

A brief history of unconventional monetary easing by the Bank of Japan and Japan's inflation

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See Appendix A-1 for analyst certification, important disclosures and the status of non-US analysts.

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October 19, 2023

The points we focus on in this article

How Japan's inflation differs from other DMs and whether it can be sustainably high

A brief history of ultra-easy monetary policy by the Bank of Japan under Kuroda governorship

Changes likely to be made under Governor Ueda

Outlook for BOJ monetary policy



**How Japan's inflation differs from other DMs
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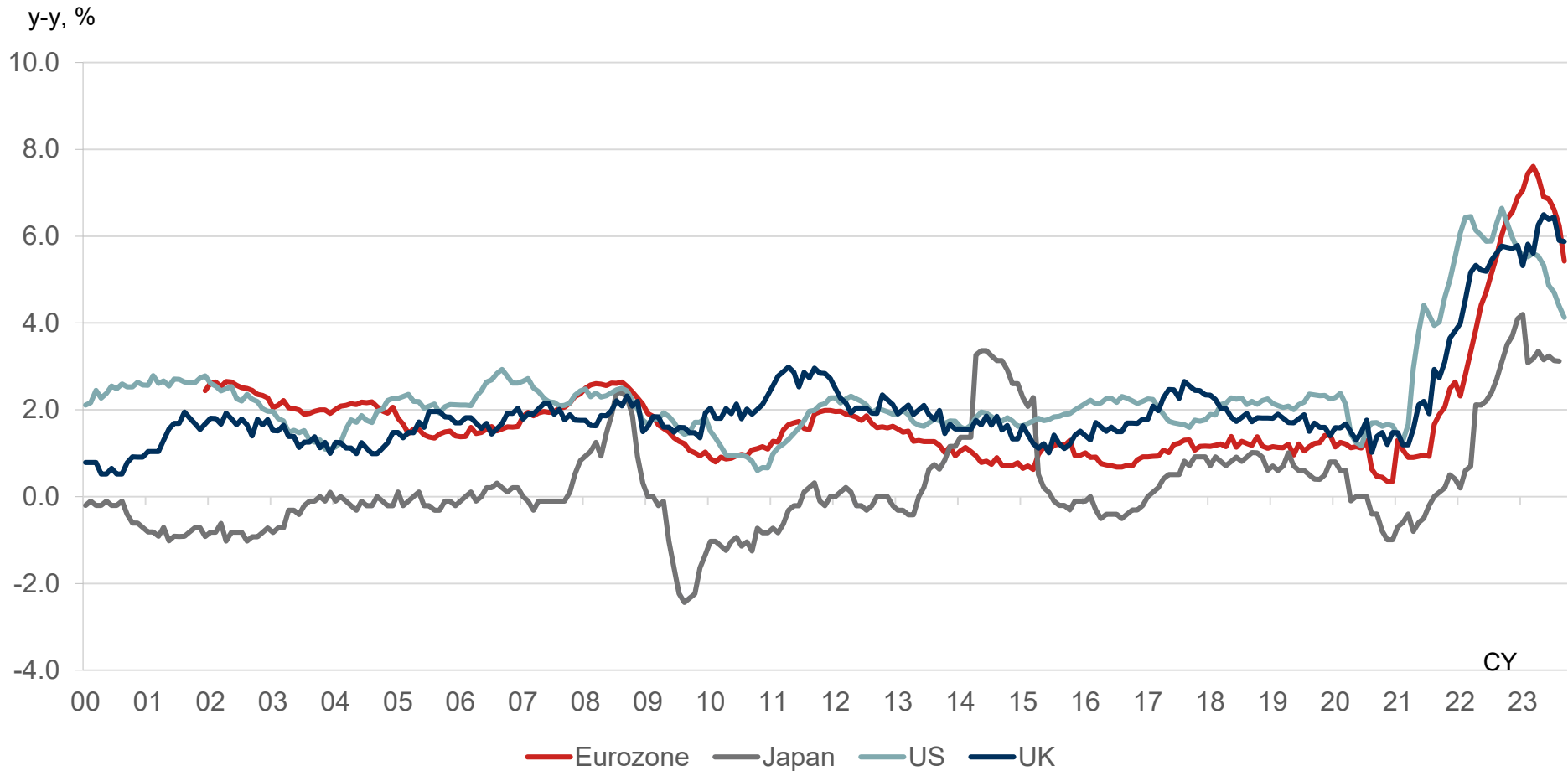


Outlook for BOJ monetary policy

A simple comparison of core inflation

- Japan's inflation is still seriously lagging behind other major developed economies

Core CPI inflation in four major more economically developed regions(each region's own definition)

