Mizuho Economic Outlook & Analysis

The BOJ after the Comprehensive Assessment will shift to a managed float system with the US adoption of Trumponomics

- The BOJ may tolerate a gradual rise without fixing long-term interest rates -

November 24, 2016

Mizuho Research Institute

Summary

- The background to change in the BOJ's policy framework includes concerns over the sustainability of its purchase of JGBs. The Comprehensive Assessment marks a historical policy shift that envisages an extension of monetary easing toward 2020 as the BOJ frees itself from quantitative restraints and demands for additional monetary easing.

- Given the rise of US interest rates driven by Trumponomics, control of Japan's long-term interest rates has caused the Japanese yen to weaken. Unlike the pegging operation in the US during the 1940s, the present "Japanese version of interest rate pegging" refers to a "managed float system"(*) which tolerates a certain degree of interest rate fluctuation while controlling the yield curve. As Trumponomics serves to intensify these characteristics, the BOJ is expected to tolerate a certain level of interest rate rise mainly in the ultra long-term zone. Provided, however, a sharp rise will be curbed by quote operations etc.

- We expect the BOJ to begin cutting back on its JGB purchases from 2017 without explicit notice. Yields on 20-year JGBs are forecast to rise to around the 0.6% level due to the decline in purchases of ultra long-term JGBs,

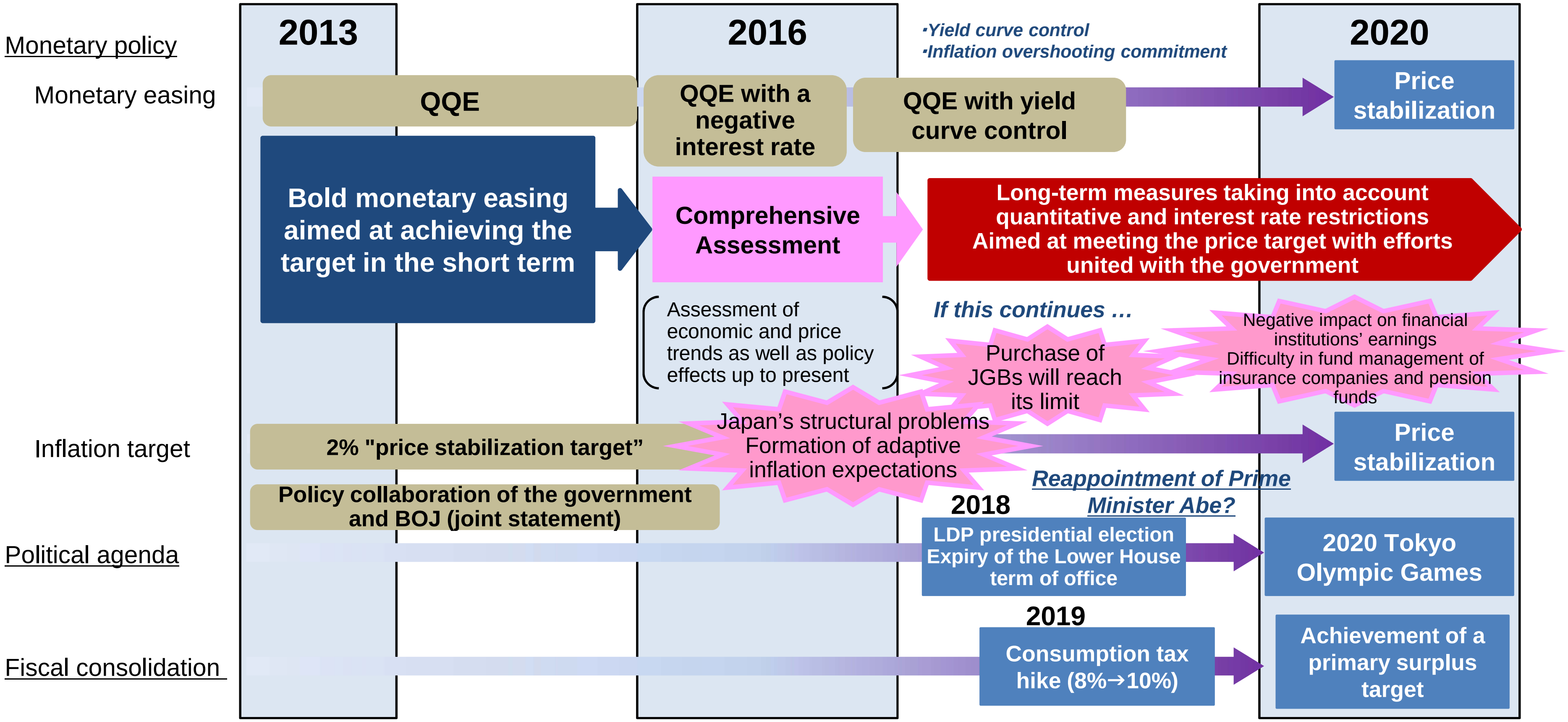
- Under its ongoing policy of driving the inflation rate higher over the long term, going forward we expect the BOJ to (1) adopt a managed float system with an exit envisaged, (2) shift its policy emphasis from quantity to "quality" (albeit with limits), (3) allow greater flexibility regarding the inflation target, and (4) clarify its policy for stronger cohesiveness with the government and pass the torch to the growth strategy.

* Managed float system: a method to control interest rates through intervention by the BOJ, with interest rate formation dependent on the market mechanism. We assume a framework similar to the managed float system in the foreign exchange market.

The Comprehensive Assessment marks a historical turning point in the monetary policy framework toward 2020

- Based on the Comprehensive Assessment in the Monetary Policy Meeting (MPM) held on September 20 and 21, the BOJ has decided to adopt "Quantitative and Qualitative Monetary Easing (QQE) with Yield Curve Control."
- This marks a shift from monetary easing with quantitative restraints aimed at producing short-term results to a sustainable monetary easing framework over the long-term, free from quantitative constraints.

[Roadmap of monetary and fiscal policies under Abenomics]



Source: Made by Mizuho Research Institute (MHRI).

The BOJ introduces yield curve control and shifts from “quantity” to “interest rates”

- The BOJ has shifted its policy target from the monetary base to yield curve control; it has secured greater flexibility in purchasing JGBs.
- In the Comprehensive Assessment, long-term interest rates are assumed that 10-year JGB yields will remain “more or less at the current level” (around zero percent). However, it should be noted that this is only an assumption until the next policy meeting.
  - Even though interest rate levels are expected to remain unchanged for the time being, they may change depending on expectations centered on price levels.

