

Yield Curve Control and Balance Sheet



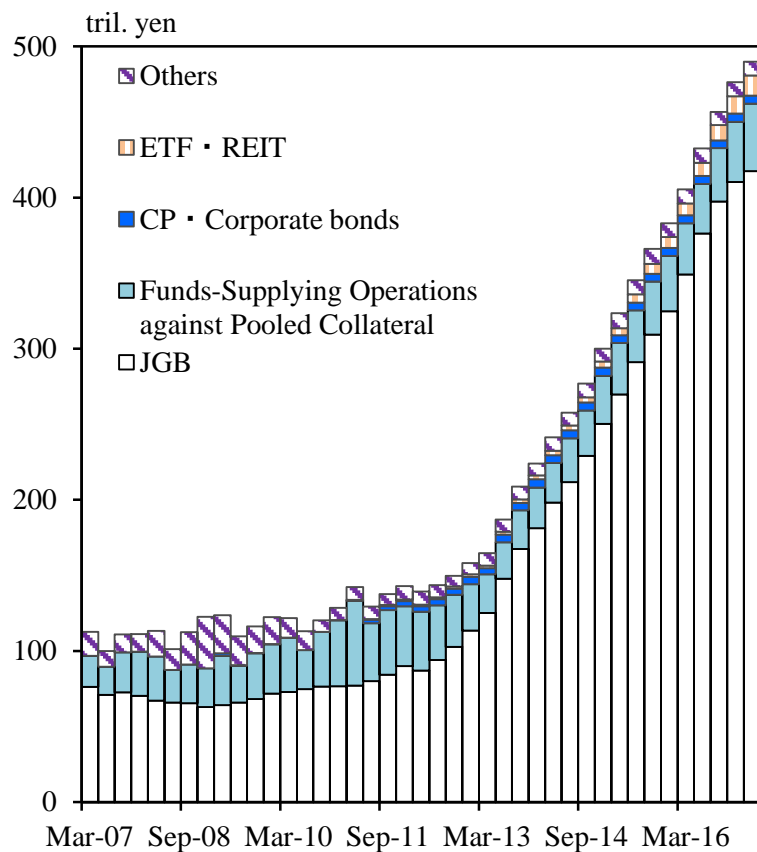
July 2017

Seiichi SHIMIZU
BANK OF JAPAN

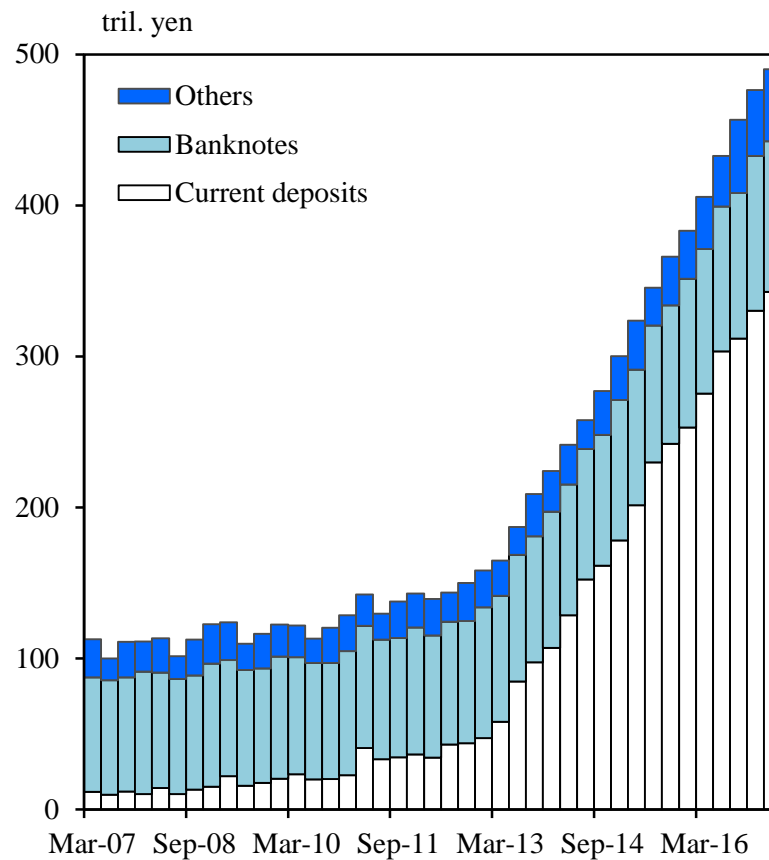
The views presented here are those of the author and do not necessarily reflect those of the Bank of Japan

