

Fiscal Aspects of Normalizing Central Banks' Balance Sheets

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Normalizing Central Banks' Balance Sheets: What is the New Normal?

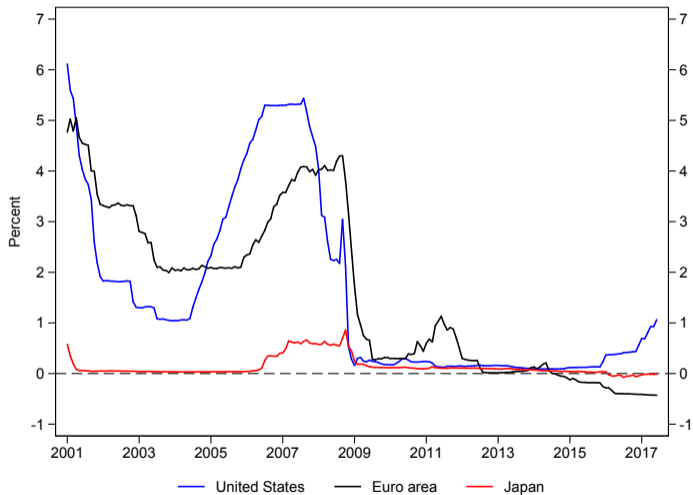


The ZLB and fiscal aspects of QE

- ▶ The ZLB and QE: Fed, ECB, BoJ.
- ▶ Fiscal aspects: debt sustainability, preferential treatment.
- ▶ Fiscal aspects of normalization for the Fed.



The ZLB: Overnight interest rates

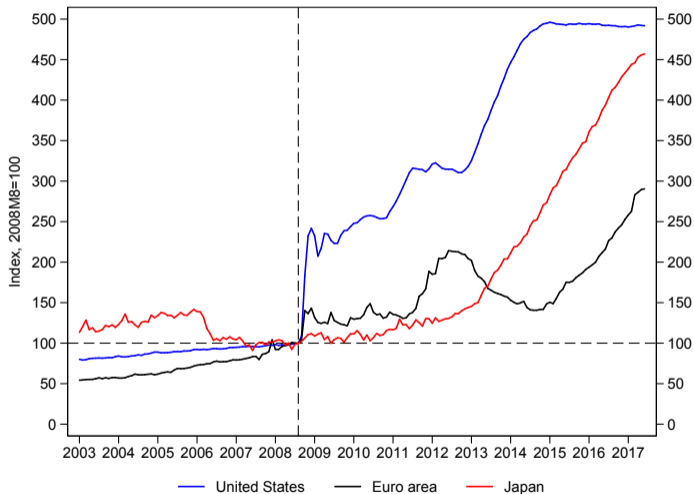


Quantitative Easing at the ZLB: The tale of three central banks

- ▶ Fed: Adopted QE early after 2008 crisis.
- ▶ ECB: Adopted QE reluctantly in 2015.
- ▶ BoJ: Reluctance from 2000s, decisive QE since 2013.



Three central banks: Size of Balance Sheet



Index, August 2008 = 100.

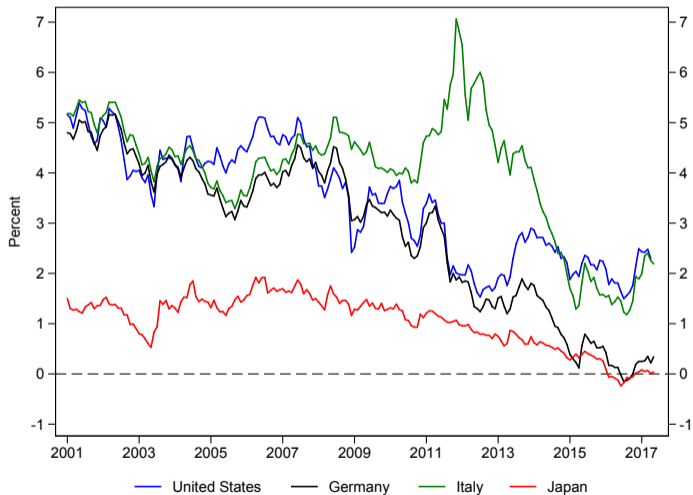


What can QE achieve?