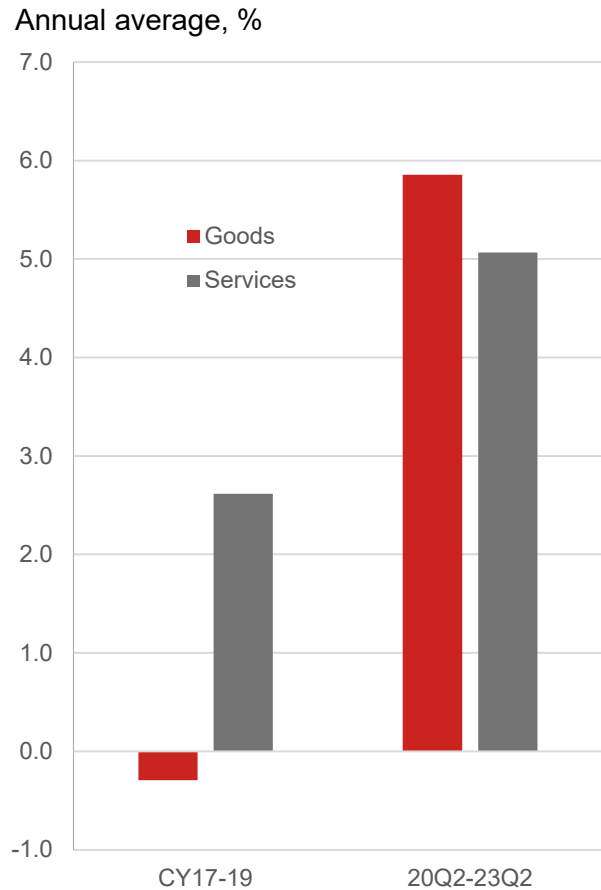


Source: Nomura, based on data from Japan's Ministry of Internal Affairs and Communications (MIC), the European Central Bank (ECB), and UK Office for National Statistics (ONS)

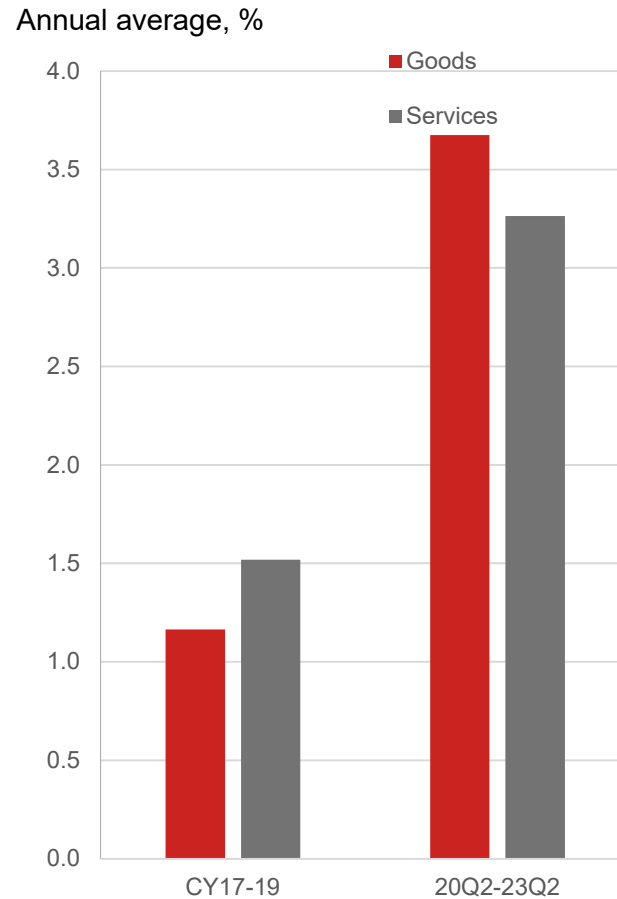
How Japan's inflation differs from others

Major difference between Japan and other DM lies in service inflation...

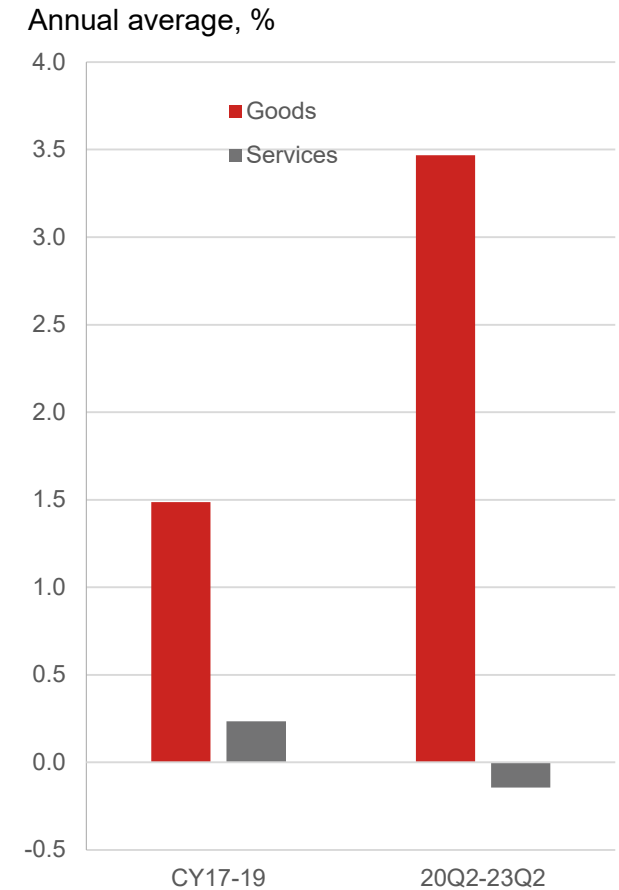
Comparison of change in CPI before and after pandemic—US