1. BOJ's Balance Sheet

Assets

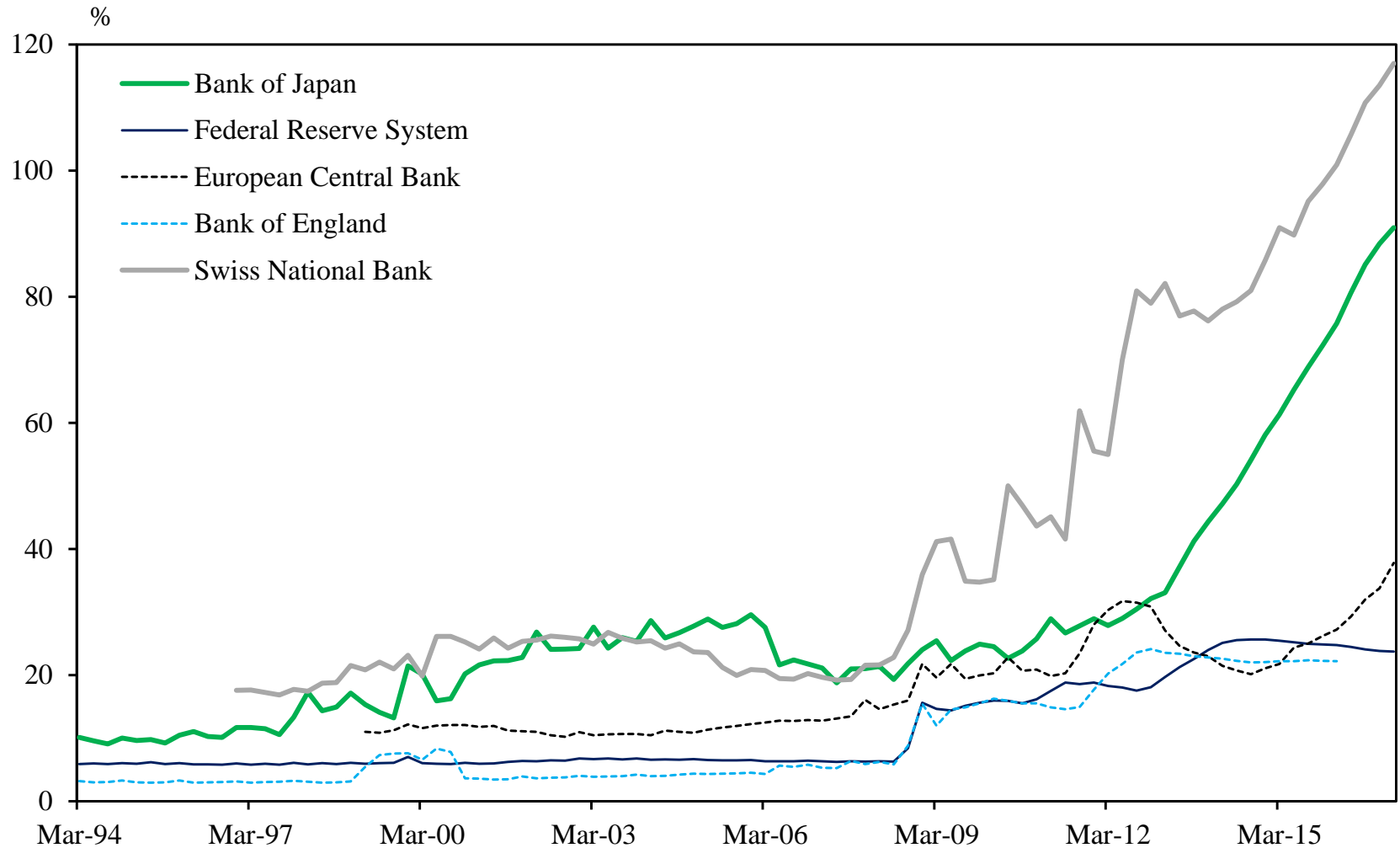


Liabilities and Net assets



Source: Bank of Japan.

2. Balance Sheets of Major Central Banks (Ratio to nominal GDP)



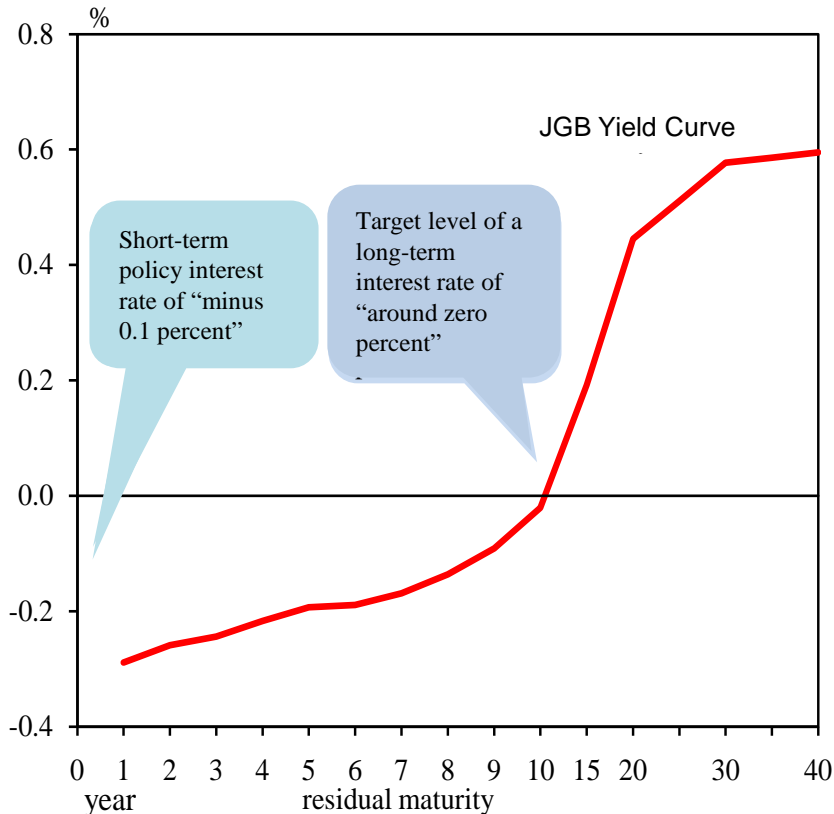
Sources: Cabinet Office; Bank of Japan; Federal Reserve; BEA ; ECB; Eurostat; Haver.