[Yield curve control]

Measures	Description
Guideline for market operations	・Short-term policy interest rate: The BOJ will apply a negative interest rate of minus 0.1% to the Policy-Rate Balances in the current accounts held by financial institutions at the BOJ. ・Long-term interest rate: The BOJ will purchase JGBs so that 10-year JGB yields will remain more or less at the current level (around zero percent). With regard to the amount of JGBs to be purchased, the BOJ will conduct purchases more or less in line with the the current pace -- an annual pace of increase in the amount outstanding of its JGB holdings at about 80 trillion yen -- aiming to achieve the target level of a long-term interest rates specified by the guideline. JGBs with a wide range of maturities will continue to be eligible for purchase, while the guideline for average remaining maturity of the BOJ's JGB purchases will be abolished.
New market tools of market operations for facilitating yield curve control	・Outright purchase of JGBs with yields designated by the BOJ (fixed-rate purchase operation) ・Fixed-rate funds-supplying operations for a period up to 10 years (extending the longest maturity from the 1 year at present)

Source: Made by MHRI based on the BOJ and other sources.

[Analysis in the Comprehensive Assessment]

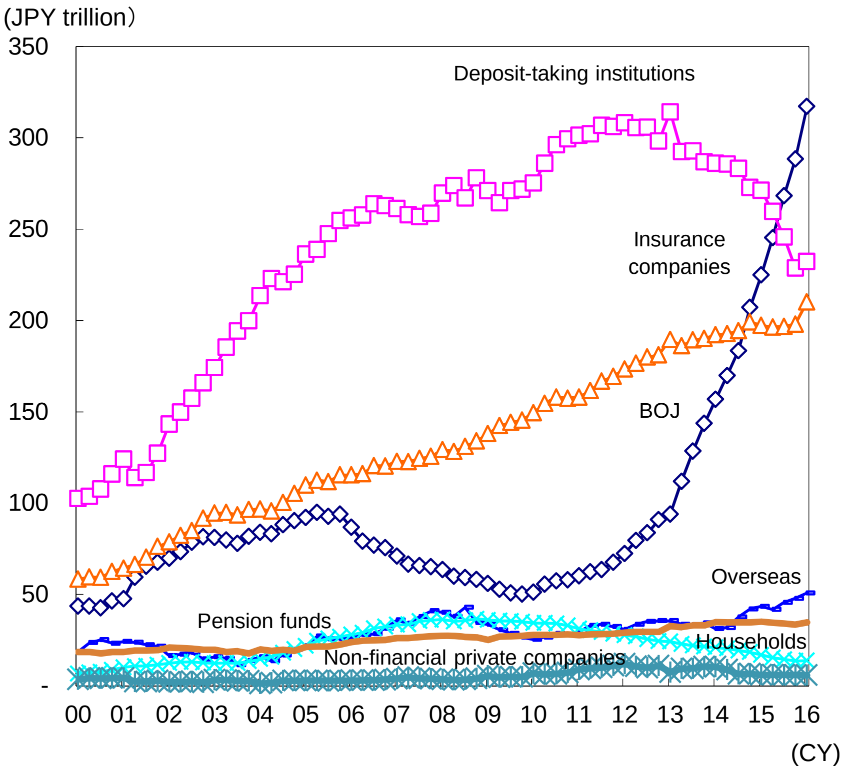
(1) QQE transmission mechanism	・QQE has lowered real interest rates. With real interest rates well below the natural rate of interest, financial conditions have improved.
(2) Factors hampering the achievement of the 2% price stability target	・(1) Decline in crude oil prices, (2) weaker demand following the consumption tax hike, and (3) slowdown in emerging economies have weakened the inflation expectations, reflecting the fact that expectation formation in Japan is largely adaptive.
(3) Mechanism of inflation expectation formation	・The relationship between the monetary base and inflation expectations seems to be long run rather than short term. The BOJ's commitment to expand the monetary base in the long run is important.
(4) Yield curve pushed down through negative interest rates and JGB purchases	・The combination of the negative interest rate policy and the purchase of JGBs is an effective means for the central bank to exert its influence on the entire yield curve.
(5) Effects and impact of the declining yield curve	・Short- and medium-term interest rates have a rekatively larger impact on economic activity than long-term rates. ・Excessive decline and flattening of the yield curve can have a negative impact on economic activity, affecting people's mindset as uncertainty increases about the sustainability of financial functions.

Source: Made by MHRI based on the BOJ.

Concern over the sustainability of JGB purchases (quantitative limit) is the underlying factor behind the Comprehensive Assessment

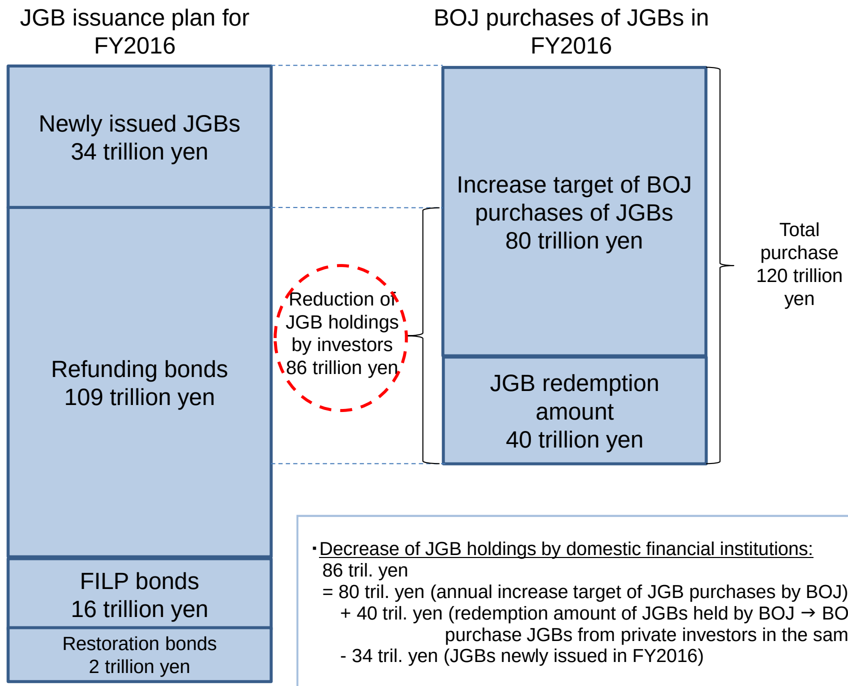
- The BOJ is the largest holder of JGBs in Japan, with the amount of outstanding JGBs held by the BOJ exceeding all other financial institutions.
- The main sellers of JGBs are financial institutions. If we assume that the BOJ makes all of the necessary JGB purchases from private investors each year in the amount of 86 trillion yen (120 trillion yen - 34 trillion yen [newly issued JGBs]) from financial institutions, the BOJ is estimated to be able to continue the purchase for about three years (up until 2019). (Outstanding JGBs held by domestic financial institutions: 232 trillion yen (as of the end of March 2016) / 86 trillion yen)

[Outstanding JGBs held by major investors]



Source: Made by MHRI based on the BOJ.