- ▶ QE can restore growth and raise inflation towards CB objective.
- ▶ QE can improve debt dynamics.
- ▶ Effectiveness depends on decisiveness, implementation.
 - ▶ Fed: Effective overall.
 - ▶ BoJ: Effective with costly delay.
 - ▶ ECB: Effective for “strong” states, **not** effective for “weak” states.



Ten-year government bond yields

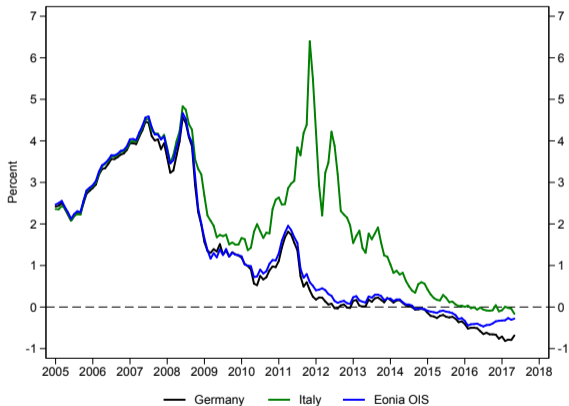


- ▶ Reluctance in adopting QE has kept inflation notably below ECB price stability objective and led to deterioration of debt dynamics in many states.
- ▶ Implementation of QE has resulted in distributional effects inside euro area—implicit subsidy for “strong” states and tax for “weak” states.
- ▶ Two issues with implementation:
 - ▶ Deviation from loss-sharing associated with single monetary policy.
 - ▶ Reliance on credit rating agencies for eligibility.

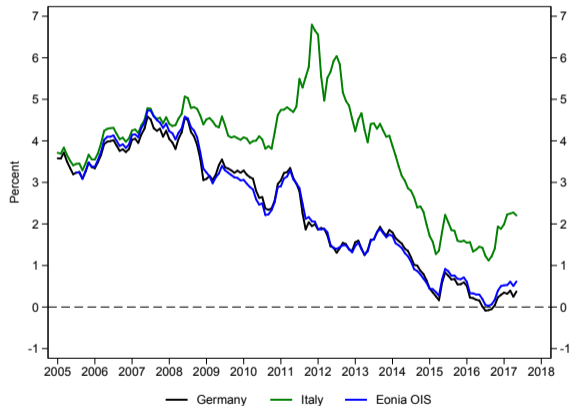


ECB QE: Government bond yields vs OIS

Two-year maturity



Ten-year maturity



BoJ: QQE with YCC

“The Bank will apply a negative interest rate of minus 0.1 percent to the Policy-Rate Balances in current accounts held by financial institutions at the Bank.”

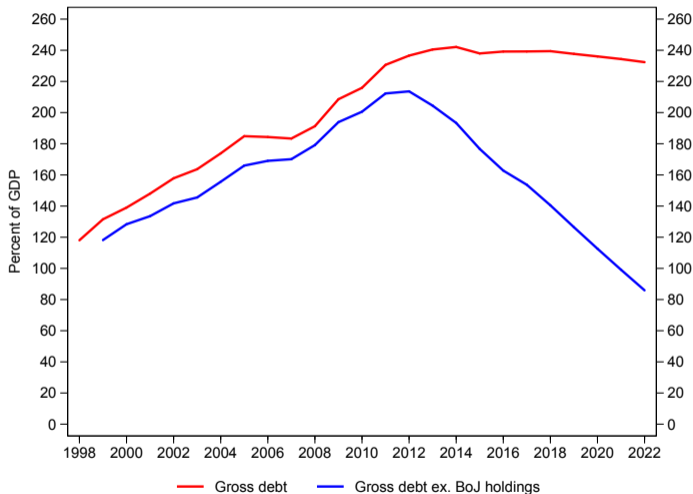
“The Bank will purchase Japanese government bonds (JGBs) so that 10-year JGB yields will remain more or less at the current level (around zero percent).
... an annual pace of increase in the amount outstanding of its JGB holdings at about 80 trillion yen ...”