3. Overview of BOJ's Monetary Policy

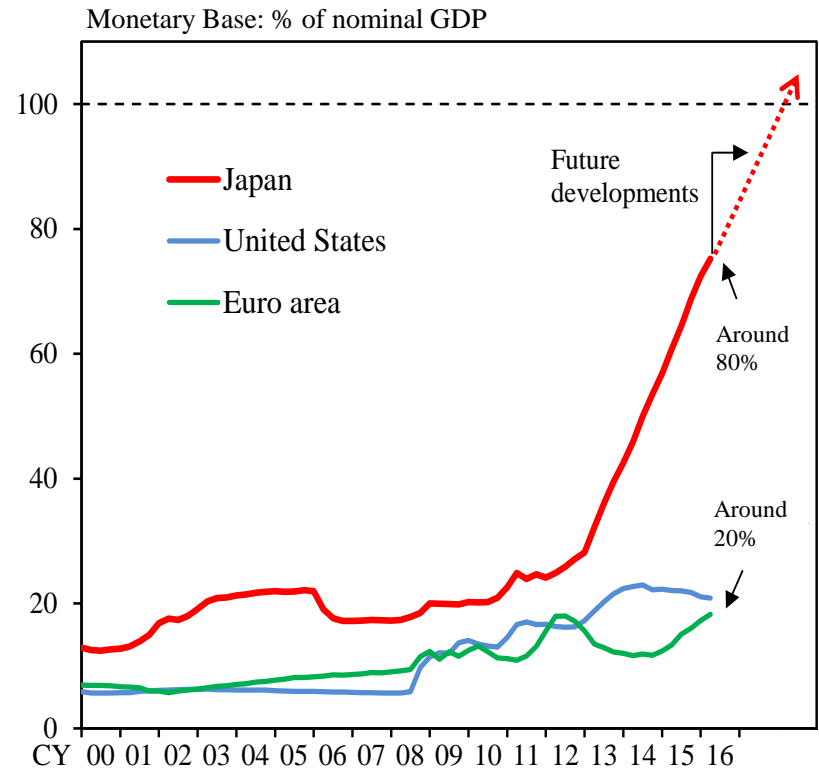
- New Monetary Policy Framework Since September 2016

New framework comprises of **Yield Curve Control** and **Inflation-Overshooting Commitment**.

Yield Curve Control (YCC)