Comparison of change in CPI before and after pandemic—eurozone



Comparison of change in CPI before and after pandemic—Japan



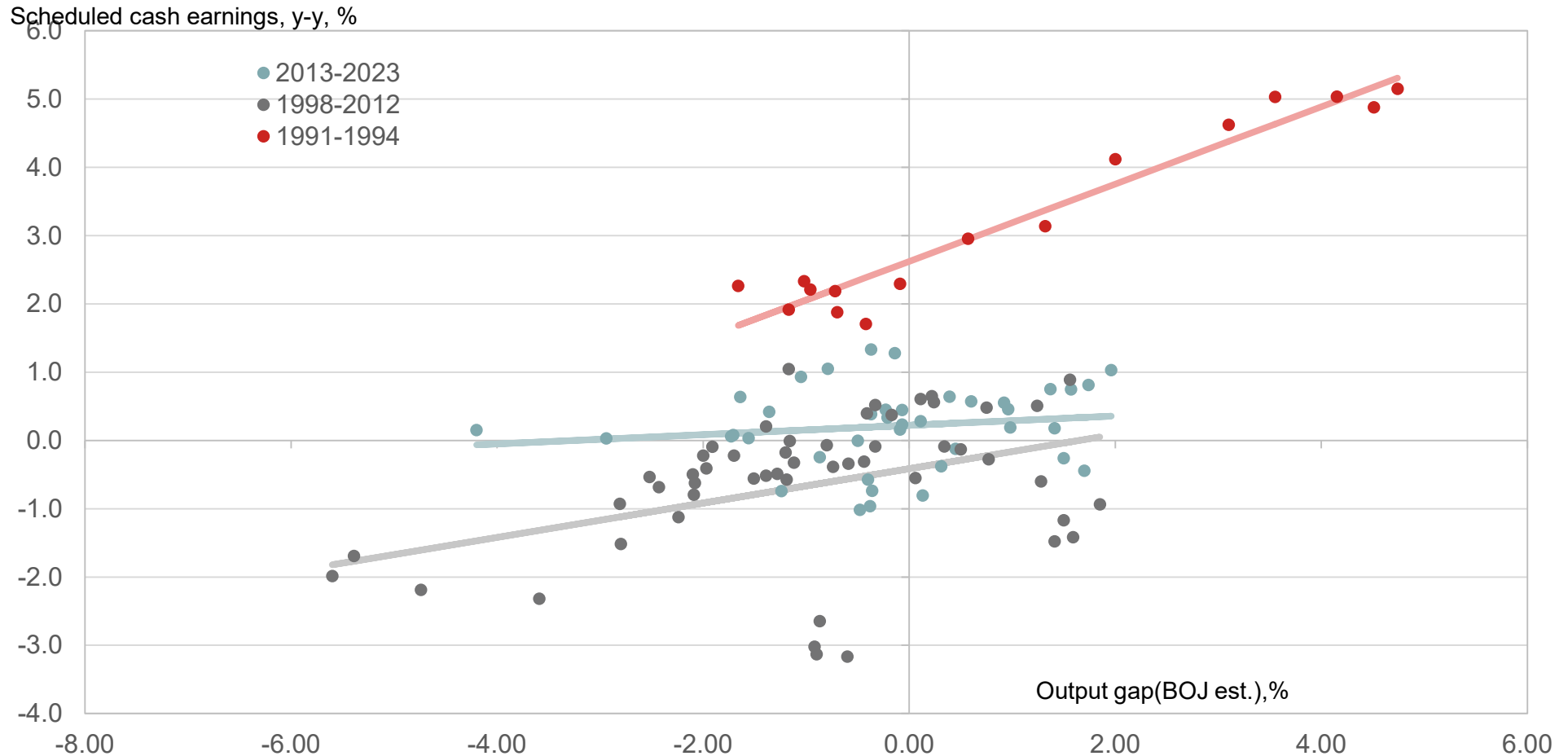
Note: Goods exclude food and energy

Source: Nomura, based on data from Japan's Ministry of Internal Affairs and Communications (MIC) and the European Central Bank (ECB)

We got a significantly high wage hike, but...

