

【Fixed Income Commentary - Japan Economic & Financial Weekly】**JGB yield scenarios for September and 2H FY26-FY28**

(original Japanese report issued on August 28, 2026)

JGB market outlook for September**JGB market outlook for September**

We expect the 10-year JGB yield to tread water just below 3% in September, although it may test that level at times. The 10-year yield touched 2.90% in intraday trading on July 9 but fell sharply the next day after Finance Minister Satsuki Katayama suggested the Government Pension Investment Fund (GPIF) might increase its investments in domestic assets. It subsequently rebounded, rising as high as 2.945% on August 18. More recently, it has been range-bound in the area around 2.85% - 2.90% as upward momentum in the 10-year UST yield and crude oil prices has stalled.

The main themes in September are likely to be: (1) the Bank of Japan's Monetary Policy Meeting and the subsequent path for the policy rate and (2) the outlook for the FY27 budget and JGB issuance plan reflecting the Takaichi cabinet's slogan of "responsible and proactive fiscal policy." Naturally, developments in the Middle East or new indications regarding Federal Reserve Chair Kevin Warsh's "next move" would also influence the market.

We expect the BoJ will raise the policy rate to 1.25% at the September 17-18 MPM (see "BoJ watch" section below for details). With the market assuming an 80%-plus probability of a rate hike, that would be in line with expectations. The market's focus will be on the subsequent pace of tightening. Market expectations for the terminal rate may rise further if Governor Kazuo Ueda signals a need to accelerate the pace of rate hikes. Even if concerns over the Bank falling behind the curve fade, the expected endpoint of this tightening cycle (the risk-free rate) would move higher, potentially lifting the entire yield curve in a bear flattening move.

Conversely, we expect to see some dip-buying if the governor's remarks on the pace of rate hikes are moderate in tone and he says that it will "depend entirely on economic activity, prices and financial conditions, as well as the likelihood of the outlook materializing and associated risks." This represents our base case. We think raising the policy rate to 1.25% while also adopting a more hawkish stance would have too great an impact on the broader JGB market.

With respect to fiscal policy, the deadline for ministries and agencies to submit their FY27 budget requests is August 31, and figures -- including the total amount requested -- are likely to become available in the first part of the week of August 31, possibly after Finance Minister Katayama returns from an overseas trip. The total will almost certainly exceed the JPY122 trillion requested for FY26, with Kyodo News reporting it is expected to top JPY130 trillion. The Cabinet Office's Economic and Fiscal Projections for Medium- to Long-Term Analysis, released on July 30, projected general account expenditures of JPY138.1 trillion in FY27 (Table 1). Although this is merely a mechanical estimate based on an effective increase in government spending of JPY10 trillion each year, it provides one benchmark for

assessing total budget requests. Concerns over increased JGB issuance are likely to emerge if the total substantially exceeds JPY140 trillion, although there is a possibility of the Ministry of Finance subsequently walking that back during its review. If the total remains in the JPY130-140 trillion range, it would likely be regarded as being within the range of expectations, limiting any shock to the market.¹ However, it will be some time before we have a clear picture of the overall budget and JGB issuance plan, given that 1) item-only requests with unspecified amounts will be incorporated during the budget formulation process heading into December, 2) it remains unclear how the consumption tax cut for food items will be funded, and 3) an increase in defense spending appears likely. Given the persistent risk premium associated with concerns over fiscal expansion, we think the downside for the 10-year JGB yield will be limited even if total budget requests are in line with expectations. For reference, Table 2 summarizes budget requests from individual ministries and agencies based on recent media reports.

September forecast range (intraday basis): 10-year JGB yield: 2.750%–3.050%
30-year JGB yield: 3.850%–4.200%

Table 1: Cabinet Office estimates for the central government general account

FY26 budget			July 2026 estimates			Difference
(JPY trillion)	Initial	Supple- mentary	FY27	FY28		Versus initial FY27 budget c-a
	a	b		Baseline	Growth strategy	
	c	d	e			
Expenditure	122.3	125.4	138.1	144.3	144.9	+15.8
Social security-related expenditure	39.1	39.1	40.0	40.9	41.0	+0.9
Local allocation tax grants, etc.	20.9	20.9	23.5	24.3	24.4	+2.6
National debt service	31.3	31.3	32.9	36.5	36.6	+1.6
Other expenditures	31.0	34.1	41.7	42.6	42.9	+10.7
Tax and other revenue	92.7	92.7	98.8	101.8	102.4	+6.1
Tax revenue	83.7	83.7	90.5	93.5	94.0	+6.8
Other revenue	9.0	9.0	8.3	8.4	8.4	-0.7
Government bond issuance (expenditure - tax revenue)	29.6	32.7	39.3	42.5	42.5	+9.7

Note: The FY27 figures are identical under the Growth Strategy scenarios 1 and 2, and the Current-trend scenario. The FY28 figures are identical under Growth strategy scenarios 1 and 2.

Source: MUMSS, from Bloomberg; MUMMS estimates

¹ In an exclusive interview with the Yomiuri Shimbun dated August 28, Prime Minister Sanae Takaichi stated that she intended to limit new government bond issuance in FY27 to approximately JPY40 trillion.

Table 2: Budget requests from individual ministries and agencies based on recent media reports

	Requested amount (JPY trn)	Requests submitted as "item-only requests"	Notes (from news reports)
Ministry of Defense	8.9	Development costs for long-range attack drones	- Could exceed JPY10 trillion - JPY8.9 trillion figure based on current Defense Buildup Program for FY23-FY27 - Three national security documents are scheduled to be revised by year-end; defense spending could be raised from 2% of GDP to 3.5%
Ministry of Economy, Trade and Industry	7.7	Cost of physical AI development and support for mass production and adoption of AI robots	- JPY2.5 trillion greater than sum of FY26 initial budget (JPY3.1 trillion) and FY25 supplementary budget (JPY2.2 trillion) - "Strong and Prosperous Japan" investment framework accounts for JPY4.5 trillion
Ministry of Education, Culture, Sports, Science and Technology	8.8	Grants to fund educational reforms at public high schools	- JPY1.2 trillion greater than sum of FY26 initial budget (JPY5.9 trillion) and FY25 supplementary budget (JPY1.6 trillion) - "Strong and Prosperous Japan" investment framework accounts for about JPY2.2 trillion
Ministry of Foreign Affairs of Japan	1.2	Portion of costs for Official Security Assistance	- JPY0.2 trillion greater than sum of FY26 initial budget (JPY817.0 billion) and FY25 supplementary budget (JPY184.4 billion)
Ministry of Finance	38.7	(Details unknown)	- Assumed interest rate was raised from 3.0% to 3.8%, boosting debt-servicing costs to JPY36.7 trillion, up JPY5.3 trillion YoY
Ministry of Health, Labour and Welfare	36.6	Revisions to compensation for nursing care and disability welfare services, and measures to address rising healthcare prices	- JPY1.5 trillion higher than FY26 initial budget - "Strong and Prosperous Japan" investment framework accounts for JPY1 trillion
Ministry of Agriculture, Forestry and Fisheries	3.1	Support for restaurant industry and farmers affected by consumption tax cut for food items New rice paddy policy	- JPY0.8 trillion higher than FY26 initial budget - Support for restaurant industry includes assistance for introducing takeout services - Benefits equivalent to loss of income for farmers are being considered
Ministry of Internal Affairs and Communications	21.9	Measures to offset decline in local government revenues due to consumption tax cut for food items	- JPY0.6 trillion higher than FY26 initial budget - Local allocation tax grants total JPY21,062.4 billion, up 4.3% YoY - General expenditures, excluding general account funding for local allocation tax grants, total JPY0.9 trillion
Ministry of Land, Infrastructure, Transport and Tourism	8.8	Construction cost of extending Hokuriku Shinkansen to Osaka Support for resuming construction of LNG carriers, etc.	- JPY2.7 trillion higher than FY26 initial budget - "Strong and Prosperous Japan" investment framework accounts for JPY1.6 trillion
Ministry of the Environment	1.1	(Details unknown)	- "Strong and Prosperous Japan" investment framework accounts for JPY0.6 trillion
Children and Families Agency	7.7	Support for early childhood education and childcare (including children aged 0-2) FY27 revisions to compensation for disability welfare services	- JPY0.25 trillion higher than FY26 initial budget - Includes special accounts (JPY4.4 trillion under general account, JPY3.2 trillion under special accounts)
Digital Agency	1.0	Cost of assessing vulnerabilities in critical government systems	- JPY0.5 trillion higher than FY26 initial budget - "Strong and Prosperous Japan" investment framework accounts for JPY0.4 trillion
Total	Over 130	-	- Initial budget expected to increase further depending on final amount of item-only requests - General account only

Note: Depending on ministry or agency, request amounts may consist solely of general account spending or may also include special accounts. Where breakdowns have been provided, they are indicated in the Notes. Budget requests and budgeted amounts have been rounded. "Total amount" is based on media reports and does not equal sum of identified requests from individual ministries and agencies.