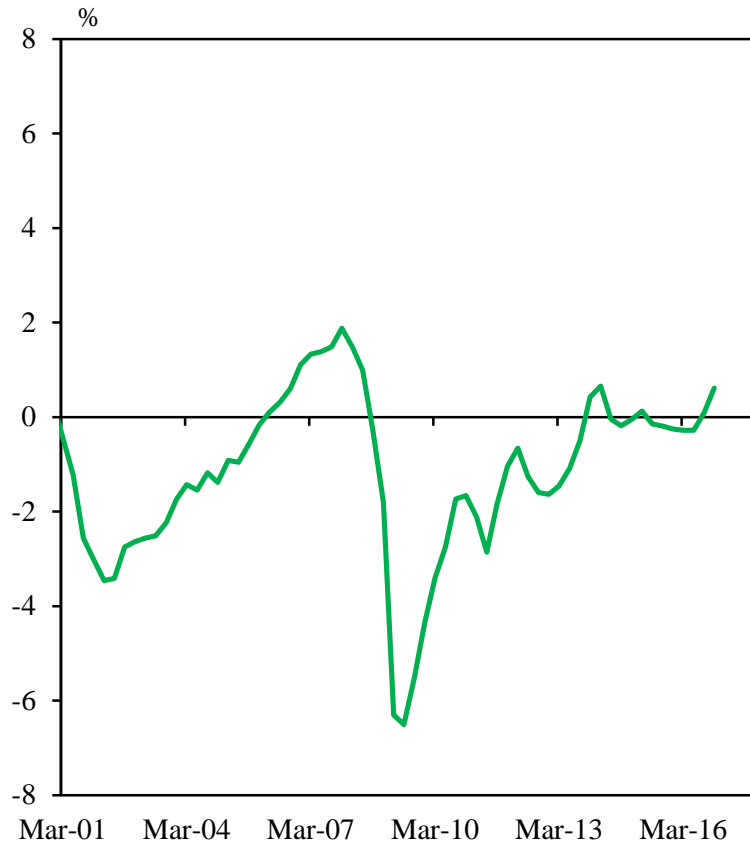
Inflation-Overshooting Commitment



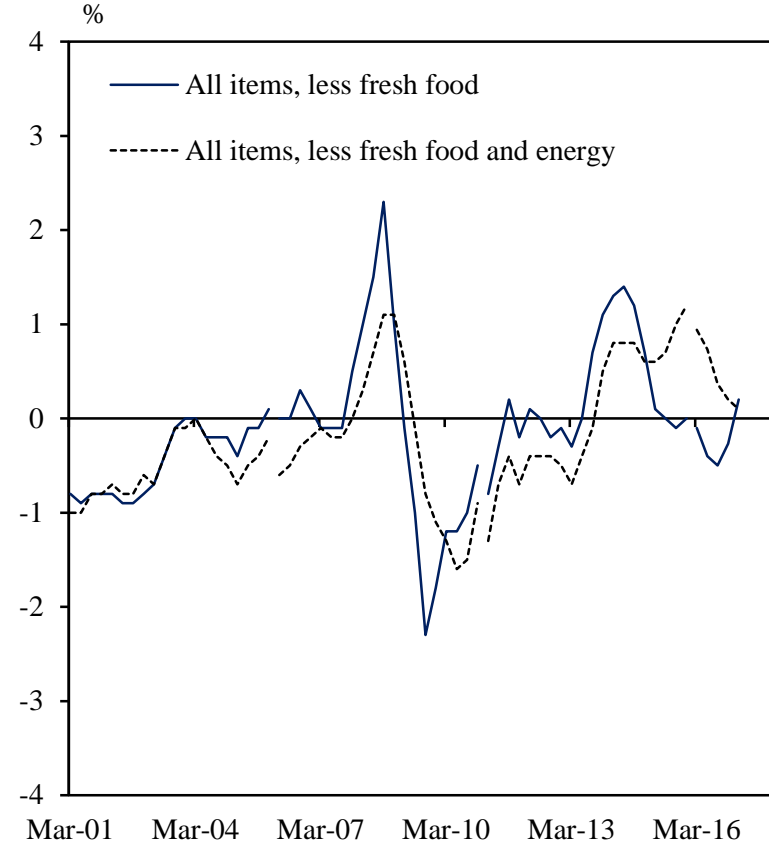
4. Where Are We Now?

- Halfway toward the price stability target of 2%

Output Gap



CPI



Sources: Bank of Japan; Ministry of Internal Affairs and Communications.

Notes: Latest data for Output Gap as at the October-December quarter of 2016. CPI data as at the January-March quarter of 2017.

5. FOMC's Consideration on Targeting a Long-Term Treasury Yield (October 2010)

- Benefits
 - ✓ Possible to ***work directly on lowering the long-term rate.***
 - ✓ An announcement of a target that clarifies perceptions could prompt the ***rate to move down without purchasing securities in significant quantity.***
- Remarks or drawbacks
 - ✓ ***Adjustments in the cap*** would likely be needed.
 - ✓ ***Substantial volatility*** in central bank securities holdings.
 - ✓ ***Complications for exit*** from targeting approaches.

Source: Board of Governors of the Federal Reserve System, "Strategies for Targeting Interest Rates Out the Yield Curve," background document for the October 15 2010 FOMC Meeting, 2010.

6. How Different is YCC from Previous Unconventional Measures?

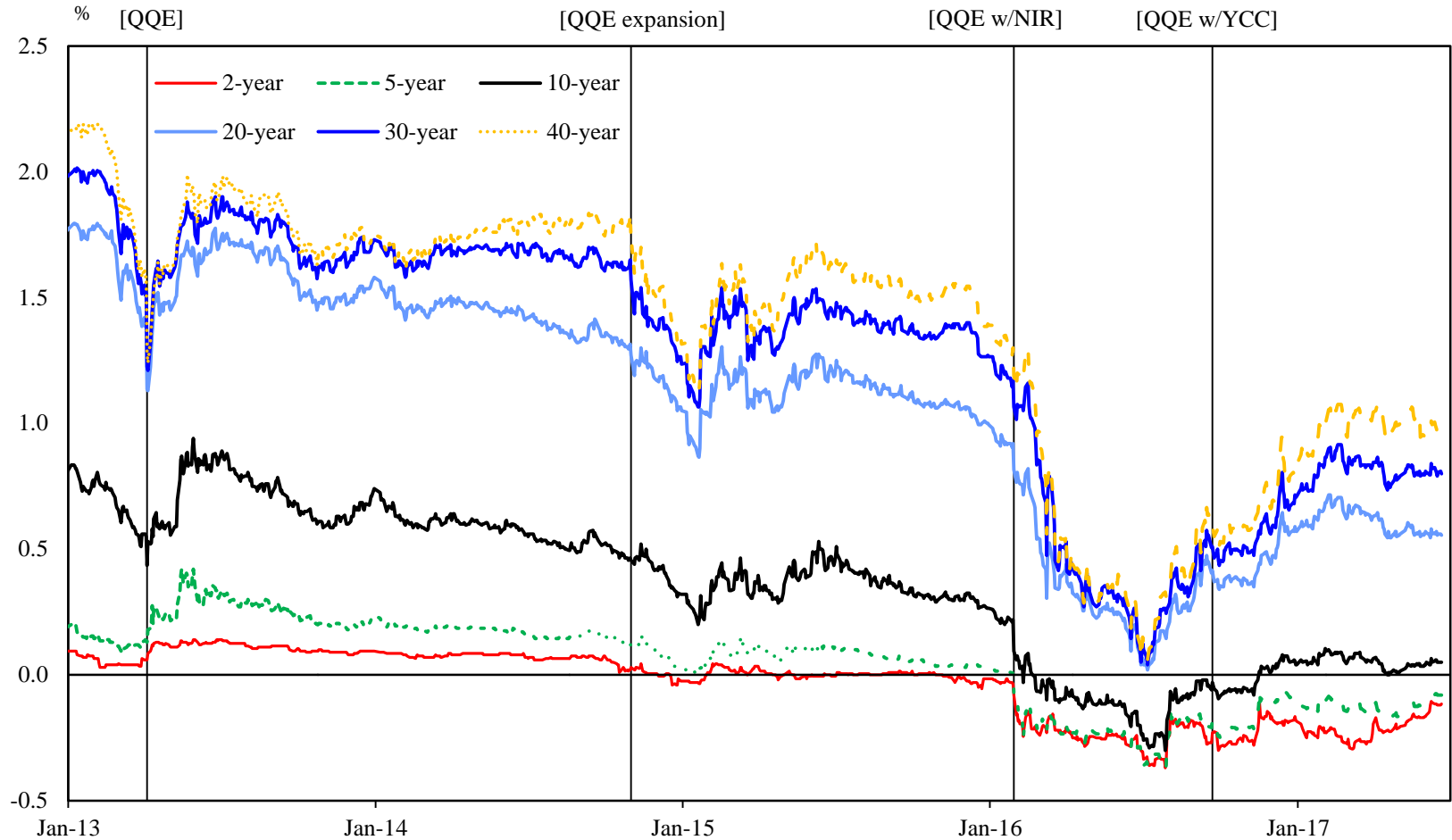
- ① Pursuance of the ***most appropriate yield curve***.
 - ✓ Lowering borrowing costs.
 - ✓ Avoiding too low super-long rates.
- ② Highly ***sustainable*** framework.
 - ✓ Little concern about scarcity of JGBs for purchases.
- ③ ***Flexible*** tool for adjustments according to economic developments.
 - ✓ Possible to change target rate as with conventional policy.