“The Bank will continue expanding the monetary base until the year-on-year rate of increase in the observed CPI (all items less fresh food) exceeds the price stability target of 2 percent and stays above the target in a stable manner.”

(Bank of Japan, 21 September 2016)



Japan's debt: The power of the BoJ balance sheet



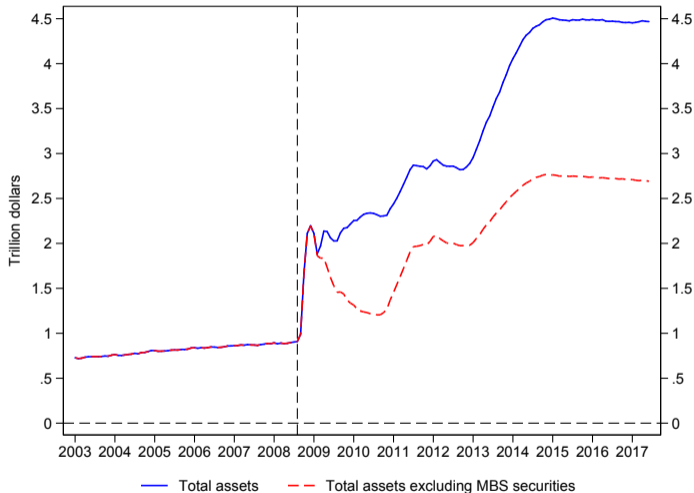
Gross debt ratio. Based on IMF projection, IMF WEO, April 2017. Actual BoJ holdings until June 2017, subsequently projected assuming annual purchases of 80 trillion yen.



- ▶ Decisive QE with unknown multiplier: Adapted when initial amounts proved insufficient.
- ▶ Distributional effects favoring housing sector through purchases of MBS—effectively a combination of monetary policy and fiscal policy.
- ▶ Issues with normalization:
 - ▶ Should Fed keep subsidizing housing sector?
 - ▶ Should the Fed reduce holdings of Treasuries?
 - ▶ Is projected balance sheet “too large”?



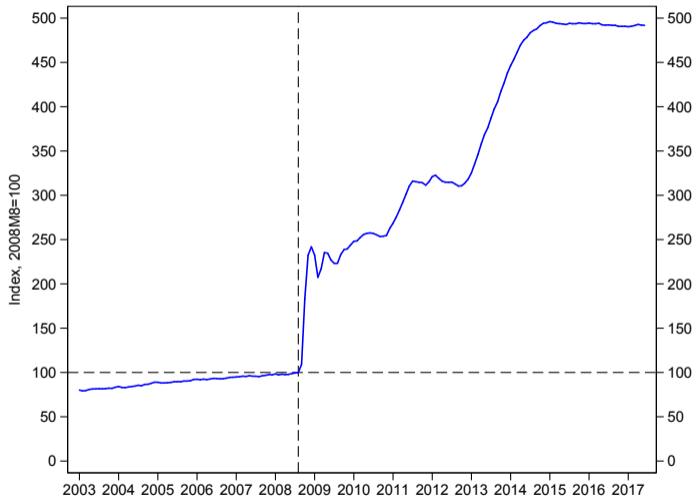
Fed QE: Treasury debt vs MBS



Size of Fed balance sheet, in trillion dollars.