- ...we still need a stable 3% wage rise p.a. even with neutral output gap, which may be compatible with a sustainable 2% inflation

Wage Phillips curve



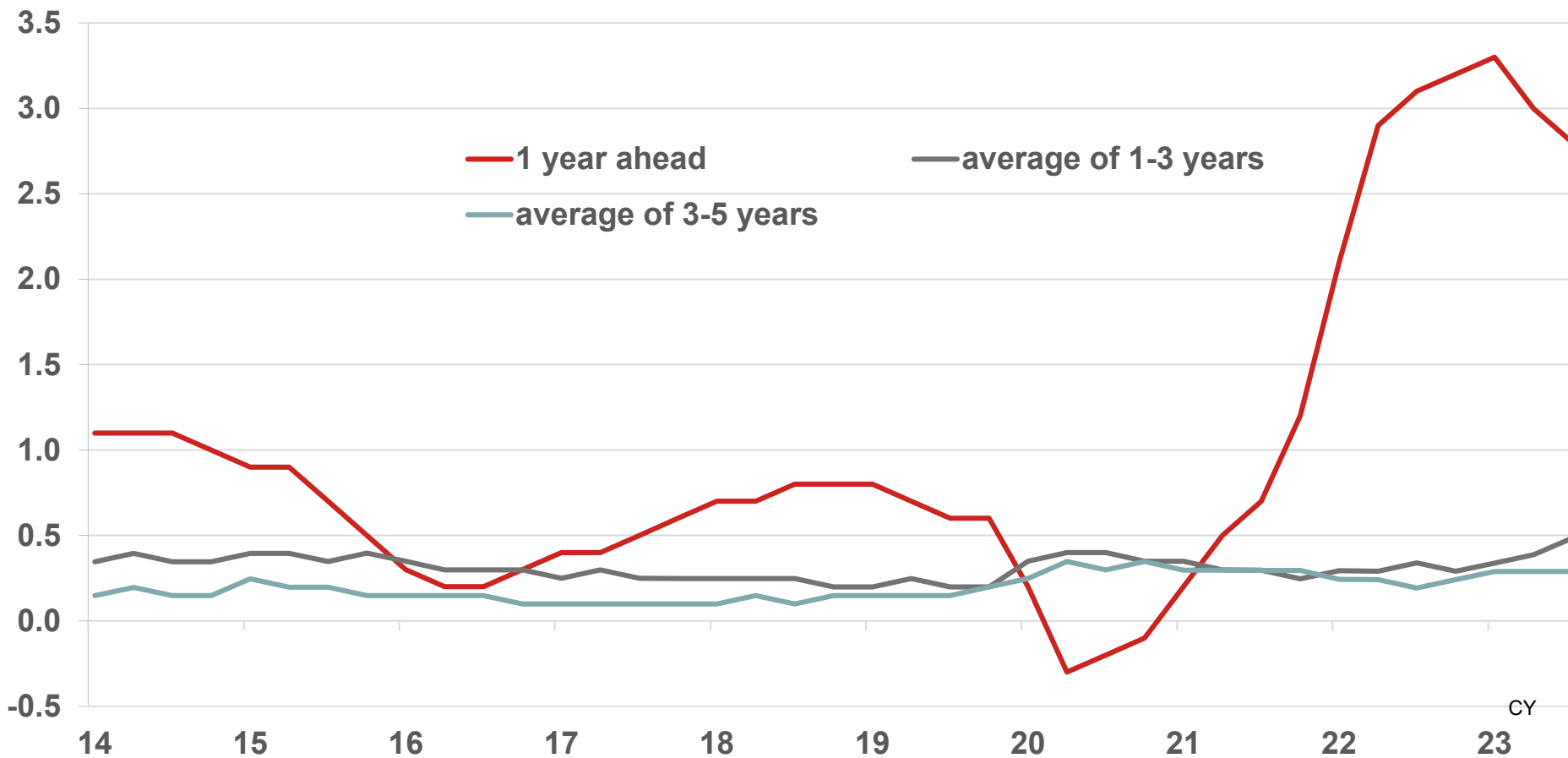
Note: Straight lines are trend lines based on simple regression for each period
 Source: Nomura, based on MHLW and BOJ data

Any changes in pricing behavior of Japanese enterprises?

■ The current rush to cost pass-through by Japanese enterprises may not last longer

Outlook for Output Prices in the BOJ Tankan (All-enterprise basis)