7. Framework of YCC

- How Can BOJ Control JGB Yield Curve?

- ✓ Purchases JGBs across all maturities in a substantial scale.
- ✓ Increases or decreases the amount of JGB purchases.
- ✓ Conducts fixed-rate JGB purchase operations.
- ✓ Conducts fixed-rate funds-supplying operations for up to 10 years.
- ✓ Announces the schedule for JGB purchase operations, while determining the amount on the day of the operations.

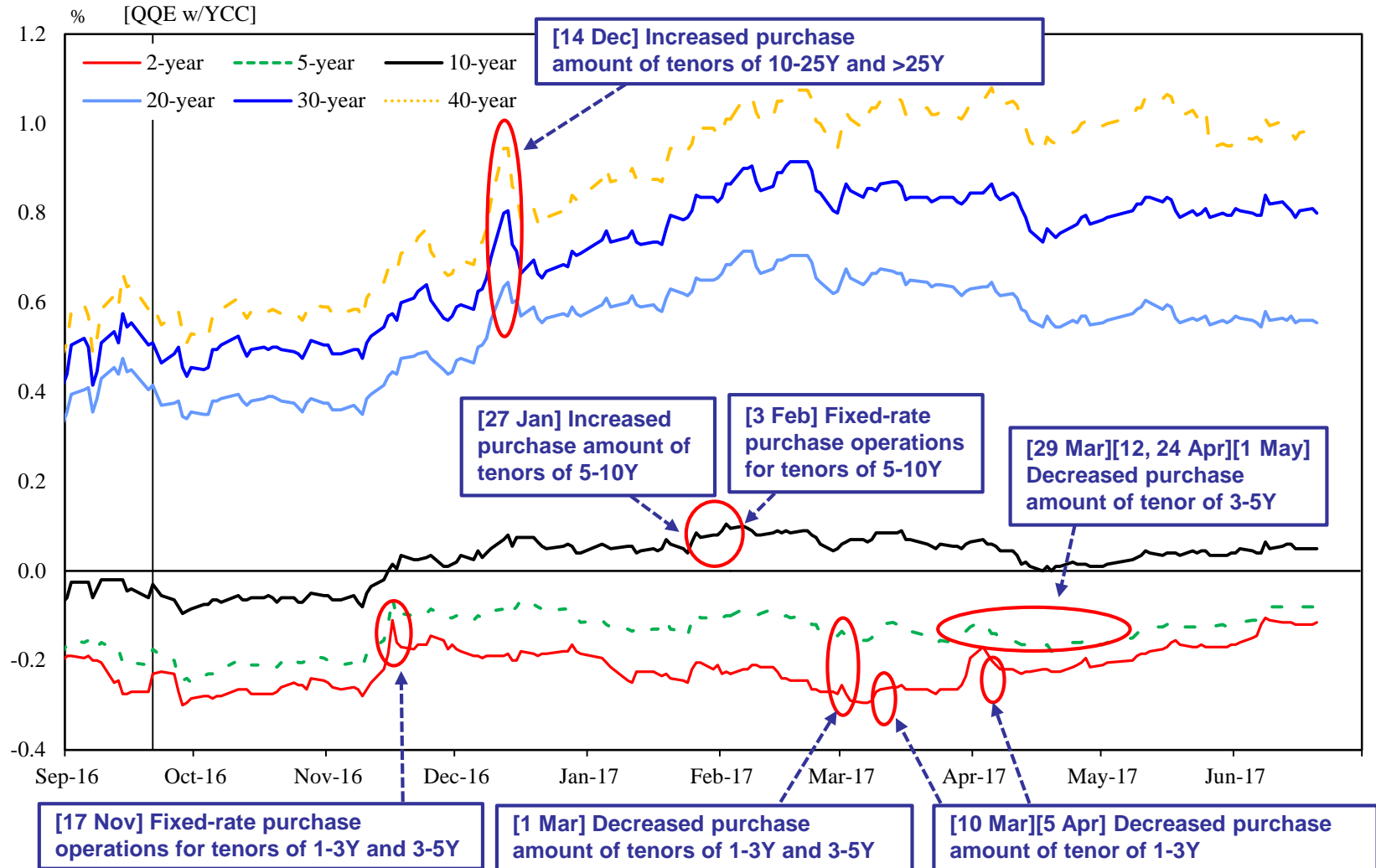
8. 9-Month Experience of YCC (1)