[Estimated period that the BOJ can continue buying JGBs]



・Decrease of JGB holdings by domestic financial institutions:
86 tril. yen
= 80 tril. yen (annual increase target of JGB purchases by BOJ)
\+ 40 tril. yen (redemption amount of JGBs held by BOJ → BOJ will purchase JGBs from private investors in the same amount)
\- 34 tril. yen (JGBs newly issued in FY2016)

・Possible JGB purchasing period:
About 3 years
= 232 tril. yen (outstanding JGBs held by domestic financial institutions) / 86 tril. yen

Source: Made by MHRI.

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Purchase of JGBs is expected to fall beginning from 2017 without explicit notification

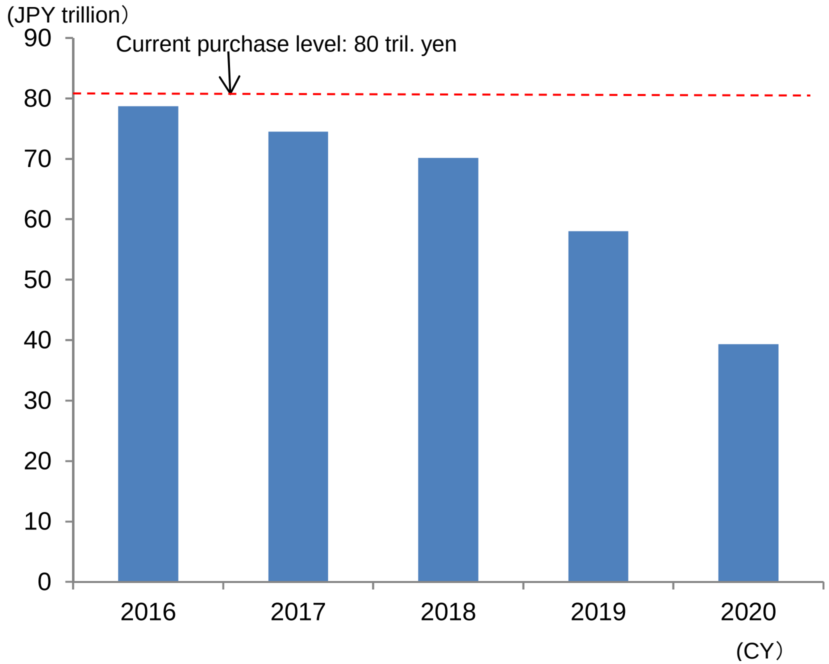
- Based on the policy change in September, a reduction in JGB purchases has become possible. According to the Minutes of the September MPM, the BOJ appears to have sought a compromise with opinions pointing out the positive effects of "quantitative" expansion.
- The increase in outstanding JGBs in 2016 is expected to fall below 80 trillion yen. The amount is expected to decrease from 2017 onward. In this case, the BOJ may not necessarily announce the reduction in the purchase amount of JGBs.
  - Even if the BOJ maintains the current pace of monthly JGB purchases, the net annual increase of outstanding JGBs is expected to slow down given the increase in the redemption of JGBs held by the BOJ.

[Minutes of the Monetary Policy Meeting (September 20 and 21)]

Relationship between the monetary base and inflation expectations	・ Up until now , commitment to the "price stability target" backed by expansion of the balance sheet or monetary base has contributed to higher inflation expectations. Introducing the commitment to expand the monetary base would be an effective measure. ・ There may have been a superficial correlation between the monetary base and inflation expectations through foreign exchange rates, but a long-term relationship has yet to be observed. ・ Foreign exchange rates and stock prices are monetary phenomena, and a long-term relationship between money and prices can be formed theoretically.
Yield curve control and JGB purchases	・ To achieve the operation target of long-term interest rates, changing the purchase amount of JGBs is possible. But it is necessary to clearly explain that the change in JGB purchases itself has no policy implications. ・ Yield curve control necessitates the continued buying of large amounts of JGBs, substantially expanding the monetary base.

Source: Made by MHRI based on the BOJ.

[Forecast of the amount of JGBs held by the BOJ if maintaining its current pace of monthly purchases]



Source: Made by MHRI.

Time schedule of the reduction of JGB purchases (without explicit notification)

[JGB purchase amount (amount of annual increase)]

Present

80 trillion yen

- Will maintain the current pace of JGB purchases in the immediate future.

Latter half of FY2017

60 trillion yen
(Possible purchase amount up until FY2020)

- Will reduce the purchase amount gradually starting with ultra long-term JGBs. The reduction will increase depending on developments of the economy, prices and the market.
- By implementing the twist of increasing short-term JGB purchases, the BOJ may reduce its JGB holding.

From FY2020 onward

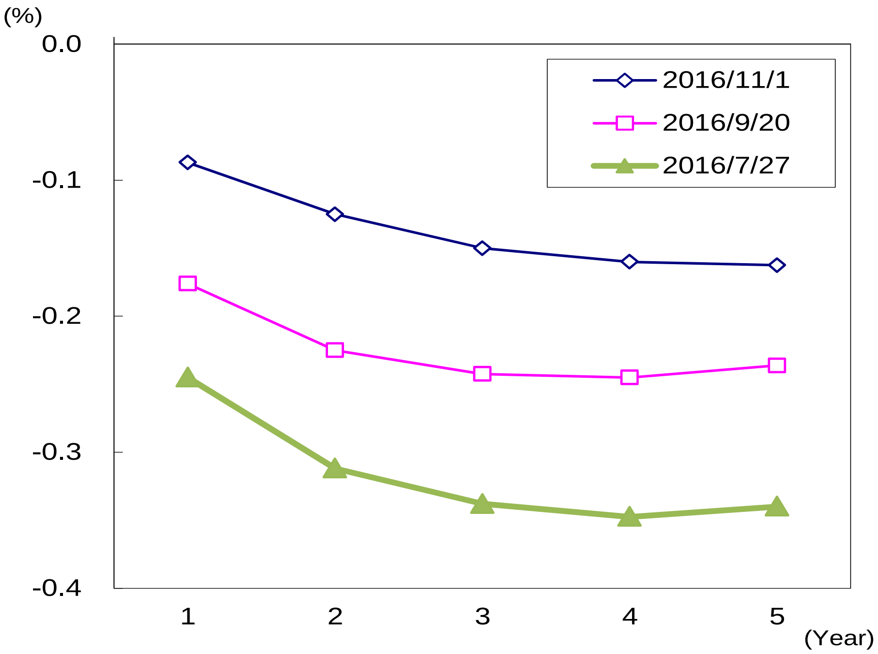
30 trillion yen or less
(Possible purchase amount over the long term)

- Will reduce the purchase amount until it reaches a level possible for sustainable purchases.
- Will try to exit from the negative interest rate policy during the change of the Abe administration, depending on developments of the economy, prices and the market.