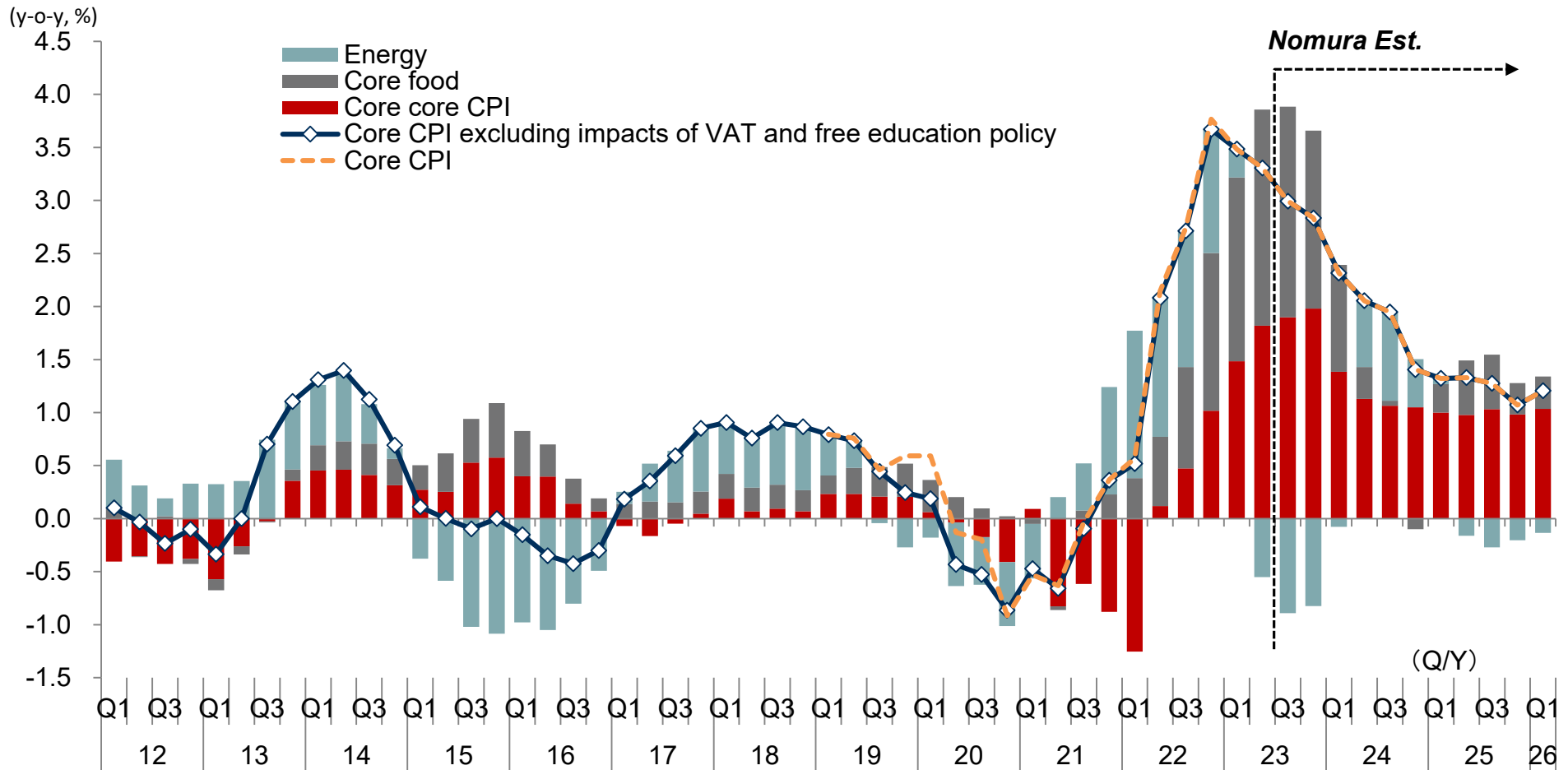
annual average, %



Achievement of 2% inflation goal still unlikely

■ As commodity and imported inflation diminishes, a domestic inflation is also likely to decelerate

Nomura's Core CPI inflation forecasts



Note: The core CPI is the consumer price index less fresh food. Core core CPI = Core CPI - energy - core food (excluding fresh food and alcohol).
 Source: Nomura, based on Ministry of Internal Affairs and Communications data

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A brief history of unprecedented monetary easing – (1)

■ Stage 1: “All-out attack” under Governor Kuroda

‘Unprecedented easing measures under Governor Kuroda

Date	Decision	Key points
2013		
22-Jan	Joint Statement of the Government and the Bank of Japan on Overcoming Deflation and Achieving Sustainable Economic Growth	Setting of price stability target of 2% inflation
4-Apr	Introduction of QQE	<ul style="list-style-type: none"> · Change in target for money market operations from uncollateralized call rate (overnight) to monetary base (annual increase of around ¥60-70trn) · Increased purchases of long-term JGBs and lengthening in maturities (annual increase in holdings of around ¥50trn, increase in average remaining maturity of JGB purchases from just under three years to over seven years). · Increase in ETF and J-REIT purchases (purchases at pace equivalent to around ¥1trn for ETFs and ¥30bn for J-REITs annually) · Continue with QQE for as long as needed to maintain in a stable manner the price stability target of 2% that it aims for
2014		
13-Oct	Expansion of QQE	<ul style="list-style-type: none"> · Larger increase in monetary base (equivalent to around ¥80trn annually) · Increase in asset purchase amount and increase in average remaining maturity (annual increase of around ¥80trn in long-term JGB holdings, average remaining maturity of around 7-10 years on JGB purchases, ETF purchases of around ¥3trn a year, J-REIT purchases at pace of ¥90bn per year)
2015		
18-Dec	Introduction of Supplementary Measures for Quantitative and Qualitative Monetary Easing	<ul style="list-style-type: none"> · Increasing average remaining maturity of JGB purchases to around 7-12 years from 2016 · Moves including establishment of new budget for ETF purchases to support companies actively investing in physical and human capital · Expand eligible collateral for BOJ provision of credit as a way to smoothly implement QQE
2016		
29-Jan	Introduction of QQE with negative interest rates	<ul style="list-style-type: none"> · Structure of three tiers for financial institutions' current accounts held at the BOJ, with negative interest rate of -0.1% applied to a portion of these
29-Jul	Enhancement of Monetary Easing	<ul style="list-style-type: none"> · Purchase ETFs so that the amount outstanding will increase at an annual pace of about ¥6trn

