mon) | 19 Dec (Tue) | - | 27 Dec (Wed) |
| | | | TBA |

Source: BofA Global Research, Bank of Japan

BofA GLOBAL RESEARCH

Exhibit 5: G3 central bank decision calendar

2023

| 2023 | | | | | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| BoJ | 18 | | 10 | 28 | | 16 | 28 | | 22 | 31 | | 19 |
| | (Wed) | | (Fri) | (Fri) | | (Fri) | (Fri) | | (Fri) | (Tue) | | (Tue) |
| Fed | 01 | 22 | | 03 | 14 | 26 | | 20 | | 01 | 13 | |
| | (Wed) | (Wed) | | (Wed) | (Wed) | (Wed) | | (Wed) | | (Wed) | (Wed) | |
| | [T+1] | [T+1] | | [T+1] | [T+1] | [T+1] | | [T+1] | | [T+1] | [T+1] | |
| ECB | 02 | 16 | 05 | | 15 | 27 | | 14 | 26 | | | 14 |
| | (Thu) | (Thu) | (Wed) | | (Thu) | (Thu) | | (Thu) | (Thu) | | | (Thu) |

Source: BofA Global Research, Bloomberg

Note: Blue shaded dates represent decisions associated with Summary of Economic Projections (SEP) for the FOMC, Staff projections for the ECB, and Outlook Report for the BoJ.

BofA GLOBAL RESEARCH

Exhibit 6: Key takeaways from BoJ governor candidate Kazuo Ueda's Diet confirmation hearings (Translation by BofA)

Conducted 24 February (Lower House) and 27 February (Upper House)

Summary**On the inflation outlook**

- "CPI inflation to fall below 2% by mid-FY23"
- "Inflation reflects the cost-push impact of rising import prices and is not the result of strong demand"
- [These cost-push factors are] "set to fade going forward"; "The inflation data (YoY CPI increase) should fall substantially" [from the February CPI onwards]
- "Positive signs are emerging in the underlying inflation trend, but it will take a little more time until we can comfortably say that inflation has reached 2%"
- Changes in monetary policy "take time to have an impact; decisions need to carefully consider a variety of indicators"

On policy normalization**Overall views on policy normalization**

- A shift in monetary policy toward tightening "would require a substantial improvement in the outlook for underlying inflation"
- Would conduct review/assessment of QQE "if necessary". However, the need to discuss a broad range of issues may mean that "assessment should be conducted carefully over a long period"
- On whether the BoJ should conduct a review of its easing program at the new BoJ leadership's first MPM In April "There will be ample scope from April to conduct the required assessment of near-term monetary policy conduct ahead of each MPM"

On Yield Curve Control (YCC)

- There are "a variety of future possibilities" for YCC. After taking over as governor, "I will decide what form policy should take after a lengthy debate with Financial Markets Department and policy board members."
- "If the underlying inflation outlook improves further, we would need to consider changes [to monetary policy] towards the direction of normalization"
- [On what would constitute a "further improvement" in the underlying inflation outlook] "The point at which we can foresee the achievement of sustained and stable 2% inflation or thereabouts"
- Even if the underlying inflation outlook does not improve "the BoJ may need to consider a more sustainable format for monetary easing that takes into account side effects and other factors"
- "Current policy is undeniably resulting in a variety of side effects." "The BoJ has adopted a variety of measures since December 2022 with the aim of mitigating these as much as possible." "We are currently in the stage where we are monitoring the effects of the changes"
- "The approach of having yield-curve control target a shorter maturity than 10 years is one future option, but there are a variety of other options"
- On the idea of shortening YCC long-rate target maturity from the current 10 years: "Even under the current 10yr YCC, 3yr-5yr yields can be maintained at low levels, provided there is no distortion in the yield curve"
- "Dialogue with the markets is extremely important." But it is "inevitable that [policy revisions] may come as a surprise from time to time." "I intend to carefully explain the thinking behind our policies"

On negative interest rate policy (NIRP)

"I do not think negative rates have impeded the financial intermediary function, and we have yet to reach the reversal rate"

On QE & outlook for Quantitative Tightening (QT)

- "When [the BoJ's 2% inflation target] is reached, it would need to take the decision to terminate its large-scale JGB purchases"
- With yields near zero and no further room to fall, "simply increasing the volume of [bond] purchases is unlikely to increase demand for goods and services, and would not create an overall impact from monetary factors"
- The 2% inflation overshooting commitment "should remain in place for now"
- "The approach will be to raise interest rates on BoJ current account deposits during a phase of monetary tightening"
- "I do not think the BoJ would need to conduct operations to sell JGBs"