The BOJ will leave its monetary policy unchanged for some time, shifting to a long-term strategy which allows more time

- In the Outlook for Economic Activity and Prices (the Outlook Report), the BOJ extended the timeline to achieve the price target from FY2017 to around FY2018. However, the BOJ decided to leave monetary policy unchanged, revealing its view that the momentum to achieve the price target is being maintained.
- By shifting its focus from quantity to yield curve control, the BOJ is now free from protracted expectations for additional monetary easing and has secured the policy freedom to adopt a long-term strategy. The BOJ has made its inflation target a *de facto* mid to long-term target and intends to closely monitor the effects of the government's fiscal stimulus and growth strategy.

[OIS curve]



Source: Made by MHRI based on Bloomberg.

[Outlook Report (November 1)]

(Y-o-y % change)

	Real GDP	CPI (all items less fresh food)	Excluding the impact of the consumption tax hike
FY2016	+0.8 to +1.0 (+ 1.0)	-0.3 to -0.1 (-0.1)	
Forecast made in July 2016	+0.8 to +1.0 (+1.0)	0.0 to +0.3 (+0.1)	
FY2017	+1.0 to +1.5 (+1.3)	+0.6 to +1.6 (+1.5)	
Forecast made in July 2016	+1.0 to +1.5 (+1.3)	+0.8 to +1.8 (+1.7)	
FY2018	+0.8 to +1.0 (+0.9)	+0.9 to +1.9 (+1.7)	
Forecast made in July 2016	+0.8 to +1.0 (+0.9)	+1.0 to +2.0 (+1.9)	

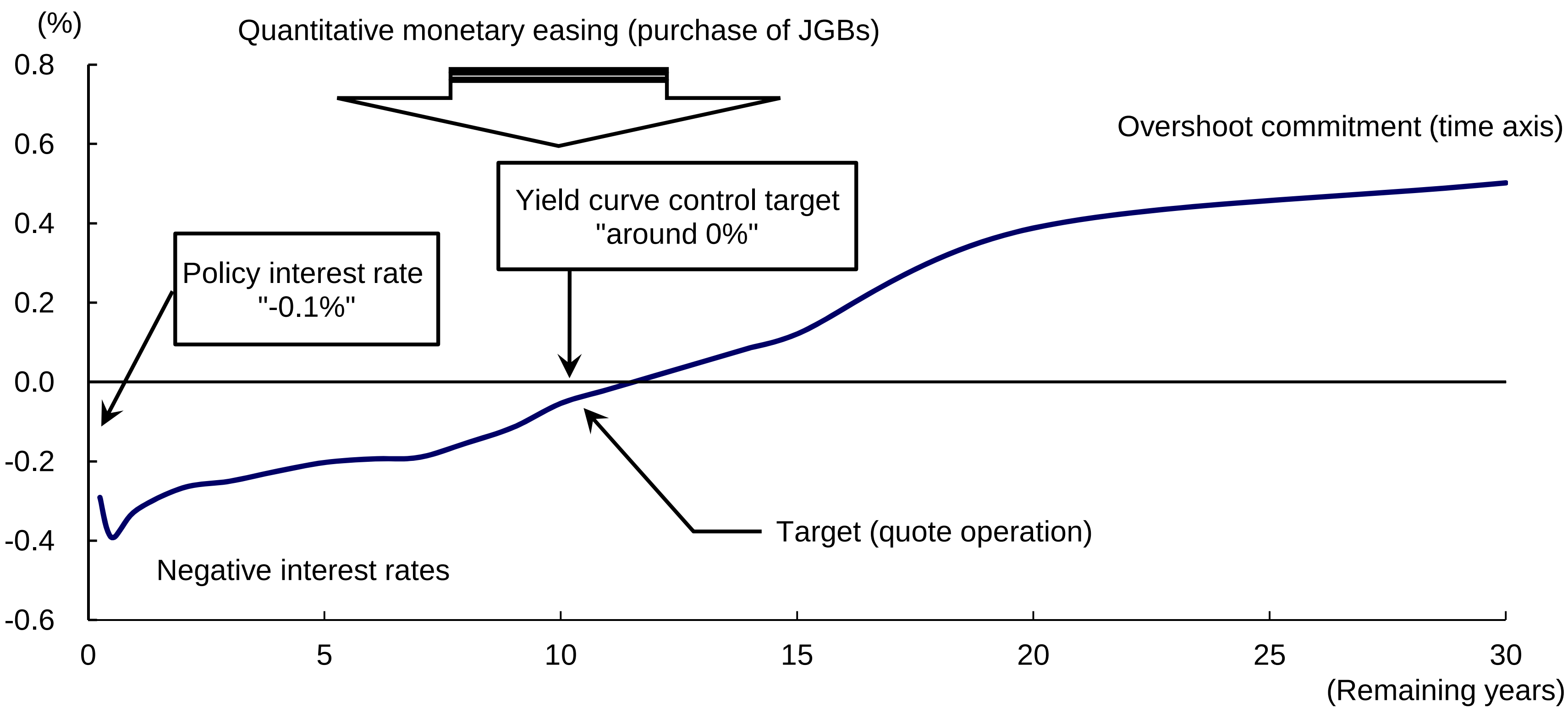
Note: The above table represents the forecasts of the majority of the Policy Board members. Figures in brackets indicate the median of the Policy Board members' forecasts.

Source: Made by MHRI based on the BOJ.

The BOJ intends to manage long-term interest rates through yield curve control

- The BOJ has decided to control long-term interest rates that have long been considered difficult to manipulate.
- This marks an end to quantitative restraints and a shift to yield curve control. Provided, however, we expect that the 10-year JGB yield will not be fixed and will be managed within a certain range.

