

DISCUSSION: “BREAKING THROUGH THE ZERO LOWER BOUND”

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BIG PICTURE

- Recovery from the Great Recession has been slow.
- Zero lower bound prevents significant expansion of conventional monetary stimulus.
- Debate has centered on what policy tools may still be effective:
 - ▶ Unconventional monetary policy?
 - ▶ Price-level / NGDP targeting?
 - ▶ Higher inflation target?

THIS PAPER

- ZLB is a *choice* we made as part of the monetary regime.
 - ▶ Paper money has a guaranteed zero nominal interest rate.

- New proposal to alter monetary regime .
 - ▶ Preserves paper money, but removes zero-interest rate guarantee.

OUTLINE

- 1 PROPOSAL
- 2 COMPARISON WITH OTHER TOOLS
- 3 MY VIEW

OUTLINE

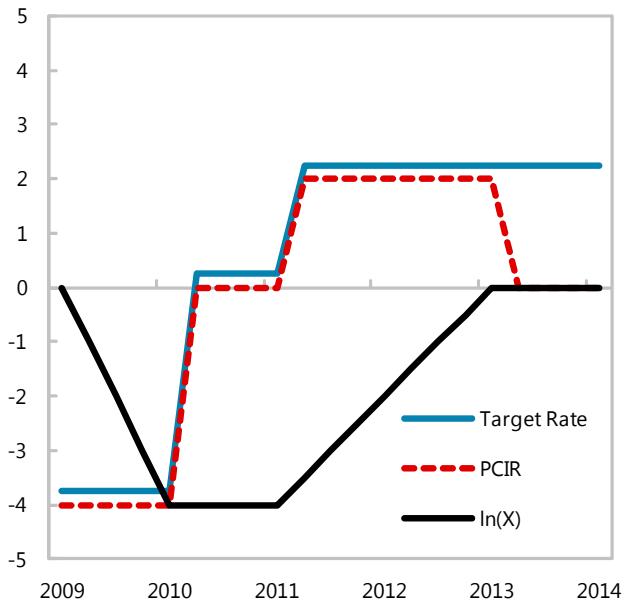
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PROPOSAL

- Two types of currency: e-\$ and p-\$.
- e-\$ are electronic dollars.
 - ▶ Earn a rate of return i_t (interest on reserves), which may be negative.
 - ▶ Can be converted into paper dollars (p-\$) at exchange rate X_t .
 - ▶ p-\$ do not pay interest.
- Current system:
 - ▶ $X_t = 1, \forall t$
 - ⇒ $i_t \geq 0$
- Agarwal-Kimball:
 - ▶ i_t free
 - ⇒ $\frac{dX_t}{dt} = i_t$ (when $X_t \leq 1$)

Case 2: Gradual Return to Par

(Percent)



PROPOSAL

- Essentially mimics stamp money (Gesell, 1906).
- While $i_t < 0$, paper money essentially gets stamped through a lower exchange rate $\frac{dX_t/X_t}{dt} < 0$. (And reversed-stamped when $i_t > 0$ and $X_t < 1$).
- This does not come for free: need prices set in e-\$.
 - ▶ Nominal interest rate in p-\$ on paper dollars is always zero!
- Key role for government in ensuring that e-\$ are the unit of account, particularly for interest-rate sensitive items (Barsky, House, Kimball, 2007).

EXCHANGE RATE

- Is the exchange rate runproof?
 - ▶ Central banks may have trouble defending overvalued exchange rate.
- Agarwal-Kimball:
 - ▶ Return on e-\$ and p-\$ in all states of the world where e-\$ is the predominant form of payment.
 - ▶ Central bank can supply unlimited e-\$ and p-\$.
- Caveat: expectations of abandoning sub-par exchange rate can create run from e-\$ to p-\$. Once e-\$ converted, government confirms expectations by resuming par.
 - ▶ Important commitment / coordination role for government.

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ADVANTAGES RELATIVE TO OTHER TOOLS

- Unconventional monetary policy.
 - ▶ Conventional monetary policy has proven effectiveness (Romer and Romer, 1989, 2004; Christiano, Eichenbaum, Evans, 2005)
 - ▶ Efficacy of unconventional monetary policy still unclear (forward guidance puzzle, are QE effects narrow or broad)
- Price-level / NGDP targeting.
 - ▶ More limited commitment problem of managing exchange rate X.
- Higher inflation target.
 - ▶ Timed, targeted, temporary (Coibion, Gorodnichenko, Wieland, 2012)
 - ▶ Lower inflation target possible (but see Daly and Hobijn, 2014; Chodorow-Reich and Wieland, 2016)
- Abolishing currency.
 - ▶ Preserves paper money (vs Rogoff, 2014).
 - ▶ p-\$ are not disadvantaged relative to e-\$ at ZLB.

DISADVANTAGES RELATIVE TO OTHER METHODS

- Not clear that these tools can be deployed quickly and without legislative approval (particularly handling of debt payments).
 - ▶ Includes structure to prevent losses among small depositors and handle bank solvency.
- There are various (finite) ways of earning zero-interest in the economy, e.g. pre-payment of bills/taxes.
- Complexity: going from 1 currencies to 2 is a big change. E.g., store transactions possibly a lot messier with varying discounts on p-\$ vs e-\$.
 - ▶ When par resumes it returns to a one-currency system, so there is time-variation in the number of currencies.

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MY VIEW

- The smallest deviation from the current system that preserves paper money and kills the ZLB?
- Value of experimentation high, especially so in Japan.
- Leaving gold was a contentious decision.
 - ▶ Lewis Douglas: “This is the end of Western civilization.”