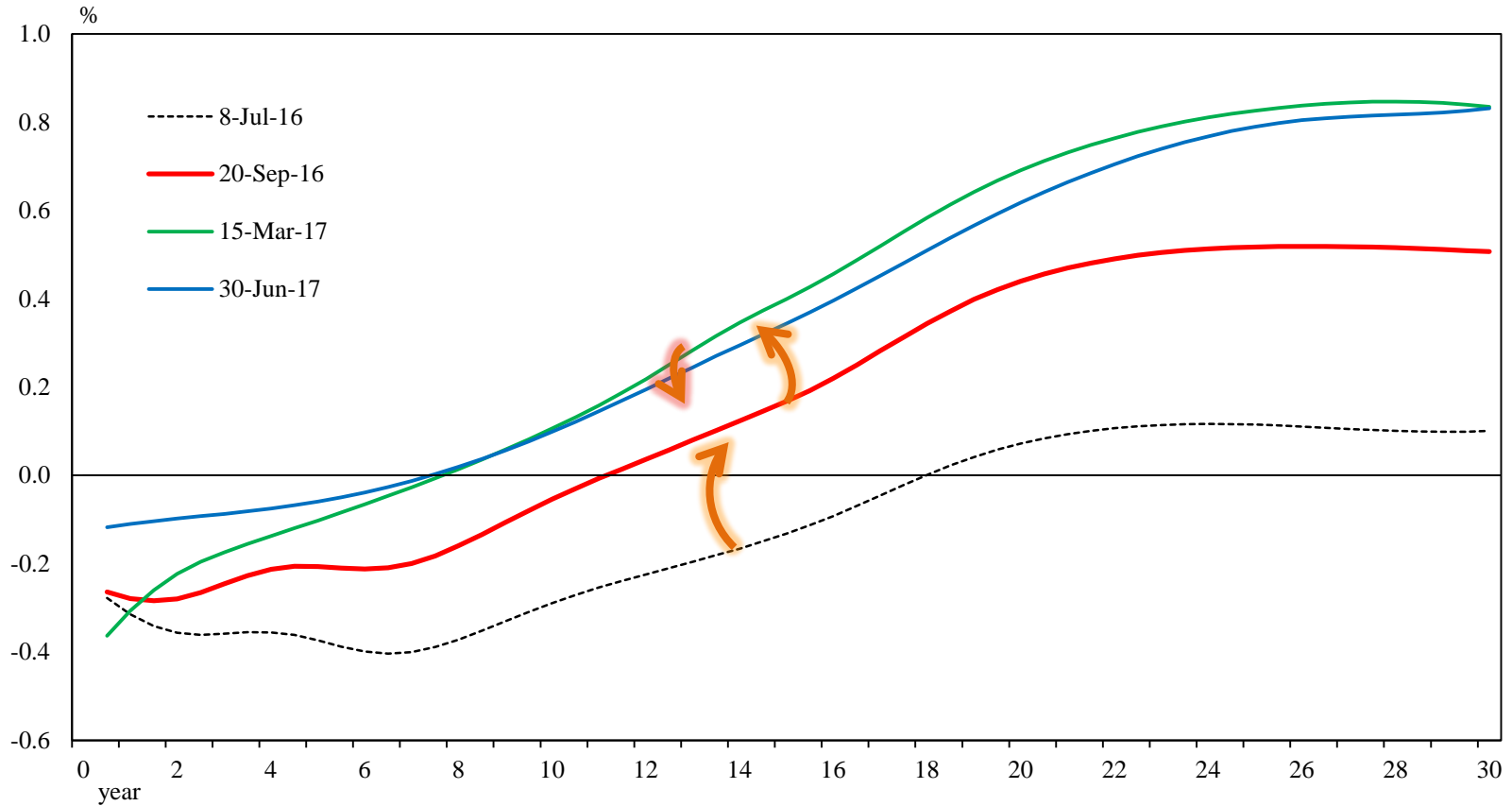
Source: Japan Bond Trading.