Source: MUMSS, from media reports

Key events in September

Key events

The Ministry of Finance plans to offer JPY2.6 trillion in 10-year JGBs on September 1, JPY600 billion in 30-year bonds on September 3, JPY2.5 trillion in 5-year bonds on September 8, JPY700 billion in 20-year bonds on September 15, JPY300 billion in 40-year bonds on September 29, and JPY2.8 trillion in 2-year bonds on September 30. It will also hold a JPY700 billion liquidity enhancement auction for JGBs maturing in 1-5 years on September 10 and a JPY650 billion auction for bonds coming due in 5-11 years on September 25. Normally, the MoF holds a meeting of JGB Market Special Participants (primary dealers) during September. The market is currently speculating that liquidity-enhancement auctions for bonds maturing in 5-11 years may be scaled back. We expect the upcoming 10- and 30-year offerings to end with satisfactory to somewhat weak results. While the

elevated yields should be attractive, monetary and fiscal policy uncertainty may prompt some investors to refrain from bidding.

In BoJ-related news, Policy Board member Hajime Takata will attend a meeting with business leaders in Sapporo on September 2, and his colleague Kazuyuki Masu will appear at a similar meeting in Fukui prefecture on September 10. Both will deliver speeches and hold press conferences. A Monetary Policy Meeting will be held on September 17-18, with the results to be announced on the second day of the meeting, followed by Governor Ueda's scheduled press conference. See the "BoJ watch" section below for details. On September 28, the Bank will release the minutes of the July 30-31 MPM. On September 30, it will announce the schedule for its outright JGB purchases in Oct-Dec. Monthly purchases are to be reduced to JPY2.3 trillion, down JPY200 billion from around JPY2.5 trillion in the Jul-Sep quarter.

In the domestic and overseas political arena, the G20 Finance Ministers and Central Bank Governors Meeting will be held in the US on August 31 and September 1. Finance Minister Katayama and BoJ Governor Ueda are expected to hold press conferences. A meeting between Mr. Ueda and US Treasury Secretary Scott Bessent is also likely to take place. The United Nations General Assembly will convene in New York on September 8. On September 24, Chinese President Xi Jinping is scheduled to visit the US and meet with President Donald Trump. In Japan, Prime Minister Takaichi has announced plans to reshuffle the cabinet and make changes to the LDP executive lineup in mid- to late September. Members of the Japan Innovation Party ("Ishin"), which has continued to work with the government from outside the cabinet, are expected to be appointed to cabinet positions. An extraordinary session of the Diet is then likely to be convened in the latter half of September. During the session, the prime minister plans to submit a legislative bill to lower the consumption tax on food and beverages. At a recent LDP executive meeting, she instructed the party to hammer out the details of the consumption tax cut, finalize the outline of the tax code reforms by the end of September, and be ready to submit necessary legislation to the extraordinary Diet session.

We project the ECB Governing Council will raise its policy rate (the deposit facility rate) to 2.50% when it meets on September 10. Reuters also reported on August 26 that the ECB is likely to hike rates at the September meeting, with a rate rise appearing to be the market consensus.

On September 2 the Fed will release its Beige Book survey of regional economic conditions, which will serve to inform discussions at the FOMC meeting on September 15-16. We expect the Committee will leave its guidance range for the policy rate unchanged at 3.50% - 3.75% and think Chair Warsh will focus on assessing underlying inflation amid rising crude oil prices.

In upcoming US data, the Bloomberg-compiled consensus as of 8:00am JST on August 28 was that the ISM manufacturing index for August (Sep 1) would fall 0.4pt MoM to a reading of 55.2. Economists expect the ISM services index (Sep 3) will edge up 0.2pt MoM to 54.3. The official US jobs report (Sep 4) is projected to show the nonfarm sector creating 55,000 jobs in August (vs. a loss of 23,000 in July), with the unemployment rate holding steady at 4.1% and the average hourly wage rising 0.3% MoM (up from a gain of 0.1% in July).

BoJ watch: We see Bank raising policy rate to 1.25%

The BoJ will hold a Monetary Policy Meeting on September 17-18, where we expect it to raise the policy rate from 1.00% to 1.25%.² The coordinated Japan-US foreign exchange intervention at the end of July substantially lowered the political hurdles to a rate hike. With underlying inflation approaching 2% and the Bank viewing risks to prices as being skewed to the upside, it is unlikely to pass up this opportunity. The prime minister reportedly expressed reluctance to sanction a rate hike at her February meeting with the BoJ governor, while at their May meeting, she is said to have requested an increase in the central bank's JGB purchases. We suspect the administration's underlying stance is unchanged, reflecting concerns that rate hikes could dampen the private sector's appetite for investment or send JGB yields higher. Nor is there any guarantee that the government's stance toward rate hikes will not harden again. As the effects of higher crude oil prices and the weak yen are seen feeding through to downstream prices, we believe the BoJ is likely to raise rates when it meets in September.

Will vote be 7-2, or something else?

Against this backdrop, we see a number of key points to watch at the September meeting. First is the number of votes for and against the decision. Board member Toichiro Asada, who was appointed by the Takaichi cabinet, dissented when the Bank raised rates in June. His colleague Ayano Sato, also nominated by the current administration, has participated in meetings since July. If a September rate hike is approved by a 7-2 majority, that would likely be seen as confirmation that the Takaichi cabinet remains opposed to further rate hikes. It could also foster the view that doves are likely to be appointed as the successors to Hajime Takata and Naoki Tamura, whose terms expire on July 23, 2027. If the vote is 8-1, with either Mr. Asada or Ms. Sato supporting the rate hike, the result would probably be viewed as evidence that Board members appointed by the Takaichi cabinet are not necessarily opposed to further tightening. A unanimous vote would likely be seen as an indication that the Takaichi cabinet has changed its stance on rate hikes.

Rationale for rate hike likely to broadly echo reasons presented at June meeting

More important will be the reasons given for the rate hike along with the guidance on future monetary policy. As at the June meeting, we think the Bank will state that, with underlying inflation approaching 2% and financial conditions still regarded as accommodative, it decided to adjust the degree of monetary accommodation in view of upside risks to prices. To justify the relatively short three-month interval between rate hikes, the BoJ may cite the continued retreat of downside risks to the economy, as well as the inflationary implications of AI-related demand and the weak yen, both discussed in the July Outlook Report. The monetary policy guidance presented at the July meeting (Table 3) is likely to be reiterated. The underlined sections were added at that meeting and helped lay the groundwork for an early rate hike.

² In our August 3 *Monetary Policy Navigator* ("Revising our BoJ policy rate scenario; now expecting next hike at September MPM"), we moved up our forecast for the next rate hike from the December 2026 meeting to the September 2026 meeting and raised our projection for the terminal rate from 1.50% to 1.75%.

Table 3: Monetary policy guidance announced at the July MPM

As for the conduct of monetary policy, given that underlying CPI inflation has been approaching 2 percent and financial conditions have been accommodative, the Bank will continue to raise the policy interest rate and adjust the degree of monetary accommodation, in response to developments in economic activity and prices as well as financial conditions. In this regard, it will consider the timing and pace of adjustment, while examining the likelihood of realizing the baseline scenario of the outlook for economic activity and prices and the risks to the outlook, including the impact of the situation in the Middle East, the expansion in AI-related demand, and developments in foreign exchange rates. In particular, the perspective of stabilizing underlying CPI inflation at a level around 2 percent becomes important in order to keep the risk of underlying CPI inflation deviating upward to a level above the price stability target of 2 percent from materializing and thereby exerting an adverse impact on the economy afterward. With the price stability target of 2 percent, the Bank will conduct monetary policy as appropriate from the perspective of sustainable and stable achievement of the target.

Source: MUMSS, from BoJ; underline by MUMSS

Will Governor Ueda signal one more rate hike in 2026?

At Governor Ueda's press conference, we focus on whether he gives any clues as to whether the following rate hike -- to 1.50% -- is also drawing near. At the press conference after the July meeting, the governor made remarks suggesting that the September meeting was "live," including "We believe it is necessary to be more mindful than before of upside risks to prices and therefore intend to hold extensive discussions from the next Monetary Policy Meeting onward" and "We will set policy based on careful analysis and discussion of factors affecting economic activity and prices at future Monetary Policy Meetings" (comments translated by MUMSS). Attention will be warranted if the governor states after the September meeting that the Bank will remain mindful of upside risks to prices and continue to hold extensive discussions at future meetings, as that could stoke expectations of a rate hike at the December meeting (the last one this year) -- even if an October hike immediately following the September action remains unlikely. As noted below, we forecast that the Bank will raise the policy rate to 1.50% at the January 2027 MPM and to 1.75% at the June 2027 meeting.