Source: Nomura, based on BOJ data

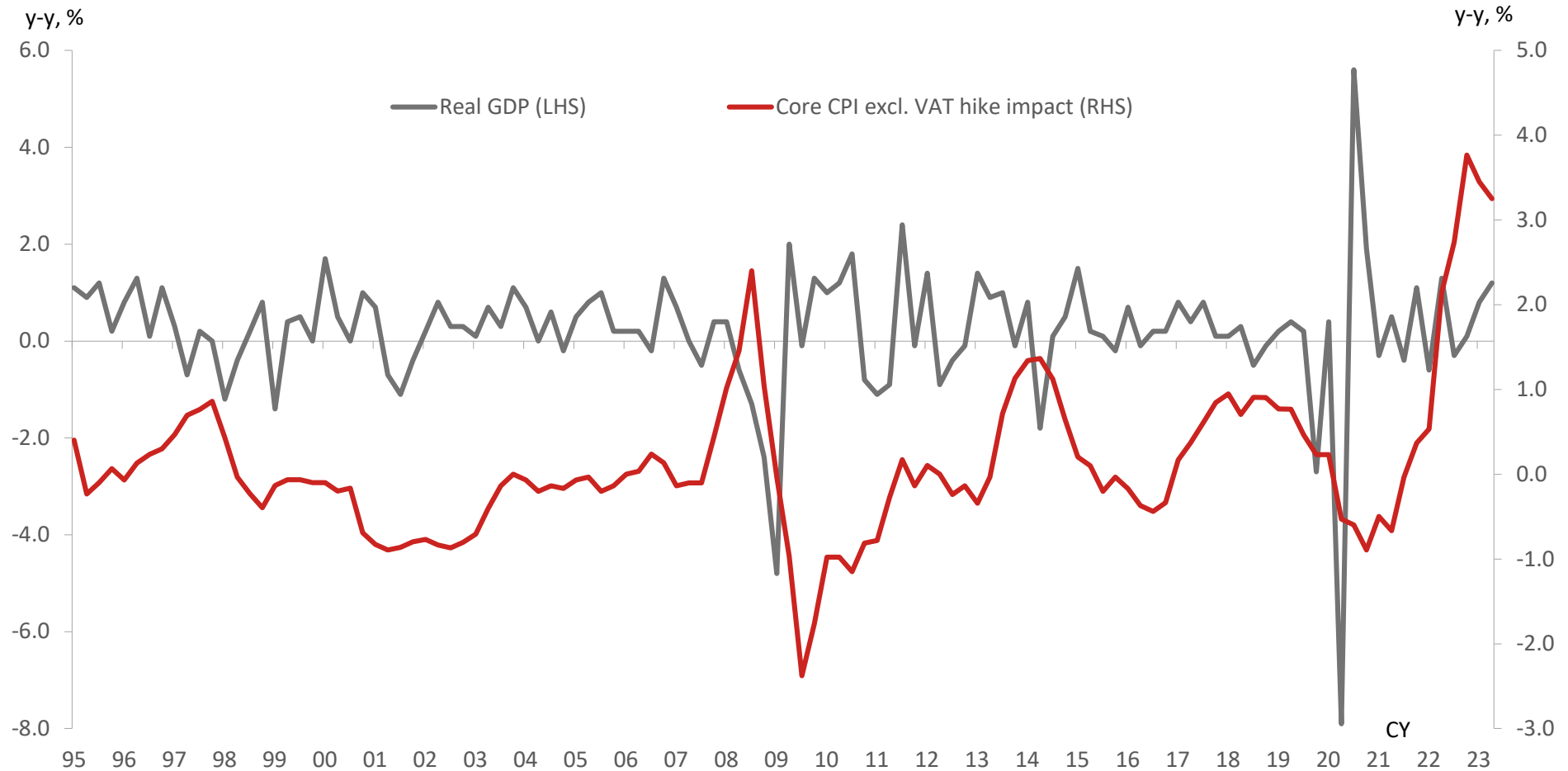
A brief history of unprecedented monetary easing – (2)

■ A shift into "War of attrition"

Comprehensive Assessment and introduction of yield curve control in Sep 2016

Date	Decision	Key points
2016		
21-Sep	<p>Announcement of Comprehensive Assessment of Developments in Economic Activity and Prices as well as Policy Effects since the Introduction of Quantitative and Qualitative Monetary Easing (QQE)</p> <p>Introduction of QQE with yield curve control</p>	<ul style="list-style-type: none"> · Assessment of how the QQE mechanism is functioning and what sort of factors prevented the achievement of 2% inflation · Assessment also of effects and impact, including impact of QQE with negative interest rate on financial markets and financial institutions · Yield curve control <p>Short-term interest rates: negative interest rate of -0.1% applied to policy-rate balances in current account balances held by financial institutions at the BOJ</p> <p>Long-term interest rates: BOJ to purchase long-term JGBs in order to keep the yield on 10-year JGBs to around current level of 0%</p> <p>Policy of yield curve control with aim of maintaining JGB purchasing around the current level (an annual increase of around ¥80trn in outstanding holdings)</p> <ul style="list-style-type: none"> · Overshooting commitment <p>QQE with yield curve control to be continued until 2% price stability target maintained in stable manner</p>