9. 9-Month Experience of YCC (2)

- Fixed-rate Operations and Major Changes in Amounts



10. Developments in JGB Yield Curve

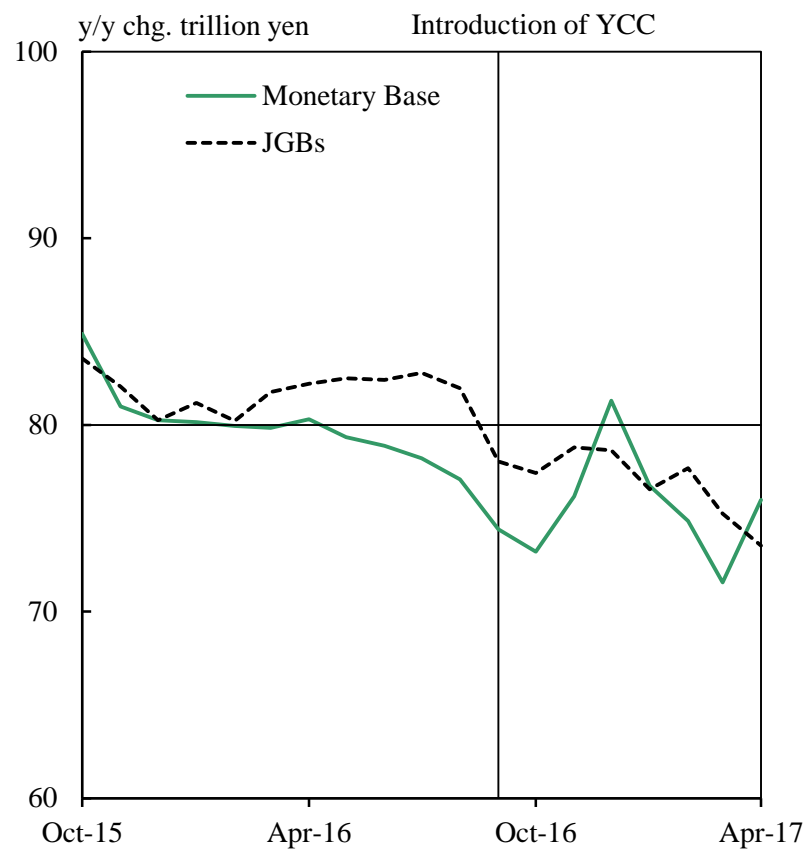
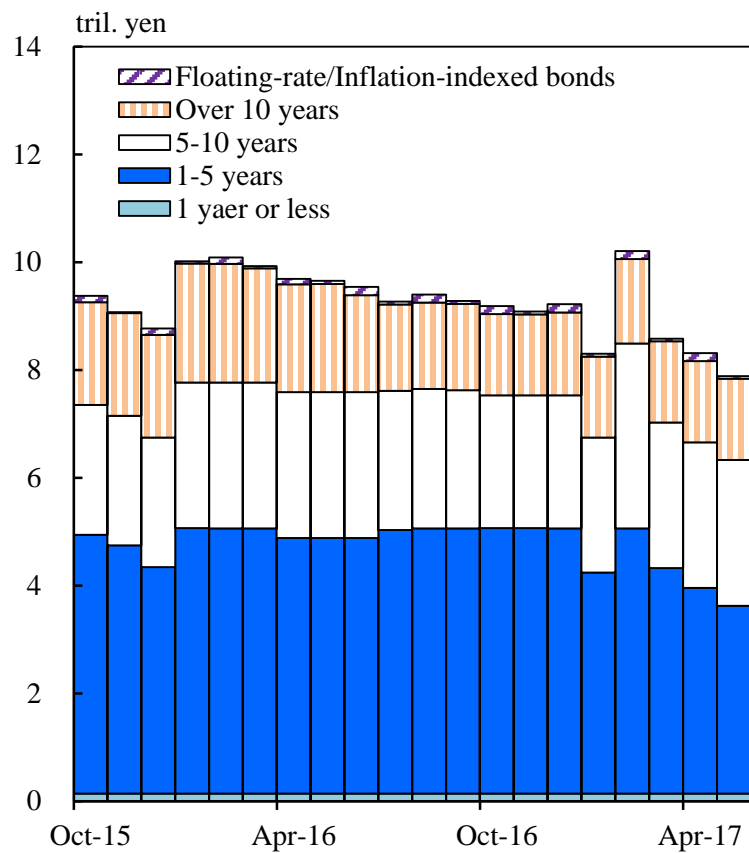


Source: QUICK.

11. Gross/Net JGB Purchases by BOJ

Gross

Net



Source: Bank of Japan.

12. Channels through which YCC Affects JGB Yields

① Stock effects

- ✓ BOJ's accumulation of JGB holdings would exert persistent downward pressure on JGB yields.

② Flow effects

- ✓ Market participants are taking for granted the ongoing JGB purchase operations.