Our scenarios through FY28

Our scenarios for 2H FY26-FY28

For yen rates, we made no changes to the point forecasts and ranges presented in the August 10 edition of this report, when we incorporated revisions to our projected path for BoJ rate hikes. For the US, we pushed the expected timing of the first Fed rate cut back to April 2027 from December 2026 and reduced the number of rate cuts anticipated over the forecast horizon from three to two. We moved up our forecast for the ECB's next rate hike to September 2026 from December 2026. Our macroeconomic forecasts for Japan now incorporate the impact of both the consumption tax cut on food starting in April 2027 and the public- and private-sector investments proposed by the Takaichi administration.

US

US economy and the Fed

Real GDP grows 2.1% in 2026 on the back of AI investment, consumption by wealthy households, tax cuts, and tariff reductions. Growth stabilizes at 2.0% in 2027, which is in line with potential, after the impact of the tax cuts winds down. In 2028 it then dips to 1.8%, which is below potential, as the effects of spending cuts in the tax cut legislation start to be felt. The Fed's preferred inflation indicator, the YoY increase in the core PCE index, dips to around 3% at the end of the year as long-term inflation expectations stabilize and the impact of high crude oil prices and

tariffs diminishes, along with revisions to the statistics. Core PCE inflation slips to the 2.0% - 2.5% range in 2027 as growth stabilizes and drops back to 2% by the end of 2028 as a slowdown in growth becomes increasingly evident.

Fed Chair Kevin Warsh remains in wait-and-see mode through the end of 2026 in response to a renewed rise in crude oil prices and then decides to cut rates by 25bp in April 2027 due to a continued slowdown in core inflation and proposals from his task forces. The Fed cuts another 25bp in March 2028, taking policy back to a largely neutral stance. The guidance range for the policy rate stands at 3.50% - 3.75% at end-2026, 3.25% - 3.50% at end-2027, and 3.00% - 3.25% at end-2028. The Fed flexibly adjusts its purchases of T-Bills (which have currently been suspended), aimed at managing reserve balances, in response to changing conditions in the money market.

Eurozone

Eurozone economy and the ECB

The eurozone economy basically continues to expand in 2026 despite persistent uncertainty surrounding the conflict in Iran. A near-term slowdown in growth is likely following the exceptionally strong Apr-Jun quarter. However, a number of factors will provide support for the economy in 2026, including greater German investment in infrastructure, expanded contributions from the Recovery and Resilience Facility, increased European defense spending, and the impact of past rate cuts. Growth then slows in 2027 as the positive impact of fiscal stimulus winds down and rate hikes carried out in 2026 start to have an effect. In 2028, the economy resumes growing at potential on fresh expectations of fiscal policy support. In terms of prices, headline HICP inflation has recently accelerated but is eventually expected to cool as energy prices fall back. The upward pressure on core inflation is also likely to ease before long. That said, the sustained economic recovery means any decline in inflation between now and the end of 2026 will probably be modest. In 2027, inflation clearly starts to slow in the spring as the economy loses momentum. Inflation gradually picks up around mid-2028 as economic activity rebounds.

The ECB carries out a 25bp rate hike at its September Governing Council meeting and then leaves the policy rate on hold at 2.50% for some time. In 2H 2027, it cuts rates by 25bp in or around December in response to a clearly weakening economy. The policy rate is then kept at 2.25% in 2028. The ECB also continues running off its balance sheet at a rate of about EUR40 billion a month by discontinuing its APP and PEPP reinvestments.

Japan

Domestic economy and prices

We project real GDP growth of 0.7% in FY26, 1.1% in FY27, and 0.8% in FY28. In Jul-Sep 2026, a recovery in petroleum imports keeps growth in check. Although the upward trend in nominal wages continues, high crude oil prices weigh on real incomes between now and the end of FY26 as CPI inflation picks up, capping growth in personal consumption. Toward the end of FY26, the postponement of food purchases ahead of the consumption tax cut on food starting in FY27 puts additional downward pressure on consumption. Personal consumption picks up somewhat from the start of FY27 as the impact of higher crude oil prices fades and the consumption tax cut boosts real incomes. The postponement of purchases at the end of FY26 also stimulates consumption at the start of the new fiscal year. Exports remain firm, supported by growing demand for semiconductors and

semiconductor production equipment fueled by the AI boom. Capital expenditures are lifted by investment for capacity expansion driven by stronger semiconductor-related demand, and companies maintain a positive stance on investment in efficiency, IT, and decarbonization. Government initiatives to expand public- and private-sector investments will also provide support for business investment.

We forecast core CPI inflation of 2.2% in FY26, 2.0% in FY27, and 2.0% in FY28, with core-core CPI inflation projected to come in at 2.1% in FY26, 2.1% in FY27, and 2.0% in FY28. When the two-year consumption tax cut for food items starting in FY27 is taken into account, we project the core CPI will rise 1.0% in FY27 and the core-core CPI, 1.1%. Excluding the impact of the tax cut, the effects of higher crude oil prices due to escalating tensions in the Middle East are seen gradually intensifying toward the end of FY26. Although government subsidies will help to curb the increase in energy prices, the pass-through of higher costs will continue to lift the core-core CPI, which excludes energy, particularly for food and daily necessities. However, upward pressure on the CPI diminishes in FY27 as crude oil prices stabilize. Meanwhile, underlying inflation works its way gradually higher in response to rising adaptive (backward-looking) inflation expectations amid sustained growth in nominal wages and elevated inflation. Inflation expectations are anchored at 2% in FY27. With respect to energy subsidies, we assumed that the current framework for petroleum product subsidies will remain in place (i.e., gasoline prices will continue to be capped at JPY170 per liter) and that electricity and gas subsidies will be reflected in the CPI in Aug-Oct 2026 (as they were in Feb-Apr 2026), with a corresponding reaction one year later.

BoJ monetary policy

We now see the Bank taking the policy rate up to 1.25% in September 2026, 1.50% in January 2027, and 1.75% in June 2027, marking the end of this tightening cycle. (Our outlook for the September MPM is presented in the “BoJ watch” section above.)

In the October 2026 Outlook Report, the BoJ indicates that it continues to grow more confident in realizing its baseline outlook, which calls for underlying inflation to rise to a level consistent with the 2% price stability target sometime between 2H FY26 and FY27. It also points out that companies are passing on higher costs to customers faster than in the past. However, the Bank still forgoes a rate hike at the December 2026 MPM unless the yen's decline accelerates sharply. In the January 2027 Outlook Report, the Bank decides to raise the policy rate to 1.50% to adjust the degree of monetary accommodation after judging that wage hike momentum has been maintained heading into the spring 2027 wage negotiations and that underlying inflation is approaching 2%. Once the policy rate climbs into the range of BoJ estimates of the neutral rate of interest (1.1% - 2.5%), the Bank says it will monitor the cumulative effects of previous rate hikes while remaining attentive to upside risks to prices.

At the April 2027 “Outlook Report” meeting, the BoJ argues that the “mechanism in which wages and prices rise moderately in interaction with each other” remains in effect. It also says that YoY increases in crude oil prices and YoY declines in the yen have been moderating and that it plans to assess whether companies’ pass-through of previous cost increases is winding down. Risks to the price outlook are viewed as being “generally balanced,” while risks to the economic outlook are seen as being “skewed to the upside.” At the June MPM, the Bank raises the policy rate to 1.75% after gauging the impact on personal consumption of the spring 2027 wage talk results and the April consumption tax cut. At the July Outlook Report meeting, the BoJ says it is becoming increasingly confident that underlying inflation

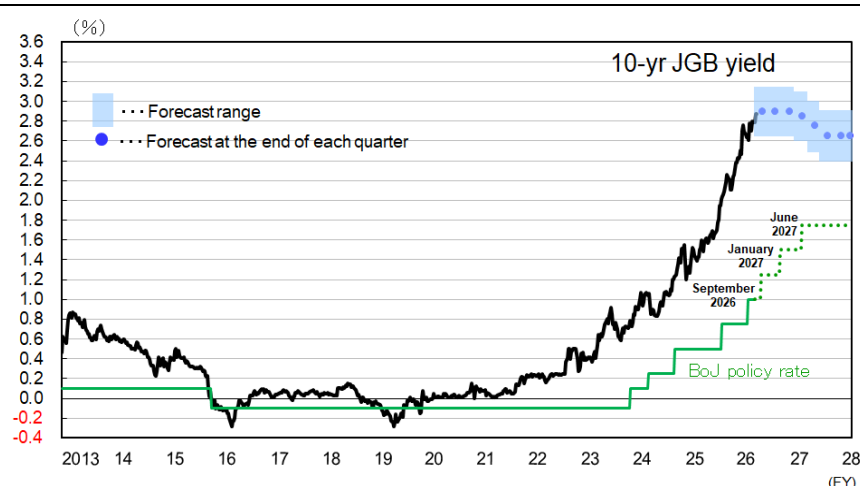
will gradually stabilize at around 2%. However, it also indicates that the upside risks to underlying inflation have diminished, partly because of previous rate hikes. It then adopts somewhat more neutral language for its monetary policy guidance while still implying the possibility of further rate hikes. For example, it might say that “Future monetary policy will be determined appropriately based on economic activity, prices, and financial conditions. The Bank may consider further increases in the policy rate in the event of increased upside risks to underlying inflation.”