Real growth and CPI inflation under the long-lasting monetary easing



Response of JGB yield under unprecedented monetary easing

- A large scale JGB purchase by BOJ along with NIRP caused extreme flattening of yield curve

JGB 2y and 10y yield



A brief history of unprecedented monetary easing – (3)

■ In the face of various negative shocks, BOJ struggled in enhancing flexibility of YCC

Policy adjustments made under YCC regime

Date	Decision	Key points
2018		
31-Jul	Decision to strengthen framework for continuous powerful monetary easing	<ul style="list-style-type: none"> Introduction of forward guidance for policy interest rate BOJ intends to maintain the current extremely low levels of short- and long-term interest rates for an extended period of time, taking into account uncertainties regarding economic activity and prices, including the effects of the consumption tax hike due to take place in October 2019
2019		
25-Apr	Decision to make BOJ's policy interest rate forward guidance clearer and implement measures contributing to the continuation of powerful monetary easing	<ul style="list-style-type: none"> Clarification of forward guidance for policy interest rate Assumes current extremely low long- and short-term interest rates will be maintained at least through spring 2020 based on uncertainties regarding economic activity and prices including developments in overseas economies and the effects of the consumption tax hike
30-Jul	A change made in policy statement	<ul style="list-style-type: none"> Implementation of measures contributing to the continuation of powerful monetary easing (details omitted) BOJ clarifies that in a situation where downside risks to economic activity and prices, mainly regarding developments in overseas economies, are significant, the Bank will not hesitate to take additional easing measures if there is a greater possibility that the momentum toward achieving the price stability target will be lost.
31-Oct	Decision of the new forward guidance for policy rates	<ul style="list-style-type: none"> A change made in forward guidance for policy interest rate 'As for the policy rates, the Bank expects short- and long-term interest rates to remain at their present or lower levels as long as it is necessary to pay close attention to the possibility that the momentum toward achieving the price stability target will be lost.'
2020		
16-Mar	Enhancement of Monetary Easing in Light of the Impact of the Outbreak of the Novel Coronavirus (COVID-19)	
27-Apr	Enhancement of Monetary Easing	<ul style="list-style-type: none"> Increase in purchases of CP and corporate bonds (will conduct purchases with the upper limit of the amount outstanding of about 20 trillion yen in total, 7.5 trillion yen for each) Further active purchases of JGBs and T-Bills (Y80 trn guideline for the increase of JGB outstanding per year removed)

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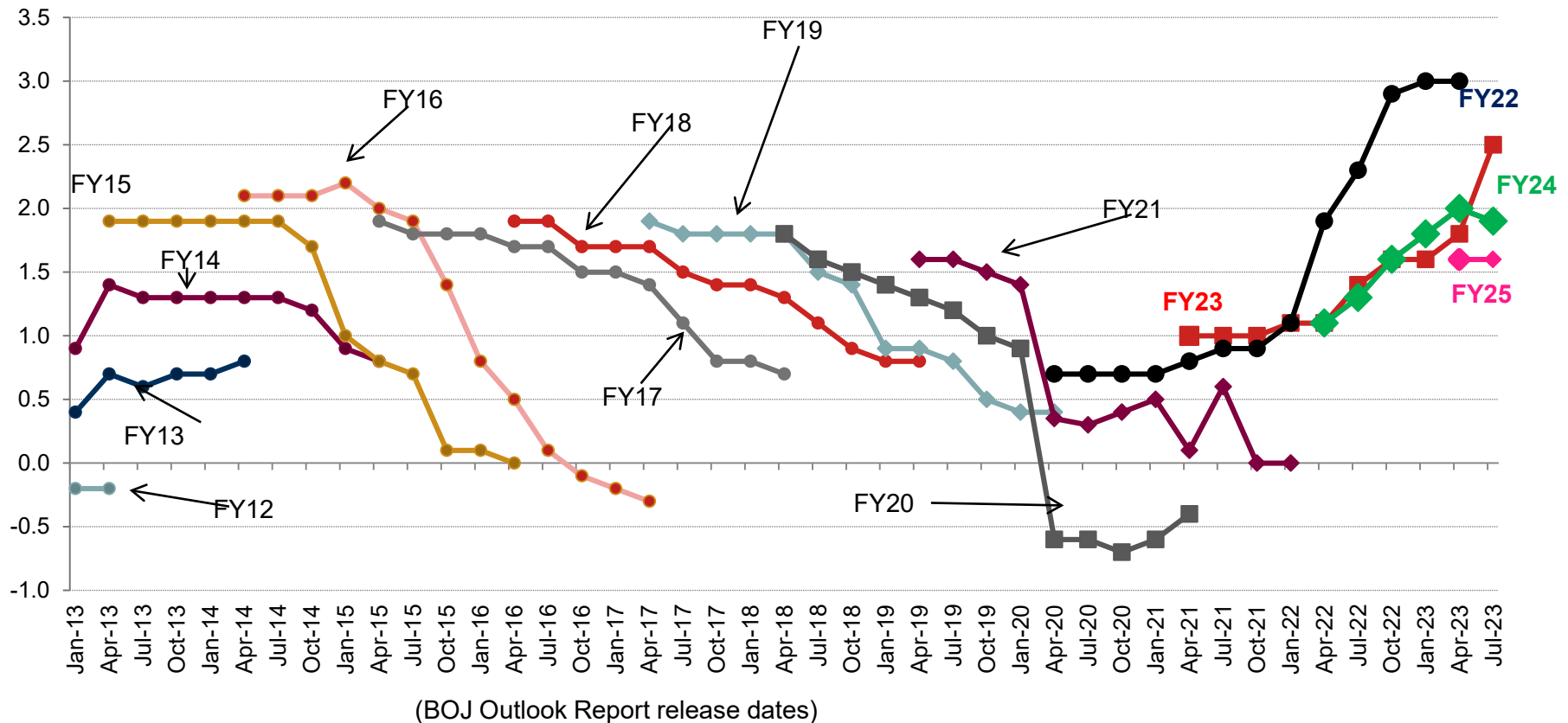
Outlook for BOJ monetary policy