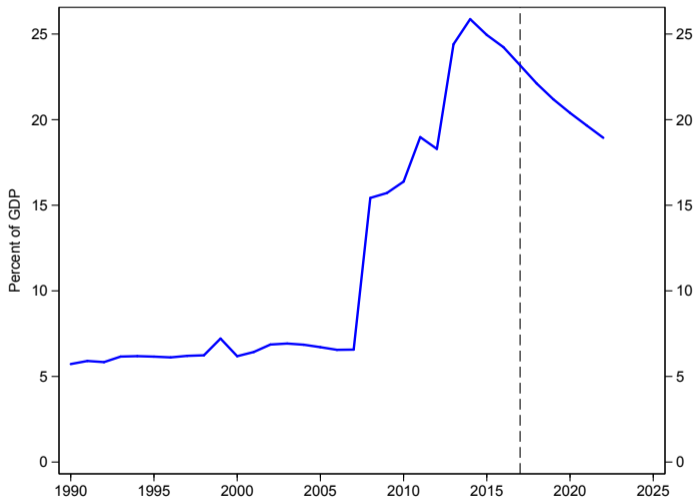
Size of Fed balance sheet: History



Balance sheet level. Index, August 2008 = 100.



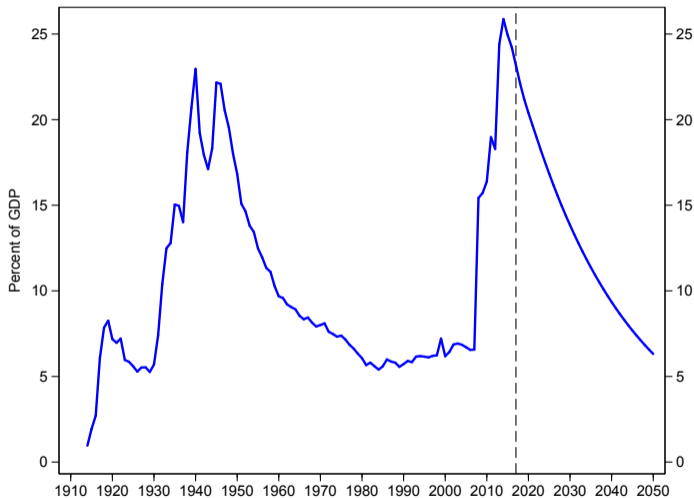
Size of Fed balance sheet: History and Projection



Balance-sheet-to-GDP ratio. Projection assumes the level of the Fed's balance sheet remains unchanged and nominal GDP grows as projected by IMF until 2022.



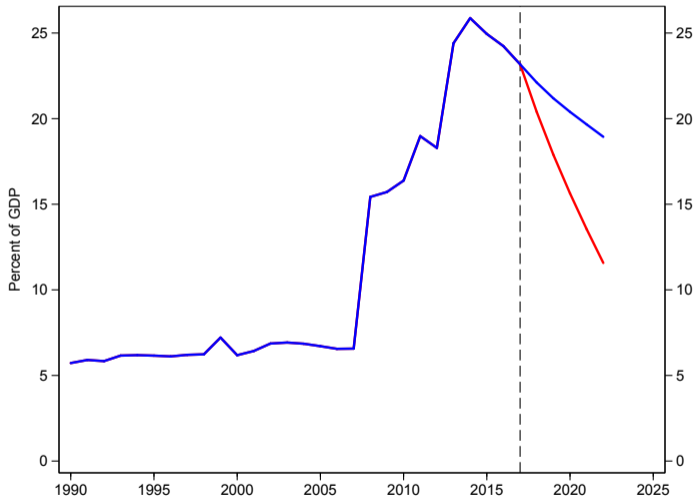
Size of Fed balance sheet: History and Projection



Projection assumes the level of the Fed's balance sheet remains unchanged and nominal GDP grows as projected by IMF until 2022 and 4% per year thereafter.



Keeping the Treasuries, phasing out the MBS



Balance-sheet-to-GDP ratio. Compares unchanged size of balance sheet with phasing out MBS, starting in 2018 ending in 2022 (about 350 billion per year).