US economic growth settles at 2.0% starting in mid-2027, broadly in line with potential, before slowing to 1.8% in 2028, which is below potential, as the effects of the spending cuts in the Trump administration’s tax-cut bill start to be felt. In Japan, upward pressure on the CPI diminishes in FY27 as crude oil prices stabilize. The BoJ therefore keeps the policy rate on hold through the end of FY28 after raising it in June 2027. A new governor and deputy governors will take office in spring 2028.

Long-term JGB yield

We project the 10-year JGB yield will stand at 2.90% at end-FY26, 2.65% at end-FY27, and 2.65% at end-FY28. We expect it to remain at elevated levels in FY26 (Graph 1). A number of factors weigh on investor appetite for the time being, including speculation of a higher terminal rate, lingering expectations of Fed rate hikes, and the uncertain outlook for “responsible and proactive fiscal policy” under the Takaichi administration. That said, in the event of an increased risk of a sharp rise in the 10-year yield above 3% -- the interest rate assumption used in the FY26 budget -- the government and the Ministry of Finance signal their willingness to discuss measures to improve JGB supply/demand, including possible reductions in long-term JGB issuance and policies to promote JGB investments by individuals. Such signals serve to curb rising yields, although it is questionable how feasible such measures might be. Fiscal-event risks temporarily recede once the government’s FY27 budget proposal, tax reform outline, and FY27 JGB issuance plan are finalized in mid- to late December 2026. But in Jan-Mar 2027, investors will find it difficult to take on more risk at the end of the fiscal year. And with the BoJ’s hiking cycle still in progress, buying is unlikely to be strong enough to lift bond prices and push yields lower.

Graph 1: Our forecast range of 10yr JGB yields for 2H FY2026–FY2028



Notes: Week-end values. The BoJ policy rate refers to the interest rate applied to current account balances held at the Bank—specifically, the interest rate on excess reserves following the introduction of QQE (Quantitative and Qualitative Monetary Easing) in April 2013; the interest rate on policy-rate balances following the introduction of negative interest rates in February 2016; and the target level of the uncollateralized overnight call rate (TONA) following the lifting of negative interest rate policy in March 2024.

Source: MUMSS, from Bloomberg; MUMMS estimates

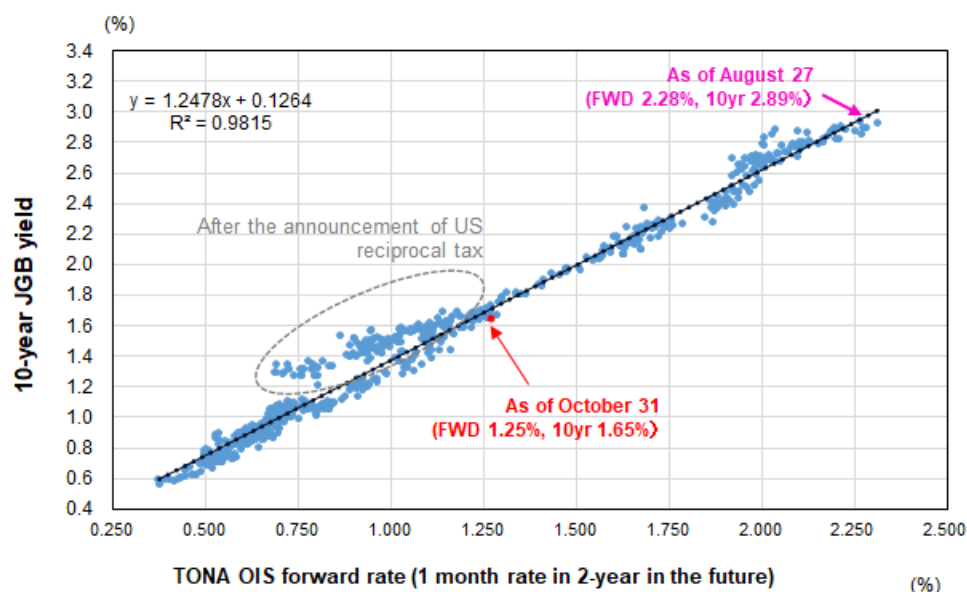
The rise in yields pauses in FY27. After confirming that longer-term inflation expectations are stable, the Fed cuts rates at the April FOMC meeting, leading to a gradual easing of concerns over rising global interest rates. YoY increases in crude oil prices and declines in the yen moderate, while upstream and midstream inflationary pressures begin to wind down. After the BoJ raises the policy rate to 1.75% in June 2027 and adopts somewhat more neutral monetary policy guidance, there is growing speculation that the rate-hiking cycle has ended. In response, domestic institutional investors that had been reluctant to take on duration risk buy some long- and super-long-term JGBs to secure carry and roll-down. However, speculation of rate cuts does not pick up as long as the Bank continues to gradually run off its balance sheet,³ limiting any bull flattening in the long- and super-long-term sectors. In late 2027 and early 2028, the market takes on a nervous tone as investors mull the appointment of the next BoJ governor and deputy governors. Bear-steepening pressures may emerge if the appointees have strongly reflationary tendencies. The 10-year JGB yield is expected to be range-bound in FY28, but mounting concerns over calls for additional tax cuts as the summer Upper House election approaches put upward pressure on yields.

Factors that could potentially send JGB yields higher during this period include an acceleration of BoJ rate hikes, a Japanese version of the UK's "Truss shock," and a resurgence of US inflation. Possible downside factors for yields include weakness in the US and Japanese economies and a correction in the pricing of risk assets (i.e., a shift to "risk-off" mode in the markets). See the "Market Forecast" at the end of this report for our detailed forecasts.

In gauging the appropriate level for the 10-year JGB yield, we considered its correlation with the 2-year-forward 1-month OIS rate, which has recently climbed above 2.2% (Graph 2). The 10-year JGB yield is also working its way higher. Investor surveys suggest the prevailing view is that the terminal rate will be somewhere between 1.25% and 1.75% (ESP Forecast Survey, August 2026). That gives the impression that forward rates, which indicate future expectations of short-term rates, are currently too high. If the BoJ stops hiking at 1.75%, we would expect to see forward rates eventually settling in the 2.00% - 2.25% range, with fair value for the 10-year JGB yield somewhere between 2.60% and 2.95%. We set the top end of our forecast range at 3.15% after taking this into account along with the fiscal risk premium and supply/demand factors.

³ Banks' loan-to-deposit gaps are expected to gradually decline, and a drop in excess reserves is also likely to increase financial institutions' funding needs.