BOJ still expects some distance remaining toward sustainable 2% inflation

■ BOJ's median core inflation forecast for FY25 remains +1.6% y-y

BOJ's core inflation forecasts in Outlook Reports

(y-o-y, %)

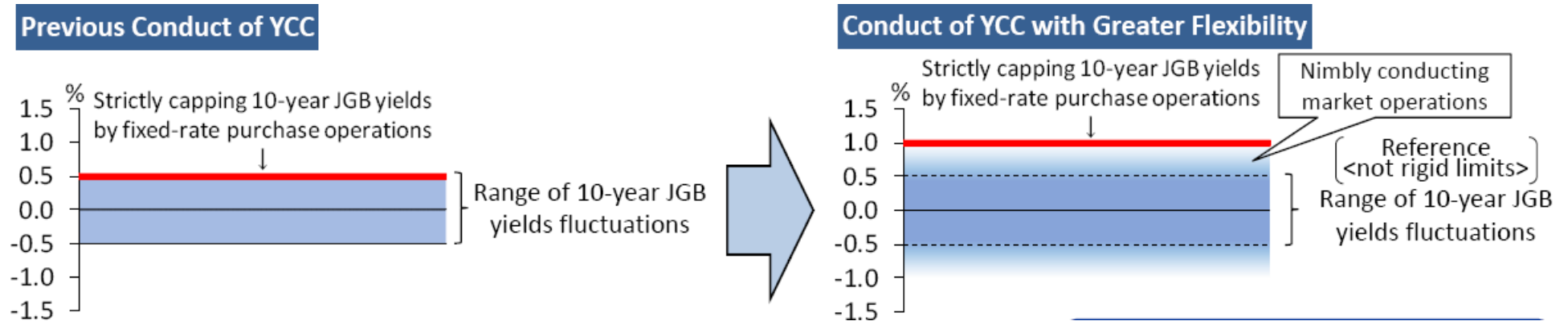


Note: Excluding the impact of consumption tax hike and free education
 Source: Nomura, based on BOJ data

Rationale behind July 2023 Policy Tweak

- BOJ raised de facto upper limit of 10y yield to 1.0%
- This does not really mean the Bank will allow 10y yield to reach there

Conduct of Yield Curve Control (YCC) with Greater Flexibility



Abstract of July 2023 Monetary Policy Meeting Statement

- Taking account of extremely high uncertainties for economic activity and prices, it is appropriate for the Bank to enhance the sustainability of monetary easing under the current framework by conducting yield curve control with greater flexibility and nimble responding to both upside and downside risks to Japan's economic activity and prices.
- If upward movements in prices continue, the effects of monetary easing will strengthen through a decline in real interest rates, while on the other hand, strictly capping long-term interest rates could affect the functioning of bond markets and the volatility in other financial markets. Such effects are expected to be mitigated by conducting yield curve control with greater flexibility.

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Our conclusion ;

- ✓ **It will still take some time to see evidence that wage increases and changes in corporate price-setting behavior are sustainable.**
- ✓ **In the wake of its decision on 28 July to become more flexible in its conducting of YCC, we think the BOJ is starting to show readiness for the lifting of monetary easing if it is driven to do so because of higher-than-expected inflation.**
- ✓ **As for the complete scrapping of YCC, our main scenario is that it will come no sooner than Oct–Dec 2024, as we think the BOJ will at least wait to make sure wage increases and improvement in the underlying economy are sustainable.**

Thank you very much for your attention!

Appendix A-1

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