[Image of yield curve control]

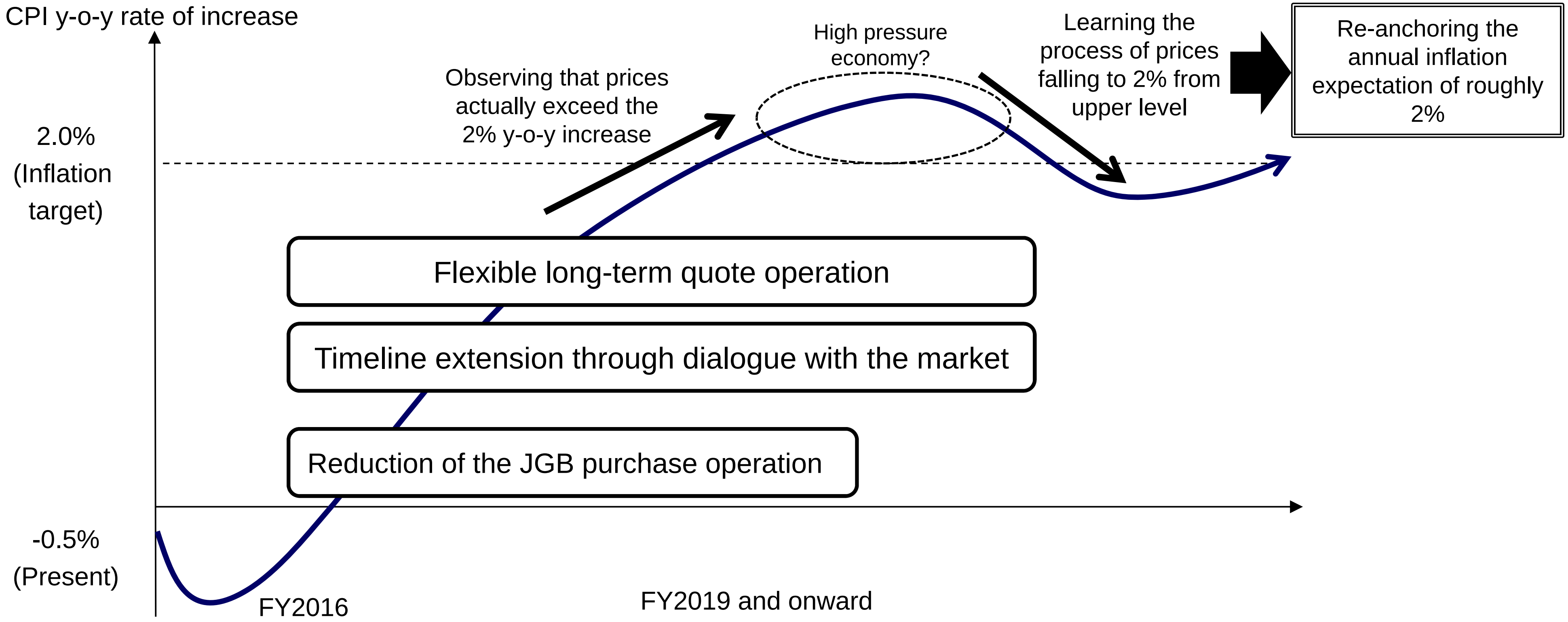


Source: Made by MHRI.

The BOJ stresses its stance on monetary easing for achieving its inflation target with an overshoot commitment

- The BOJ has strengthened its commitment to achieve its inflation target by tolerating an increase in the CPI over 2% y-o-y and emphasizing its stance on monetary easing.
  - Up until now, the BOJ has stated that "the Bank will continue QQE with negative interest rates, aiming to achieve the price stability target of 2%, as long as it is necessary for maintaining the target in a stable manner."
  - The BOJ's new commitment reflects its stance on monetary easing by continuing to "expand the monetary base until the year-on-year increase in the observed CPI (all items less fresh food) exceeds 2% and remains above the target level in a stable manner." But we need to pay attention to the fact that this is not a commitment to maintain long-term interest rates.

[Image of the overshoot commitment]

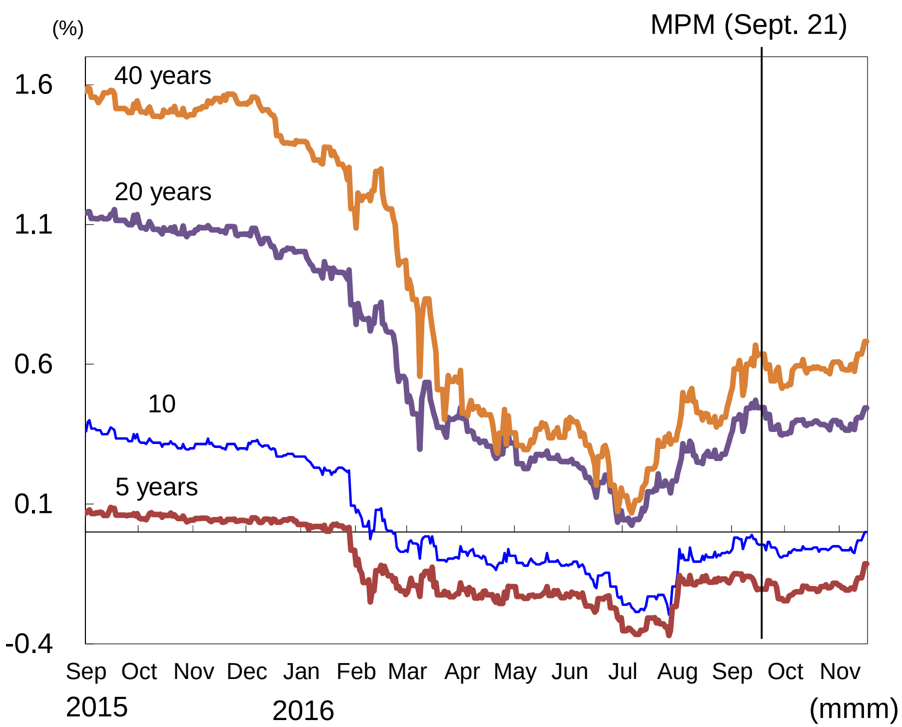


Source: Made by MHRI.