Graph 2: 10yr JGB yields and OIS forward rate



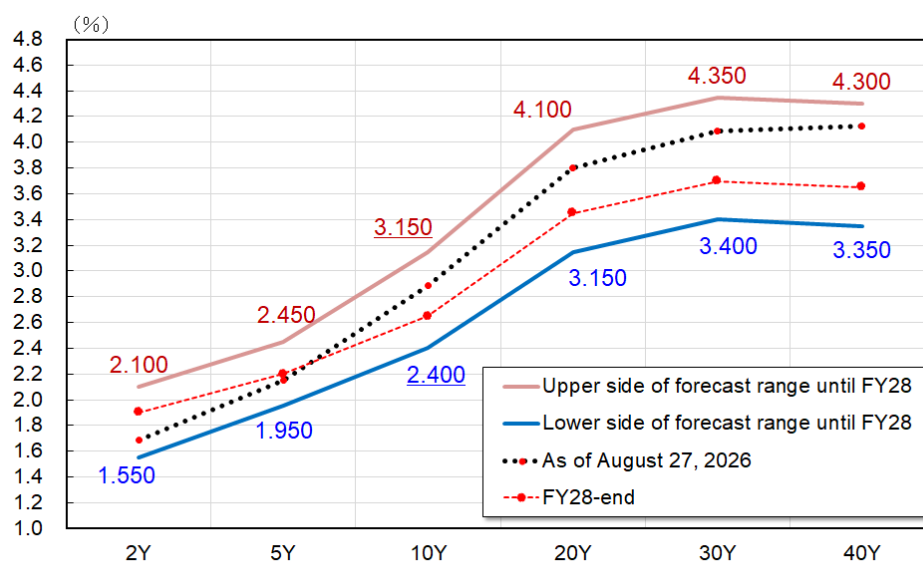
Notes: Estimation period from Jan 2024 onward.
Source: MUMSS, from Bloomberg

JGB yield curve forecasts

Graph 3 shows our forecast ranges for key JGB yields from October 2026 through the end of FY28. We expect the short- and medium-term sectors to lead a bear flattening of the yield curve through Apr-Jun 2027 as the BoJ gradually raises rates. However, yields in the long-term sector and beyond remain elevated because 1) the Bank's rate hikes are simply "an adjustment in the degree of monetary accommodation" and do not represent actual tightening and 2) concerns over fiscal expansion are likely to linger (although to varying degrees) under a Takaichi administration that aims to pursue "responsible and proactive fiscal policy." We forecast continued high volatility in the 30- and 40-year sectors in particular now that overseas investors have become central players.

The bear flattening in the short- and medium-term sectors pauses in mid-FY27 and beyond after the BoJ stops raising rates. Inflationary concerns driven by high oil prices also ease. Depository institutions extend duration to secure roll-down, and life insurers step up their purchases of super-long JGBs to some extent. The bull flattening of the curve out to the long-term sector picks up at times in response to concerns about a US economic slowdown but does not become established since the entrenchment of 2% inflation in Japan helps put a floor under yields, and the BoJ is unlikely to shift to an easing stance.

Graph 3: Our forecast range for key JGB yields from Oct 2026 through FY28



Note: Simple yields.

Source: MUMSS, from QUICK data; MUMSS estimates

Naomi Muguruma
Chief Fixed Income Strategist

Takahiro Otsuka
Senior Fixed Income Strategist

Keisuke Tsuruta
Senior Fixed Income Strategist

Takuya Onizawa
Fixed Income Strategist

Yutaro Ikeda
Fixed Income Strategist

14:00 JST, August 28, 2026

Economic indicators for the week of August 31

Date/Time (JST)		Indicator/Event	Our Forecasts / Past Results			Market Consensus	Comments
8/31 (Mon)	8:50	Indices of Industrial Production (preliminary)	Jul est.	MoM	-0.7%	-0.9%	We expect production of electrical machinery and ICT equipment to have fallen back after the previous month's increase. Underlying AI-related demand likely remained firm.
			Jun	"	+1.9%		
			May	"	+0.1%		
	8:50	Retail sales value Monthly Report on the Current Survey of Commerce (preliminary)	Jul est.	YoY	+2.9%	+3.0%	We expect retail sales value growth to accelerate as household appliance sales rebound from the previous month's pullback. However, the recovery in real terms likely remains gradual amid rising prices.
			Jun	"	+0.6%		
			May	"	+5.0%		
	14:00	New housing starts	Jul est.	YoY	+8.8%	+9.0%	We expect YoY growth to slow from the previous month as the favorable base effect from the sharp year-earlier decline fades. Elevated prices and rising interest rates also appear to be weighing on the July figure.
			Jun	"	+18.6%		
			May	"	+33.9%		
		Deadline for outline of FY27 budget requests*					
9/1 (Tue)	8:50	Financial Statements Statistics of Corporations by Industry (April-June)					
	10:30	10yr JGB auction (planned issuance: approx. 2.6 trillion yen); announcement of results, 12:35					
	14:00	New automobile registrations (Aug)					
	14:00	Consumer Confidence Survey (Aug)					
9/2 (Wed)	8:50	Monetary base (Aug)					
	10:30	Policy Board member Hajime Takata, speech at a meeting with local leaders in Sapporo					
9/3 (Thu)	10:30	30yr JGB auction (planned issuance: approx. 600 billion yen); announcement of results, 12:35					
9/4 (Fri)	8:30	Family Income and Expenditure Survey	Jul est.	YoY	-1.5%	-1.7%	We expect the YoY decline to narrow as consumption recovers from the previous month's weakness caused by unusually heavy rainfall and a pullback in household appliance purchases, including air conditioners.
		Real consumption expenditure	Jun	"	-3.3%		
		(two-or-more-person households)	May	"	-0.4%		
	10:20	3mo T-Bill auction (planned issuance: approx. 3.5 trillion yen); announcement of results, 12:30					

*Release date not final.

Source: MUMSS, from media reports.

Japan Economic Outlook

Forecasts

(%)

	FY2025				FY2026 (F)				FY2027 (F)				FY24	FY25	FY26 (F)	FY27 (F)	FY28 (F)
	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3					
Real GDP	0.2	-0.4	0.2	0.5	0.3	0.1	0.0	0.0	0.5	0.4	0.3	0.3	0.7	0.9	0.7	1.1	0.8
(QoQ annualized rate)	0.7	-1.8	1.0	1.9	1.1	0.3	0.1	0.1	2.1	1.5	1.3	1.1					
(YoY)	2.1	0.6	0.4	0.5	0.7	1.1	0.9	0.4	0.7	1.0	1.3	1.5					
*Domestic demand	0.2	-0.3	0.2	0.2	-0.2	0.5	0.2	0.1	0.5	0.4	0.3	0.3	1.0	1.0	0.6	1.4	0.9
*Private demand	0.1	-0.3	0.1	0.0	0.0	0.2	0.1	0.1	0.5	0.3	0.3	0.2	0.5	0.9	0.2	1.1	0.7
Private consumption	0.1	0.5	0.1	0.5	-0.0	0.1	0.1	-0.0	0.5	0.3	0.3	0.2	0.1	1.3	0.6	1.0	0.8
Residential investment	0.5	-8.0	5.0	0.9	-0.5	0.4	0.1	0.1	0.1	0.1	0.1	0.1	-0.4	-2.6	1.0	0.5	0.3
Capital investment	1.4	-0.3	1.3	-1.0	-1.2	1.2	0.4	0.4	0.6	0.6	0.6	0.6	1.8	2.3	-0.1	2.4	1.5
*Private inventories	-0.2	-0.2	-0.4	-0.1	0.3	-0.1	-0.0	0.0	0.1	0.0	0.0	0.0	0.2	-0.1	-0.1	0.1	0.0
*Public demand	0.1	-0.0	0.1	0.1	-0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.1	0.4	0.3	0.2
Government consumption	0.5	0.1	0.4	0.4	1.6	0.1	0.3	0.2	0.2	0.2	0.2	0.2	2.3	0.8	2.4	0.9	0.8
Public investment	0.7	-1.1	-0.4	1.5	-0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-0.3	0.7	0.2	0.2
*Net exports	-0.0	-0.2	0.1	0.3	0.5	-0.4	-0.1	-0.1	-0.0	-0.0	0.0	-0.0	-0.3	-0.1	0.1	-0.3	-0.0
Exports	1.6	-1.4	0.1	1.7	0.5	0.1	0.8	0.5	0.4	0.4	0.3	0.3	2.7	2.0	2.2	1.8	1.3
Imports	1.8	-0.6	-0.1	0.3	-1.5	2.6	1.7	1.0	0.5	0.4	0.4	0.4	4.0	2.5	1.5	3.4	1.6
Nominal GDP	1.8	0.3	0.9	0.7	1.2	0.4	0.7	0.6	0.3	0.8	0.9	0.8	4.0	4.3	3.1	2.5	2.8
(YoY)	5.4	4.1	3.8	3.8	3.2	3.2	3.0	2.9	2.0	2.5	2.6	2.8					
GDP deflator (YoY)	3.2	3.5	3.4	3.2	2.6	2.1	2.1	2.5	1.4	1.5	1.3	1.3	3.2	3.3	2.3	1.4	1.9
Domestic demand deflator (YoY)	2.6	2.8	2.6	2.4	2.9	2.9	2.9	2.9	1.4	1.1	1.1	1.1	2.8	2.6	2.9	1.2	1.7
CPI core (excluding perishables, YoY)	3.5	2.9	2.8	1.7	1.5	1.8	2.5	3.0	2.2	2.1	1.8	1.7	2.7	2.7	2.2	2.0	2.0
[Excl. tax hike/tuition wavers]									1.3	1.2	0.8	0.7				1.0	
BoJ core CPI (excluding perishables and energy, YoY)	3.2	3.2	3.0	2.5	1.8	2.0	2.3	2.3	2.2	2.0	2.0	2.1	2.3	3.0	2.1	2.1	2.0
[Excl. tax hike/tuition wavers]									1.3	1.1	1.1	1.1				1.1	
Industrial production (QoQ)	-0.5	-1.1	0.3	2.5	0.2	0.2	0.1	0.1	1.0	0.8	0.7	0.5	-1.5	-0.2	2.2	2.2	1.7
(YoY)	0.0	-0.7	-1.0	1.2	1.7	3.2	3.0	0.6	1.3	1.9	2.6	3.0					
USD/JPY (FY avg)													152.5	150.7	161.0	163.0	163.5
Crude oil (import-basis, USD/bbl)													82.8	71.3	88.0	79.0	81.0
Current account (trillion yen)													30.0	34.5	36.0	35.5	36.6
as % of nominal GDP													4.7	5.2	5.2	5.0	5.0
Trade balance (customs-cleared, trillion yen)													-5.4	-1.8	-1.9	-1.3	-0.5