On the ETF purchase program

- Future disposal of exchange-traded funds (ETFs) purchased by BoJ "a major issue"
- Should monetary policy shift toward an exit, "we will need to consider the specifics [of the future for the BoJ's ETF purchases], but we there is some time before we get to that point"

On the 2% price stability target and 2013 BoJ-government joint statement

- "I see no urgent need at this point to review" the joint statement
- "I see no need to change the wording of the current inflation target in the near term given the favorable trend in underlying inflation"
- On the need for a wage growth target: "I question the appropriateness of the BoJ setting a target for wage growth." "It is not as if the central bank has a way to directly influence wages"

Source: BofA Global Research, Nikkei Shimbun, Reuter, Bloomberg, House of Representatives, House of Councillors

BofA GLOBAL RESEARCH

Disclosures

Important Disclosures

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. **VOLATILITY RISK RATINGS**, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. **INVESTMENT RATINGS** reflect the analyst's assessment of both a stock's: absolute total return potential as well as its attractiveness for investment relative to other stocks within its *Coverage Cluster* (defined below). There are three investment ratings: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

| Investment rating | Total return expectation (within 12-month period of date of initial rating) | Ratings dispersion guidelines for coverage cluster ^{R1} |
|-------------------|---|--|
| Buy | ≥ 10% | ≤ 70% |
| Neutral | ≥ 0% | ≤ 30% |
| Underperform | N/A | ≥ 20% |

^{R1} Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. *Coverage Cluster* is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

Due to the nature of strategic analysis, the issuers or securities recommended or discussed in this report are not continuously followed. Accordingly, investors must regard this report as providing stand-alone analysis and should not expect continuing analysis or additional reports relating to such issuers and/or securities.

BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

BofA Securities fixed income analysts regularly interact with sales and trading desk personnel in connection with their research, including to ascertain pricing and liquidity in the fixed income markets.

Other Important Disclosures

Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.

The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

This report may refer to fixed income securities or other financial instruments that may not be offered or sold in one or more states or jurisdictions, or to certain categories of investors, including retail investors. Readers of this report are advised that any discussion, recommendation or other mention of such instruments is not a solicitation or offer to transact in such instruments. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor for information relating to such instruments.

Rule 144A securities may be offered or sold only to persons in the U.S. who are Qualified Institutional Buyers within the meaning of Rule 144A under the Securities Act of 1933, as amended.

SECURITIES OR OTHER FINANCIAL INSTRUMENTS DISCUSSED HEREIN MAY BE RATED BELOW INVESTMENT GRADE AND SHOULD THEREFORE ONLY BE CONSIDERED FOR INCLUSION IN ACCOUNTS QUALIFIED FOR SPECULATIVE INVESTMENT.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.

The securities or other financial instruments discussed in this report may be traded over-the-counter. Retail sales and/or distribution of this report may be made only in states where these instruments are exempt from registration or have been qualified for sale.

Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.

This report, and the securities or other financial instruments discussed herein, may not be eligible for distribution or sale in all countries or to certain categories of investors, including retail investors.

Individuals identified as economists do not function as research analysts under U.S. law and reports prepared by them are not research reports under applicable U.S. rules and regulations.

Macroeconomic analysis is considered investment research for purposes of distribution in the U.K. under the rules of the Financial Conduct Authority.

Refer to [BofA Global Research policies relating to conflicts of interest](#).

"BofA Securities" includes BofA Securities, Inc. ("BofAS") and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. "BofA Securities" is a global brand for BofA Global Research.

Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:

BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under n° 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at www.bofam.com/BofASEdisclaimer; BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSF); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Investment Industry Regulatory Organization of Canada; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill

Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.

This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSCF; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofASE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the [Electronic Communications Disclaimers](#) for further information.

This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities. This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

Futures and options are not appropriate for all investors. Such financial instruments may expire worthless. Before investing in futures or options, clients must receive the appropriate risk disclosure documents. Investment strategies explained in this report may not be appropriate at all times. Costs of such strategies do not include commission or margin expenses.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

This report may contain a trading idea or recommendation which highlights a specific identified near-term catalyst or event impacting a security, issuer, industry sector or the market generally that presents a transaction opportunity, but does not have any impact on the analyst's particular "Overweight" or "Underweight" rating (which is based on a three month trade horizon). Trading ideas and recommendations may differ directionally from the analyst's rating on a security or issuer because they reflect the impact of a near-term catalyst or event.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned in this report. Investors in such securities and instruments effectively assume currency risk.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofAS or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information.

In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

Copyright and General Information:

Copyright 2023 Bank of America Corporation. All rights reserved. iQdatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities.

Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this

material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.