Policy expectations under US President-elect Donald Trump cause interest rates to rise around the world

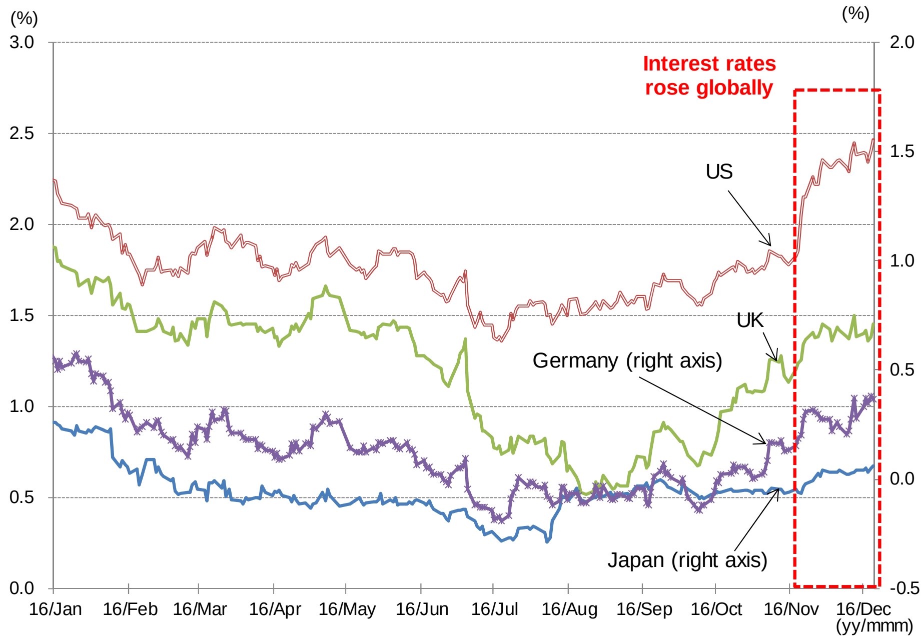
- Interest have been rising around the world, reflecting expectations toward policy measures under US President-elect Donald Trump. Japan's 10-year JGB yield has also moved into positive territory.
  - However, compared with other major countries, the rise of interest rates have been subdued in Japan under the BOJ's yield curve control.

[JGB yield]



Source: Made by MHRI based on Bloomberg.

[10-year government bond yields of major countries]

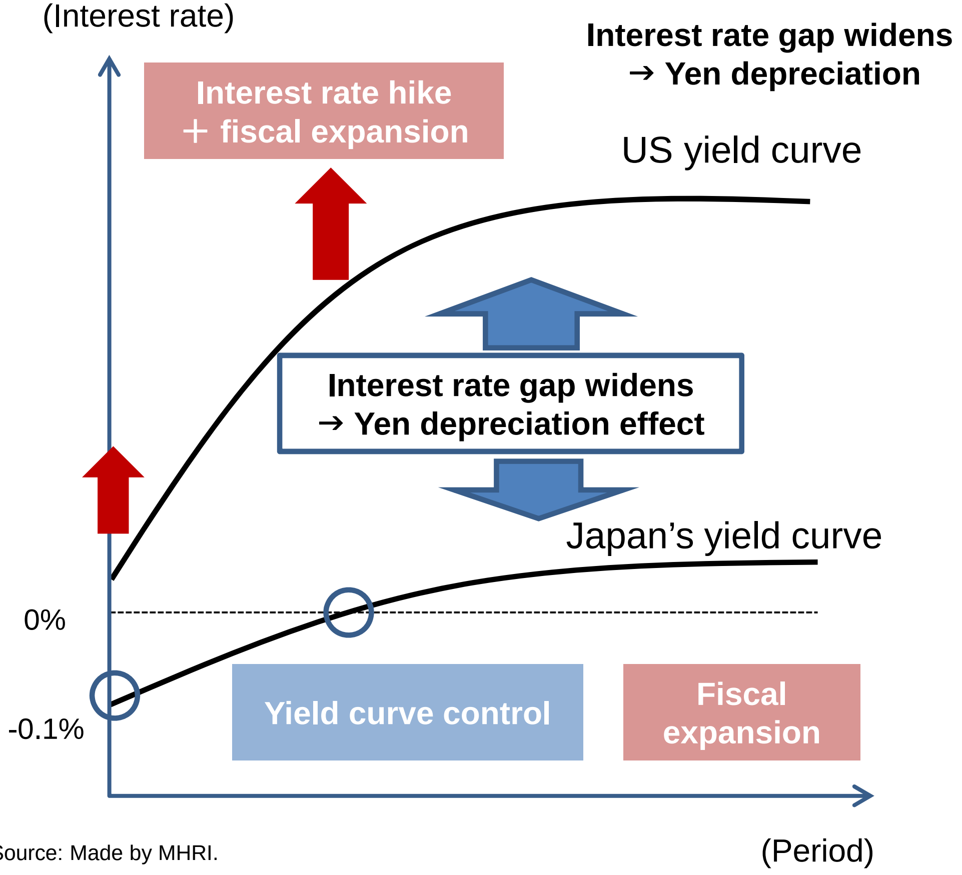


Source: Made by MHRI based on Bloomberg.

Thanks to Trumponomics, the yen has weakened with yield curve control

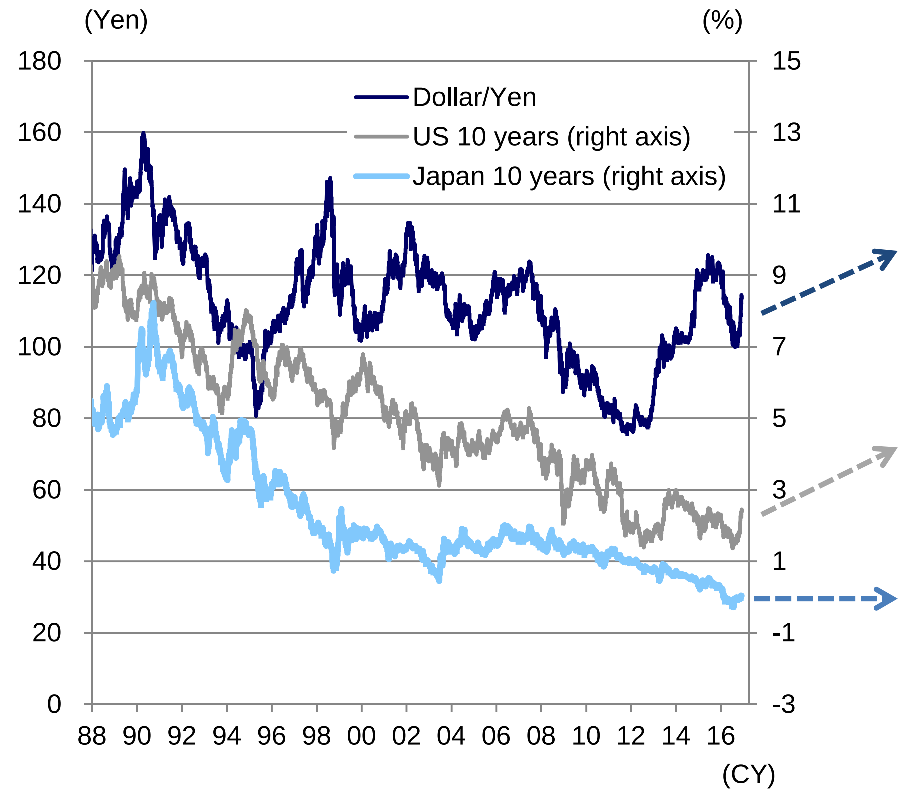
- A policy mix of interest rate hikes (monetary tightening) and fiscal expansion under Trumponomics serve to strengthen the dollar.
- On the other hand, the BOJ's yield curve control will lead to a widening of the interest rate gap between the US and Japan, leading to the depreciation of the yen.