Notes:

1) QoQ figures unless noted otherwise; rows beginning with asterisk (*) show QoQ contribution to GDP in percentage points.

2) Assuming food consumption tax cut to 1% (from current 8%) from April 2027 through March 2029.

3) Estimates as of August 28, 2026.

Source: MUMSS, from Cabinet Office, MIC, METI, and other data; MUMSS forecasts

Market Forecast

			FY24	FY25				FY26 (forecast)				FY27 (forecast)				FY28 (forecast)
			Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	FY28 (forecast)	
Japan	Real GDP	Annualized QoQ (%)	—	0.7	-1.8	1.0	1.9	1.1	0.3	0.1	0.1	2.1	1.5	1.3	1.1	—
		YoY (%)	0.7	0.9	0.9	0.7	0.7	0.7	1.1	1.1	1.1	0.8	0.7	0.7	2.0	
	Core CPI	YoY (%)	2.7	3.5	2.9	2.8	1.7	1.5	1.8	2.5	3.0	1.3	1.2	0.8	0.7	2.0
	Uncollateralized QN rate	End of term (%)	0.500	0.500	0.500	0.750	0.750	1.000	1.250	1.250	1.500	1.750	1.750	1.750	1.750	1.750
	3-months yen TBSR	End of term (%)	0.820	0.772	0.818	1.072	1.268	1.412	1.600	1.750	1.950	2.200	2.200	2.200	2.200	2.200
JGB yields	2-year JGB yield	Range (%)	0.190-0.880	0.580-0.855	0.730-0.935	0.890-1.170	1.130-1.380	1.345-1.450	1.385-1.800	1.550-1.950	1.600-2.000	1.700-2.100	1.700-2.100	1.700-2.100	1.700-2.100	1.700-2.100
		End of term (%)	0.830	0.745	0.935	1.170	1.350	1.355	1.700	1.750	1.800	1.900	1.900	1.900	1.900	1.900
	5-year JGB yield	Range (%)	0.360-1.180	0.725-1.105	0.960-1.230	1.185-1.545	1.530-1.820	1.730-2.030	1.910-2.350	1.950-2.400	1.950-2.400	2.000-2.450	2.000-2.450	2.000-2.450	2.000-2.450	2.000-2.450
		End of term (%)	1.095	0.980	1.225	1.545	1.770	1.880	2.150	2.150	2.150	2.200	2.200	2.200	2.200	2.200
	10-year JGB yield	Range (%)	0.740-1.580	1.110-1.570	1.385-1.655	1.620-2.080	2.060-2.385	2.300-2.790	2.650-3.150	2.650-3.150	2.650-3.150	2.600-3.100	2.600-3.000	2.400-2.900	2.400-2.900	2.400-2.900
		End of term (%)	1.485	1.420	1.645	2.060	2.345	2.670	2.900	2.900	2.900	2.850	2.750	2.650	2.650	2.650
	20-year JGB yield	Range (%)	1.515-2.310	1.900-2.595	2.310-2.680	2.570-3.000	2.880-3.450	3.195-3.775	3.500-4.100	3.500-4.100	3.450-4.050	3.400-4.000	3.250-3.850	3.150-3.750	3.150-3.750	3.150-3.750
		End of term (%)	2.220	2.345	2.610	2.985	3.280	3.640	3.800	3.800	3.750	3.700	3.550	3.450	3.450	3.450
	30-year JGB yield	Range (%)	1.805-2.610	2.250-3.170	2.865-3.285	3.035-3.430	3.280-3.875	3.550-4.150	3.740-4.350	3.750-4.350	3.700-4.300	3.600-4.200	3.450-4.050	3.400-4.000	3.400-4.000	3.400-4.000
		End of term (%)	2.520	2.910	3.140	3.410	3.710	3.940	4.100	4.050	4.000	3.900	3.750	3.700	3.700	3.700
FX	40-year JGB yield	Range (%)	2.100-2.965	2.555-3.675	3.055-3.535	3.345-3.745	3.515-4.205	3.640-4.355	3.755-4.300	3.700-4.300	3.650-4.250	3.550-4.150	3.400-4.000	3.350-3.950	3.350-3.950	3.350-3.950
		End of term (%)	2.790	3.090	3.335	3.610	3.920	3.770	4.050	4.000	3.950	3.850	3.700	3.650	3.650	3.650
	Dollar/Yen	Range	139.89-150.49	139.89-150.49	142.68-150.92	146.59-157.89	152.10-160.46	155.04-162.67	152.5-167.0	153.0-167.5	153.5-168.5	154.0-169.0	154.5-169.5	155.0-170.0	155.5-170.5	156.0-171.0
		End of term	149.96	144.03	147.90	156.71	158.72	162.55	160.0	160.5	161.0	161.5	162.0	162.5	163.0	163.5
	Euro/Yen	Range	154.42-175.43	158.30-169.86	168.46-175.13	172.27-184.92	180.81-186.87	182.05-187.95	177.7-193.0	178.3-193.6	178.8-194.7	179.4-195.3	180.0-195.8	180.6-196.4	181.2-197.0	181.7-197.6
US		End of term	162.21	169.78	173.53	184.01	183.38	185.68	185.6	186.2	186.8	187.3	187.9	188.5	189.1	189.7
	Real GDP	Annualized QoQ (%)	—	3.8	4.4	0.5	2.1	1.5	2.4	2.1	2.0	2.0	1.9	1.8	1.7	—
		YoY (%)	2.8	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.8
	FF rate (target)	End of term (%)	4.25-4.50	4.25-4.50	4.00-4.25	3.50-3.75	3.50-3.75	3.50-3.75	3.50-3.75	3.50-3.75	3.50-3.75	3.25-3.50	3.25-3.50	3.25-3.50	3.00-3.25	3.00-3.25
	10-yr Treasury yield	Range (%)	3.6176-4.7924	3.9943-4.5985	4.0206-4.4813	3.9493-4.1878	3.9375-4.4278	4.2479-4.6663	4.35-4.85	4.25-4.75	4.25-4.75	4.05-4.55	3.85-4.35	3.65-4.15	3.65-4.15	3.55-4.05
Euro zone		End of term (%)	4.21	4.23	4.15	4.17	4.32	4.47	4.60	4.50	4.50	4.30	4.10	3.90	3.90	3.80
	Real GDP	Annualized QoQ (%)	—	-0.0	1.3	0.8	0.0	1.8	0.9	2.2	1.5	1.0	0.8	0.4	0.5	—
		YoY (%)	1.0	1.2	1.2	1.2	0.9	0.9	0.9	0.9	0.9	1.3	1.3	1.3	1.3	0.8
	Deposit facility rate	End of term (%)	2.50	2.00	2.00	2.00	2.00	2.25	2.50	2.50	2.50	2.50	2.50	2.25	2.25	2.25
	10-year German Bund yield	Range (%)	2.010-2.940	2.424-2.732	2.542-2.801	2.523-2.914	2.643-3.129	2.831-3.201	2.90-3.30	3.10-3.50	3.10-3.50	2.90-3.30	2.60-3.00	2.30-2.70	2.50-2.90	2.90-3.30
		End of term (%)	2.74	2.61	2.71	2.86	3.00	2.86	3.10	3.30	3.30	3.10	2.80	2.50	2.70	3.10

Notes: 1) JGB, Treasury, and Eurozone bond yields are daily closing rates. Japanese 2yr - 40yr JGBs are newly issued. Forex rates (from Bloomberg) are intraday-based.