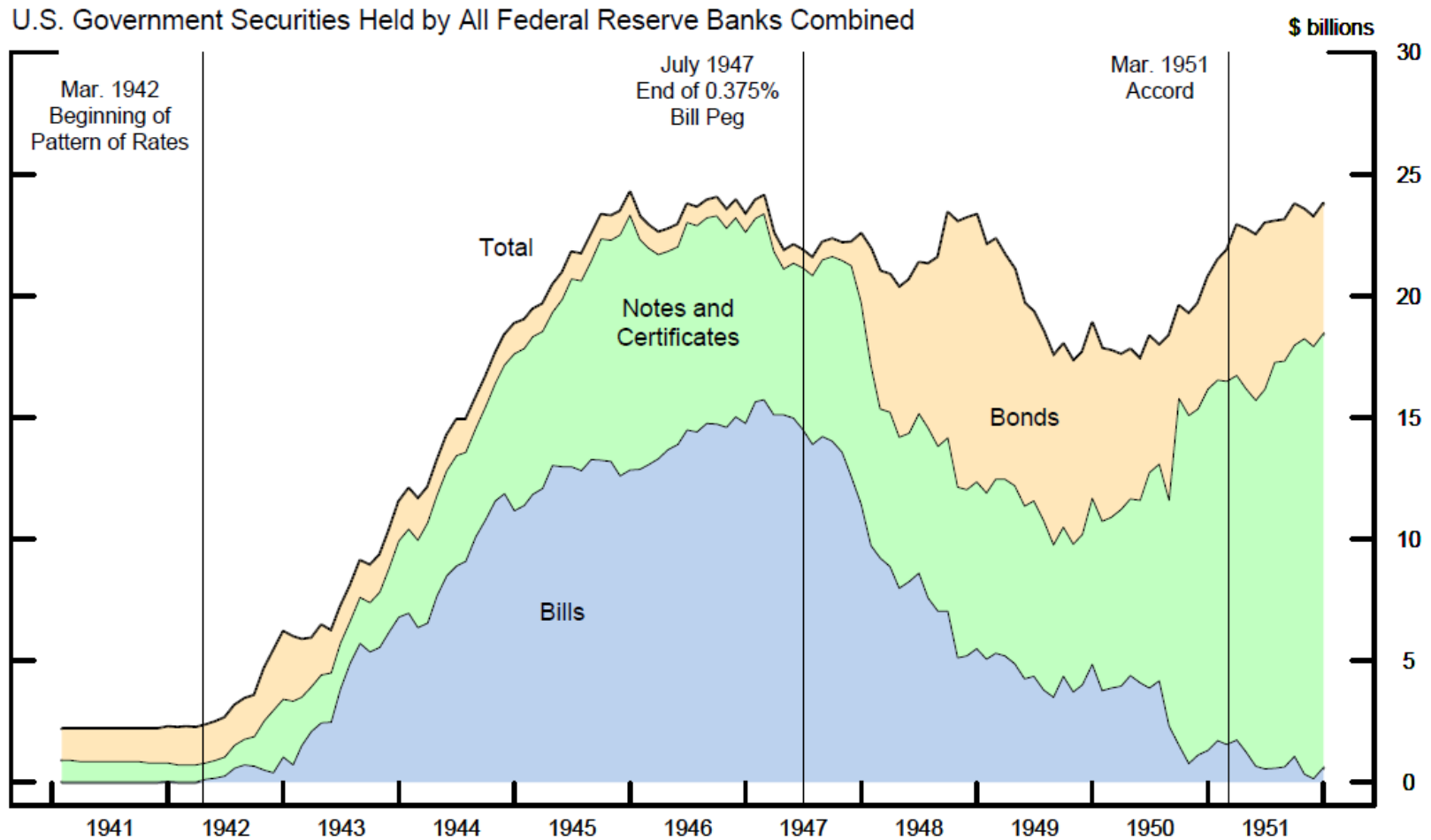
③ Signaling effects

- ✓ Fixed rate operation in early February effectively provided counterparties with an opportunity to sell JGBs at strike price, thereby enhancing market confidence in YCC.

13. USA Case(1942-51) : Overview

- ✓ Long-term Treasury bond yield was capped at 2.5%, and short-term Treasury bill yield was pegged at 0.375% (until July 1947).
- ✓ The policy was driven by wartime finance requirements rather than monetary policy considerations.
- ✓ The cap on long-term rates was binding only from late 1947 to December 1948 when large securities purchases were required.
- ✓ Prior to 1947, low inflation and pegging of the TB rates at 0.375% helped long-term rates to stay below the ceiling. The FED accumulated bills in its portfolio.
- ✓ Inflation pressures eventually led to the Treasury-Fed Accord of 1951, which discontinued the interest rate cap.

14. USA Case(1942-51) : Fed Balance Sheet



Source: Board of Governors of the Federal Reserve System, "Targeting the Yield Curve: The Experience of the Federal Reserve, 1942-51," *background document for the June 24-25 2003 FOMC Meeting*, 2003.

15. USA Case(1942-51) :

Comparison with BOJ's YCC

	FED (1942-51)	BOJ's YCC
Purpose	Wartime finance	Monetary policy
Framework	TB rates pegged at 0.375% Long-term rates capped at 2.5%	Short-term policy rate at -0.1% 10Y target rate at around 0%
Operations	Large scale bill purchases prior to 1947 Large scale bond purchases during 1947-48	Large scale JGB purchases across all maturities of JGBs
Final outcome	Conflict with FED's monetary policy objectives	Target will be adjusted according to monetary policy considerations

16. Closing

A key question: Does YCC entail balance sheet risks?

- ✓ Amount of JGB purchases may change in order to achieve the intended JGB yield curve.
- ✓ Fluctuations of JGB purchases, though did exist, were not necessarily significant during past 9 months.
- ✓ Appropriate and timely operations and proper communication might avoid significant expansion of JGB purchases.
- ✓ Most importantly, appropriate adjustment of targets according to economic developments would alleviate potential balance sheet risks.