[Widening interest rate gap between the US and Japan reflects a difference in policy mix]



Source: Made by MHRI.

[Trends of US-Japan 10-year interest rates and USD/JPY]

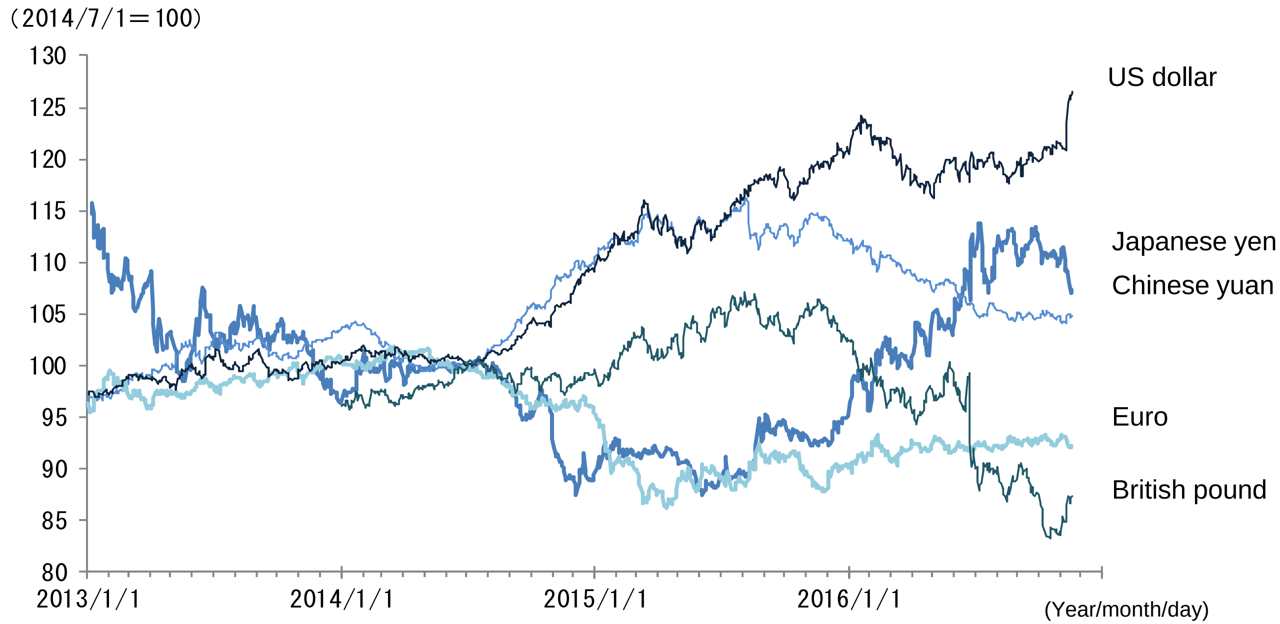


Source: Made by MHRI based on Bloomberg.

Under Trumponomics, the BOJ's negative interest rate policy may be perceived as a measure to weaken the Japanese yen

- Under a protectionist Trump administration, the BOJ's negative interest rate policy (NIRP) and yield curve control may be perceived as measures to weaken the yen.
  - Given policy expectations under the Trump administration and rising speculation of US interest rate hikes, the US dollar is currently the strongest among the five major currencies. With the risk that the stronger US dollar may weaken the competitiveness of US export industries, the new Trump administration may be pressured into taking corrective measures to weaken the US dollar.
- Although the BOJ has explained that the purpose of monetary easing is to achieve its inflation target, external pressure may force the BOJ to reexamine the NIRP, hence the need to keep a close watch on future developments. (Further efforts to push down interest rates deeper into negative territory may be shelved.)

[Nominal effective exchange rates of the five major currencies (G5)]



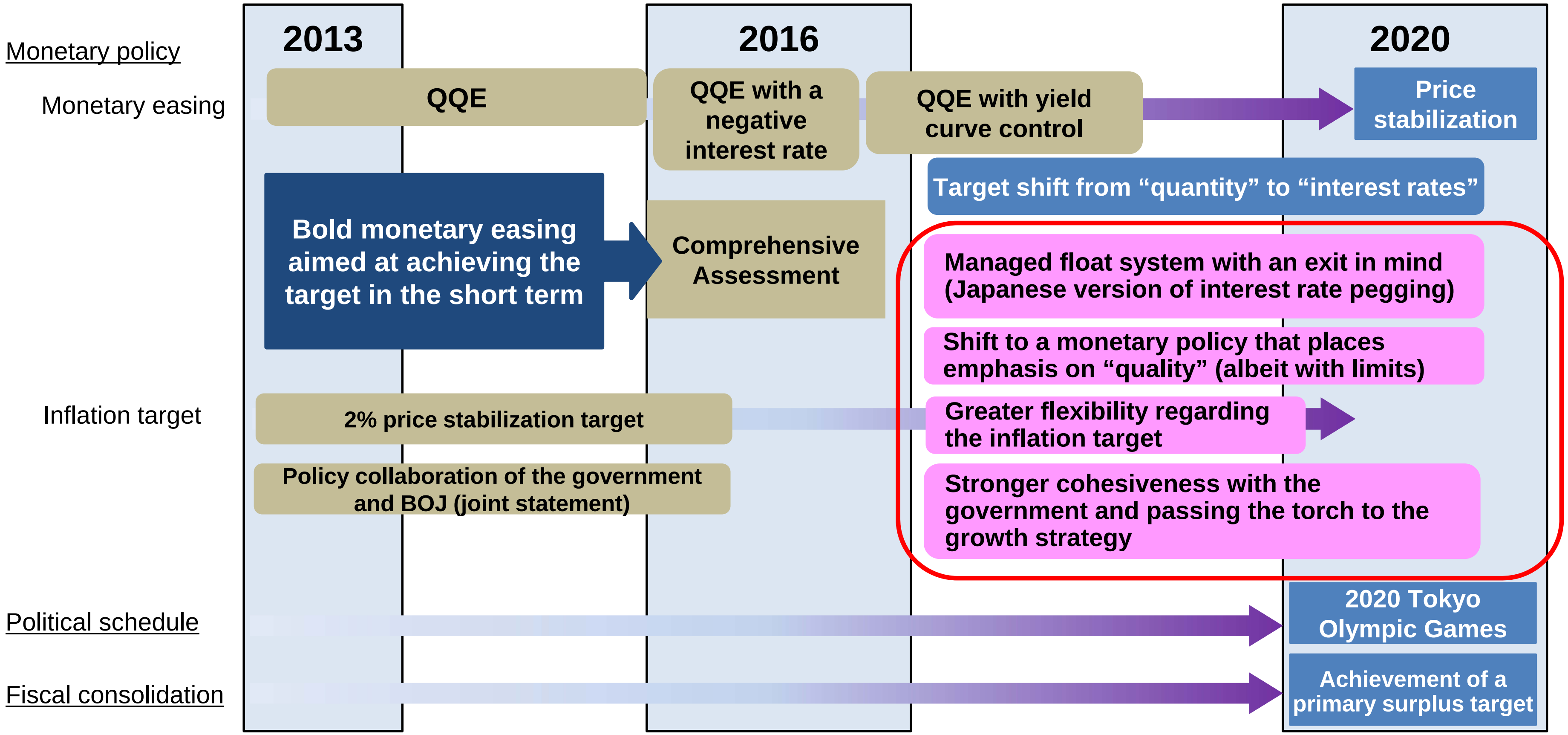
Notes: 1. Figures for the Japanese yen are announced by the BOJ (yen index of the prior business day). The latest figures are estimates by MHRI based on the BIS weight.
2. Figures for the US dollar are announced by the FRB. The latest figures not yet released are estimates by MHRI based on the FRB weight. 3. Figures for the Chinese yuan are estimates by Bloomberg. 4. Figures for the euro are announced by the ECB. 5. Figures for the British pound are announced by the BOE. The latest figures are estimates by MHRI based on the BOE weight.