2) Forecasts for macroeconomic indicators as well as forecast ranges and end-of-term figures for interest rates and forex revised August 28, 2026 (previous revision August 21, 2026).

3) Uncollateralized QN rate is upper end of BoJ's target range. US FF rate is FOMC's target range. US and Eurozone real GDP growth rates (calendar year) are against previous year.

Source: MUMSS, from Quick and Bloomberg data; MUMSS estimates

Investment Research Division, Mitsubishi UFJ Morgan Stanley Securities

Naomi Muguruma, Chief Fixed Income Strategist
Keisuke Tsuruta, Senior Fixed Income Strategist
Yutaro Ikeda, Fixed Income Strategist
Shuji Tonouchi, Senior Economist

Takahiro Otsuka, Senior Fixed Income Strategist
Takuya Onizawa, Fixed Income Strategist
Katsuhiro Oshima, Ph.D., Chief Economist

Appendix A

Analyst Certification

The analyst(s) mentioned on the cover of this report hereby certify(ies) (or, where multiple analysts are responsible, individually certify with respect to each security that the analyst covers in this report) that the views expressed in this report accurately reflect their personal views about the subject company(ies) and its (their) securities, and also certify(ies) that they have not been, are not, and will not be receiving direct or indirect compensation in exchange for expressing any specific recommendation(s) or view(s) in this report.

Disclosures

Mitsubishi UFJ Morgan Stanley Securities Co., Ltd. ("MUMSS") has established organizational and administrative arrangements such as appropriate policies and procedures to monitor activities and/or communication between the research department and other business areas of MUMSS and to monitor correspondence and personal brokerage accounts of all those involved in the production of research.

MUMSS policy prohibits its analysts and members of their households for whom the analysts act as proxies or those whose securities investment activities are influenced by the analysts from dealing in the securities of any companies in the analysts' areas of coverage.

Analysts are paid in part based on the profitability of MUMSS, which includes investment banking revenues.

MUMSS and/or its affiliate(s) may have holdings in other financial interests or other products issued by the companies named in this report. MUMSS and/or its affiliate(s) may have a short or long position in respect to these financial interests or other products.

An officer (or officers) of MUMSS (member of the board, executive director or auditing officer as stipulated by the Company Act of Japan (Law no. 86 of 2005, as amended, the Company Act)) serve(s) as an officer (or officers) in Mitsubishi UFJ Financial Group, Fukuoka Financial Group, The Bank of Fukuoka, Tokio Marine & Nichido Fire Insurance

(Unregistered ratings)

Credit rating information in this report identified as "unregistered" constitutes "unregistered credit ratings" assigned by credit rating agencies that are not registered under the Financial Instruments and Exchange Act of Japan. The registration system is designed to ensure the fairness of credit ratings through conduct regulations and supervision on credit rating agencies. Unregistered credit rating agencies are not subject to these regulations or supervision. For the significance of and points to note regarding unregistered credit ratings, please refer to "Explanatory Statement Regarding Unregistered Ratings" available on our website: <http://rpt.sc.mufig.jp/public/mp/e04/372228/5ae04-239194-1781051325.pdf>

Disclaimers

This report has been prepared by MUMSS solely for the purpose of supplying information to the clients of MUMSS and/or its affiliate(s) to whom it is distributed. This report is not, and should not be construed as, a recommendation, solicitation or offer to buy or sell any securities or related financial products.

All statements in this report attributable to MUMSS are based only on publicly available information. The authors of this report are prohibited from using or even obtaining any insider information. As a subsidiary of Mitsubishi UFJ Financial Group, Inc. ("MUFG"), MUMSS does not, as a matter of corporate policy, cover MUFG for investment recommendation purposes.

This report has been prepared by MUMSS solely from publicly available information. The information contained herein is believed to be correct and reliable but has not been independently verified. This report does not purport to contain all the information that a prospective investor may require. MUMSS and/or its affiliate(s) do not make any guarantee, representation or warranty or accept any responsibility or liability as to the accuracy, reliability, completeness, adequacy or appropriateness of such information. Information contained herein may not be current due to, among other things, changes in the financial markets or economic environment.

Opinions reflected in this report are subject to change without notice. MUMSS and/or its affiliate(s) have no obligation to update the opinion and information contained in this report. Content presented herein is solely a reflection of the best judgment of MUMSS at the time of publication. MUMSS and/or its affiliates assume no responsibility for the content of any third-party websites located at URLs appearing in this report.

MUMSS may have issued, and may in the future issue, other communications that are inconsistent with, and reach different conclusions from, the information presented herein. MUMSS has prepared and published this report wholly independently of any of its affiliates, and thus any comments, views, outlook, ratings or target prices expressed in this report may differ substantially from any similar reports issued by affiliates which may be based upon different sources and methodologies.

Regarding any securities or related financial products mentioned either directly or indirectly in this report, there is risk that investors may, upon a sale of investments, receive less than the originally invested capital due to factors including fluctuations in share price, changes to issuers' management and/or financial profiles, related changes to external evaluations, and changes in interest and/or foreign exchange rates.

This report does not constitute, and should not be used as a substitute for, tax, legal or investment advice. The report does not constitute a personal recommendation and has been prepared without regard to the individual financial circumstances, needs or objectives of persons who receive it. The securities and investments related to any securities or related financial products discussed in this report may not be suitable for all investors. Readers should independently evaluate particular investments and strategies, and seek the advice of their own professional and financial advisers as to the legal, business, financial, tax and other aspects before making any investment or entering into any transaction in relation to the securities mentioned in this report.

MUMSS and/or its affiliate(s) shall not be liable in any manner whatsoever for any consequences (including but not limited to any direct, indirect or consequential losses, loss of profits and damages) of any reliance on or usage of this report and accepts no legal responsibility to any investor who directly or indirectly receives this material.

The final investment decision must be made by the investor and the responsibility for the investment must be taken by the investor.

Past performance should not be taken as an indication or guarantee of future performance. Unless otherwise attributed, forecasts of future performance represent analysts' estimates based on factors they consider relevant. Actual performance may vary. Consequently, no express or implied warranty can be made regarding future performance.

MUMSS or any other company affiliated with MUFG or any of their directors, associates, connected parties and/or employees may deal in or otherwise have a financial interest in securities referred to in this report, or derivatives of such securities or other securities issued by companies mentioned in this report, for their own account or the accounts of others, may enter into transactions contrary to any recommendations contained herein, may act as market maker or may supply or seek to supply a wide range of financial services to the issuers of such securities or to their affiliates. In reviewing this report, an investor should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest. MUMSS is prohibited under Article 135 of the Company Act from dealing in the shares of MUFG for its own account.

The securities referred to in this report may not be eligible for sale in all jurisdictions or to all categories of investors. This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to any law, regulation or rule.

European Economic Area (EEA): This report is distributed in the EEA, by MUFG Securities (Europe) N.V. ("MUS (EU)") and / or MUS (EU), Paris Branch. MUS (EU) is a member of MUFG, contact number +31 (0) 20 799 02 00. MUS (EU) is authorised and regulated by the Dutch Authority for the Financial Markets ("AFM") and also regulated by De Nederlandsche Bank ("DNB") in the Netherlands, MUS (EU) Paris Branch is regulated in France by the Autorité de contrôle prudentiel et de résolution (ACPR) and the Autorité des marchés financiers (AMF).

For the avoidance of doubt this report is prepared for a "professional client" or "eligible counterparty" and not intended for a "retail client" as those terms are defined in the MIFID II Directive (2014/65/EU) and should not be passed on to any such persons. This report may be distributed to professional investors (or equivalent) in member states of the EEA by MUS (EU). This report has been prepared in accordance with MUS (EU)'s organisational and administrative arrangements for managing conflicts of interest. Such arrangements include policies which set out guidelines relating to the production of research including (but not limited to) restrictions on access to information, personal dealing and inducements. Further MUS(EU) related Policies, Disclosures and Notices can be found at <https://www.mufgemea.com/governance/legal-and-regulatory/>.

United Kingdom: This report is distributed in the United Kingdom, by MUFG Securities EMEA plc. ("MUS(EMEA)"), a member of MUFG, contact number +44-207-628-5555. MUS(EMEA) is authorised by the Prudential Regulation Authority ("PRA") and regulated by the Financial Conduct Authority ("FCA") and PRA in the UK (FS Registration Number 124512). In the United States, MUS(EMEA) is a registered Swap Dealer ("SD") with the Commodity Futures Trading Commission ("CFTC") and a member of the National Futures Association ("NFA"). MUS(EMEA) is also a registered Security-Based Swap Dealer ("SBSD") with the Securities and Exchange Commission ("SEC"). MUS(EMEA) Dubai Branch is registered in Dubai (No:1698498) with its registered office at Level 3, East Wing, The Gate, Dubai International Financial Centre, Dubai, United Arab Emirates. MUS(EMEA) Dubai Branch is regulated by the Dubai Financial Services Authority (No: F002623). For the avoidance of doubt this report is prepared for a "professional client" or "eligible counterparty" or "Market Counterparty" and not intended for a "retail client" as those terms are defined in the FCA and DFSA rules and should not be passed on to any such persons.

