Comments on
“Optimal Monetary Policy in a Liquidity Trap”
by G. Eggertsson and M. Woodford

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Contributions of the paper

• The paper provides clear answers (or the correct way to think about the issue) to various questions raised in the policy debate in the last five years.
  – I wish we could have seen the paper earlier!

• Modified version of price level targeting
  – History dependence
  – The rule is attractive because it instructs how to conduct policy not only when the zero bound is binding, but also when it is NOT binding.
  – The central bank is able to demonstrate its intention to follow the rule before the zero bound constraint becomes binding
Comments

1. Monetary policy

2. Fiscal policy
Assumption of Ricardian fiscal policy

• Setting of Section 2 of the paper

(i) Assume Ricardian fiscal policy

(ii) Minimize CB’s loss function with respect to inflation rate, output gap, and monetary policy subject to IS, AS curves, and the zero bound constraint

• This is equivalent to:

  Minimize CB’ loss function with respect to inflation, output gap, monetary policy, and fiscal policy subject to IS, AS curves, the zero bound constraint, and the government’s budget constraint (or equilibrium relation implied by BC)

It is assumed that the government does its best to support monetary policy (or central bank independence). But fiscal adjustments are hidden behind the scene.
What’s going on behind the scene?

\[
\text{Price level} = \frac{\text{Nominal value of government debt}}{\text{Expected present discounted value of future primary surpluses}}
\]

Denominator increases

Optimal policy (in a usual situation) is to lower nominal interest rate
Numerator also increases \( \square \) No need for fiscal adjustments

However, when the zero bound constraint is binding, the numerator does not increase sufficiently. Then, without fiscal adjustment, the current price level must fall. Furthermore, higher price level in the future (this is the optimal policy in the paper) implies even lower price level today. To avoid deflation in the current period, we need a decrease in primary surpluses.

Behind the CB’s optimization, the Government is required to increase fiscal deficits.
BOJ’s two commitments

1. The BOJ will keep the overnight rate at zero until “deflationary concerns are dispelled.” (April 1999)

2. The BOJ will continue quantitative easing until “the CPI registers stably a zero percent or an increase year on year.” (March 2001)
Estimated density of market expectations about the duration of the ZIRP

Source: “Term structure of interest rates under the ZIRP” by K. Marumo et al., March 2003 (in Japanese)
Who recognizes the importance of history-dependent monetary policy commitment?

- **BOJ:** Probably, NO
  - Governor repeatedly states that the second commitment is a firm one.
  - However, word is not necessarily consistent with action. For example, in August 2000, the policy board broke the first commitment by terminating the ZIRP despite the existence of deflationary pressure.

- **Market participants:** NO
  - Recent rise in JGB rates reflect market’s expectation that the BOJ will not keep the second commitment.