Source: Made by MHRI.

Policy choices that envisage an exit

- Even though the BOJ shifted its target from "quantity" to "interest rates" to enable a long-term strategy at the September MPM, the roadmap to achievement of the inflation target is still unclear.
- From a long-term perspective, the policy choices available to overcome deflation include (1) a managed float system that envisages an exit, (2) shift to a monetary policy that places emphasis on "quality" (albeit with limits), (3) greater flexibility regarding the inflation target, and (4) stronger cohesiveness with the government and passing the torch to the growth strategy.

[Roadmap of monetary and fiscal policies under Abenomics]

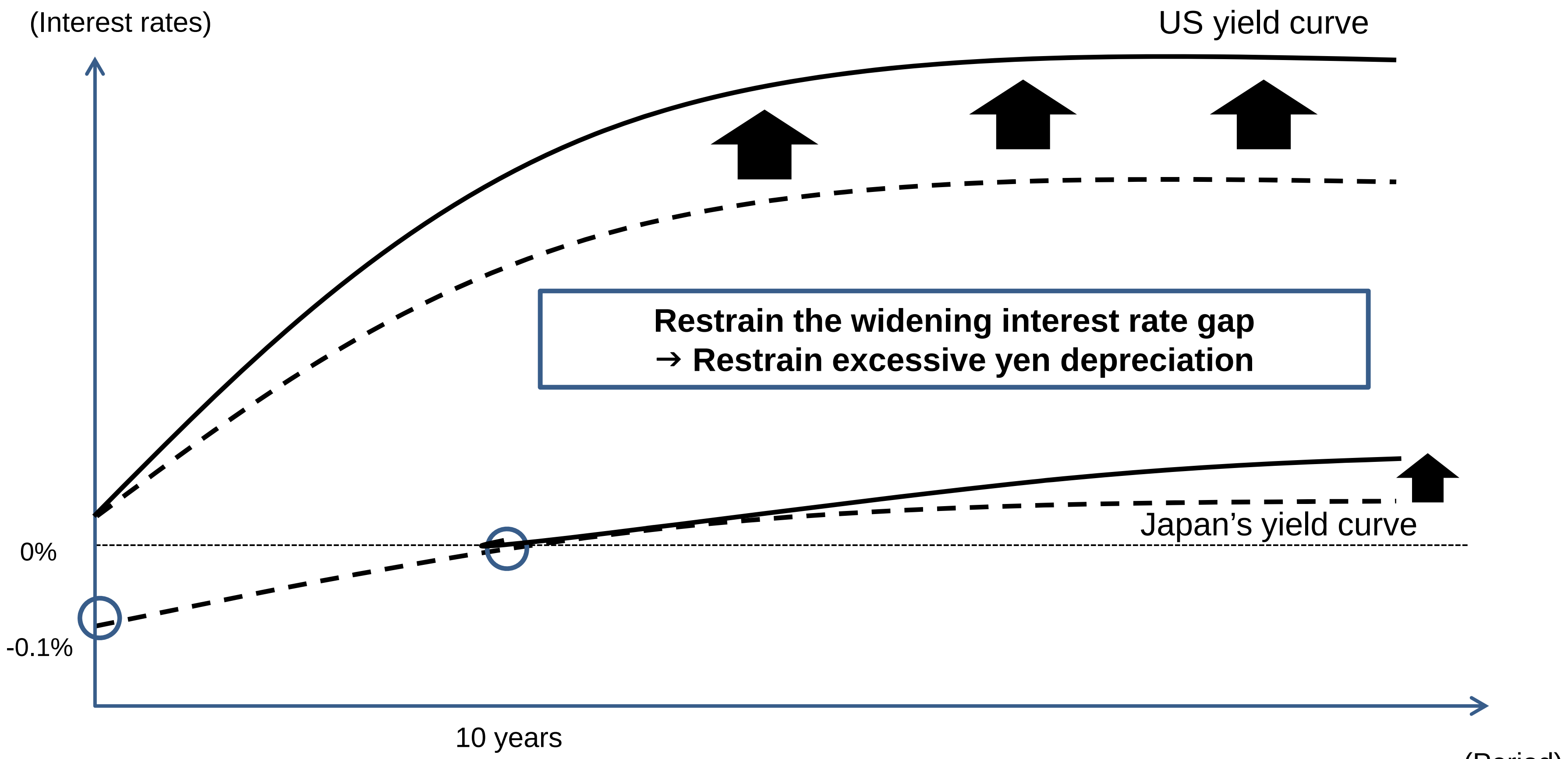


Source: Made by MHRI.

Managed float system that envisages an exit: effect of mild yield curve control

- Amid the widening gap between US and Japan interest rates, the BOJ can move the yield curve to avoid the perception that the purpose of its policy is to weaken the Japanese yen.

[Gap between US-Japan 10-year interest rates and USD/JPY exchange rates]



Source: Made by MHRI.