This report has been prepared in accordance with MUS(EMEA)'s organisational and administrative arrangements for managing conflicts of interest. Such arrangements include policies which set out guidelines relating to the production of research including (but not limited to) restrictions on access to information, personal dealing and inducements. Further MUS(EMEA) disclaimers, disclosures, policies and notices can be found at <https://www.mufgemea.com/governance/legal-and-regulatory/>.

United States of America: MUFG SECURITIES AMERICAS INC. ("MUSA") is registered as a broker-dealer in the United States with the Securities and Exchange Commission and is a member of the Financial Industry Regulatory Authority ("FINRA") (SEC# 8-43026; CRD# 19685).

This report, when distributed by MUSA, is intended for Institutional Investors ("Institutional Accounts" as defined by FINRA Rule 4512(c)). When distributed by a non-US affiliate of MUSA, this report is intended for distribution solely to "major U.S. institutional investors" or "U.S. institutional investors" pursuant to Rule 15a-6 under the U.S. Securities Exchange Act of 1934, as amended. Securities referenced in this report may have been underwritten by MUSA and/or its affiliates. Nothing in this report should be considered an offer or solicitation of an offer to buy or sell securities or any other financial product or a commitment of any kind with respect to any transaction.

IRS Circular 230 Disclosure: MUSA does not provide tax advice. Accordingly, any discussion of U.S. tax matters included herein (including any attachments) is not intended or written to be used, and cannot be used, in connection with the promotion, marketing or recommendation by anyone not affiliated with MUSA of any of the matters addressed herein or for the purpose of avoiding U.S. tax-related penalties.

Canada: MUFG SECURITIES (CANADA), LTD. ("MUS(CAN)") is an investment dealer registered in Canada with the Ontario Securities Commission ("OSC") and in each province and territory of Canada, a member of the Canadian Investment Regulatory Organization ("CIRO"), and a member of the Canadian Investor Protection Fund ("CIPF"). Customers' accounts are protected by CIPF within the specified limits.

In Canada, MUS(EMEA) and MUSA each operate under an International Dealer Exemption ("the exemption") and exempt from registration with the securities regulators. MUS(EMEA) operates under the exemption in Alberta, British Columbia, Manitoba, Ontario and Québec. MUSA operates under the exemption in all Canadian Provinces and Territories. When distributed by MUS(EMEA) or MUSA, this report is only intended for a "permitted client" as that term is defined under the National Instrument 31-103 in Canada and is not intended for re-distribution to any other person. When distributed by MUS(CAN), this report is only intended for an "institutional client" as that term is defined under the CIRO Investment Dealer Partially Consolidated rules and is not intended for re-distribution to any other person. The information contained herein is not, and under no circumstances is to be construed as, a prospectus, an advertisement, a public offering, an offer to sell securities described herein, or solicitation of an offer to buy securities described herein, in Canada or any province or territory thereof. Under no circumstance is the information contained herein to be construed as investment advice in any province or territory of Canada and is not tailored to the needs of the recipient.

Japan: This report, when distributed in Japan, is distributed by MUMSS, a member of MUFG, a Financial Services Agency registrant. Japanese equity transactions totaling JPY193,000 or less are subject to a maximum commission of JPY2,750 (tax included). Japanese equity transactions in excess of JPY193,000 are subject to a commission of up to 1.43% (tax included) of the transaction amount.

No additional fees are charged on fixed income transactions, as the equivalent markup or markdown values are included in the quoted price.

Material on foreign equities is based on securities filings or other public information that, under the laws of the relevant country, would be equivalent to a Form 10-K or similar disclosure, such as an annual report, quarterly report, or earnings release. The material does not contain any ratings, investment opinions, or earnings forecasts by MUMSS. Figures in this material may differ from those in foreign securities disclosures owing to differences in the scope of available data or when the materials were prepared.

The business activities of foreign securities mentioned in these materials are not disclosed under Japan's Financial Instruments and Exchange Act (unless any such company is subject to the stipulations of the Financial Instruments and Exchange Act). The information in these materials about the relevant foreign securities is based on disclosure rules of the countries where the main exchanges for the securities are located.

Foreign equity transactions are subject to both local and domestic brokerage fees. The local brokerage fee is determined based on market conditions and local circumstances at the time, and the amount cannot be recorded in advance. For details, please contact the branch office through which you make your transactions. The domestic brokerage fee is up to 1.1% (including tax) of the contracted transaction amount. Foreign equities may incur losses based on fluctuations in foreign exchange rates and other factors.

When MUMSS purchases unlisted bonds (government bonds, municipal bonds, government-secured bonds, and corporate bonds) as the counter-party, only the purchase price will be paid. Bond prices may vary depending on fluctuations in interest rates and other factors, and bond transactions may incur losses. Foreign bonds may incur losses based on fluctuations in foreign exchange rates and other factors.

Singapore: This report is only intended for distribution to an "institutional investor", "accredited investor" or "expert investor" as those terms are defined under regulation 2 of the Financial Advisers Regulation. It is solely for the use of such investors and shall not be distributed, forwarded, passed on or disseminated to any other person. Investors should note that, as a result of exemptions that apply when this report is distributed to "accredited investors" and "expert investors", MUS(ASIA) Singapore is exempt from complying with certain requirements under the Financial Advisers Act, including section 34 of the Financial Advisers Act (which requires a financial adviser to disclose all material information on certain investment products), section 36 (which requires a financial adviser to have a reasonable basis for making recommendations on investments) and section 45 (which requires a financial adviser to disclose any interests that it holds in securities that it recommends).

Hong Kong: This report is only intended for distribution to a "professional investor" as that term is defined in the Securities and Futures Ordinance and should not be passed onto any other person.

Australia: In respect of the financial services provided to wholesale clients in Australia, MUS(ASIA), MUS(EMEA) and MUS(USA) are each exempt from the requirement to hold an Australian financial services licence under the Corporations Act 2001 of Australia under the Australian Securities and Investments Commission Class Order Exemption CO 03/1099, CO 03/1103 and CO 03/1100, respectively. Each of MUS(ASIA), MUS(EMEA) and MUS(USA), are regulated under the laws of Hong Kong, the United Kingdom and the United States respectively, which differ from Australian laws. This material is only intended for distribution to persons in Australia who are sophisticated or professional investors for the purposes of section 708 of the Corporations Act of Australia, and are wholesale clients for the purposes of section 761G of the Corporations Act of Australia. This material is not intended to be distributed or passed on, directly or indirectly, to any other class of persons in Australia.

Other: This report may not be copied, published or distributed in Indonesia. This report may not be copied, published or distributed in the People's Republic of China (not including Hong Kong Special Administrative Region, Macau Special Administrative Region or Taiwan, the "PRC"), except under circumstances that will result in compliance with any applicable PRC laws and regulations.

MUS (EMEA)'s branch in the Dubai International Financial Centre (DIFC) which operates under the trade name MUFG Securities (DIFC Branch) is registered as a Recognized Company in the DIFC and is authorized and regulated by the DFSA and is located at Level 3, East Wing, The Gate, Dubai International Financial Centre, P.O. Box 506894, Dubai, United Arab Emirates.

MUFG Securities (DIFC branch) may only conduct business with and provide financial services to "Professional Client" or "Market Counterparty" but not to "Retail Client" as defined by the DFSA rules.

Copyright © Mitsubishi UFJ Morgan Stanley Securities Co., Ltd. All rights reserved.

This report is the work of MUMSS and is protected under copyright laws. This report may not be altered, reproduced or redistributed, or passed on directly or indirectly, to any other party, in whole or in part, without the prior written consent of MUMSS.

Nikkei 225 is owned by Nikkei Inc.

Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.

Otemachi Financial City Grand Cube, 1-9-2, Otemachi, Chiyoda-ku, Tokyo 100-8127, Japan

MUMSS is a financial instruments firm registered under the Financial Instruments and Exchange Act of Japan, with the registered number 2336, issued by the Director, Kanto Local Finance Bureau.

MUMSS is a member of the Japan Securities Dealers Association, the Investment Management Association of Japan, the Financial Futures Association of Japan, the Type II Financial Instruments Firms Association, and the Japan Security Token Offering Association.