Escaping from deflation and a liquidity trap

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Avoiding deflation

- Positive credible inflation target
  - Margin for deflation
- Inflation-forecast targeting
  - Looking ahead, responding in time, preemption
- Price-level targeting vs. inflation targeting
  - Unanticipated fall in price level below target: Automatic increase in inflation expectations, fall in real interest rate

Escaping from deflation and liquidity trap

- Deflation and recession: Expansionary stabilization policy
- Expansionary fiscal policy
  - Increase aggregate demand: Fiscal expansion (money financed, Ricardian equivalence)
  - Lower “effective” real interest rate: Time-varying VAT/investment credits (Stiglitz, Feldstein)
• Expansionary monetary policy (exchange-rate policy)
  – Create inflation expectations, lower real interest rate (short and long)
  – Currency depreciation (net export, UIP: lower real interest rate)
  – Increase other asset prices (long bonds, equity, property)

Means
  – Positive inflation target (Krugman, Posen)
  – Monetary base expansion (Meltzer)
  – Tax on money (Goodfriend, Buiter)
  – Currency peg (McKinnon)

The foolproof way of escaping from a liquidity trap

1. Announce price-level target path, upward slope = inflation target
   – Best nominal anchor: Avoid run-away inflation
   – Undo “price-level gap”
   – Provides exit strategy from exchange-rate peg

2. Announce depreciation and temporary exchange rate peg
   – Jump-start economy, increase output and price level
   – Sizeable initial real depreciation
     – Feasible (initial excess demand for currency)
   – Expected real appreciation
   – Inflation expectations
   – Lower real interest rate

3. Announce exit strategy: When price-level target path reached, shift to float and inflation/price-level targeting

– Currency depreciation
  * Monetary-base expansion, FX interventions, portfolio-balance (PB) effect (Meltzer, Bernanke, Orphanides-Wieland)
  * Exchange-rate rule (McCallum)
  * The foolproof way (FPW): Price-level target, temporary depreciation/peg, exit strategy (Svensson)
Comparison with other proposals

• Krugman: Announce inflation target, future monetary expansion
  – Why credible?
  – Price-level target path better anchor than inflation target
  * Accumulated inflation: Avoid run-away inflation
  * Long-run inflation expectations independent of timing
  * Price gap to undo
  – Devaluation and exchange-rate peg demonstrates commitment
    * Do, not just say
    * Induces expectations of real appreciation and inflation

• Meltzer, McCallum, Bernanke: FX interventions/open-market operations to depreciate currency
  – Temporary peg more structure, benchmark
  – Portfolio-balance effects (endogenous risk premia) not needed
  – McCallum reaction function
    \[
    \tilde{s}_t = s_{t-1} + \nu_0 - \nu_1(\pi_{t,t-1} - \pi^*) - \nu_2(x_{t,t-1})
    \]
    * Time-varying exchange-rate target/instrument \( \tilde{s}_t \):
      Commitment to buy/sell unlimited amounts of FX at time-varying rate \( \tilde{s}_t \)
    * More complex commitment and benchmark, less verifiable
    * Parameter values?
    * Interest-rate setting?
    * Exit strategy?

• McKinnon: Permanent bilateral peg
  – Would escape liquidity trap by \( i_t = i_t^* \)
  – No real depreciation to jump-start economy
  – No price gap to undo
  – Sustainable?
  – Optimal?
  – Temporary peg, exit strategy
  – Unilateral

• Quantitative easing (Meltzer, Nakahara, current BOJ, Orphanides-Wieland)
  – Money and T-bills (close to) perfect substitutes
  – Volumes, targets?
  – Exit strategy?
• Coenen-Wieland C-R 2002: 3-region model, deflation/liquidity trap in Japan, comparison of 3 proposals,
  – Orphanides-Wieland: Monetary base expansion
  – McCallum: Exchange-rate rule
  – Svensson: The foolproof way
  – All work
  – FPW works even if it starts 11 qtrs into deflation/recession
    * Especially if crawling peg
  – Relatively small international effects on inflation and output gaps
• FPW not just direct stimulus of net export and direct effect on CPI

Summary
• Avoiding deflation/liquidity trap feasible
• Escaping deflation/liquidity trap feasible: There is a foolproof way
• It can help Japan (but is not enough alone)
• Any political problems can be solved

Political problems (Japan, region, US)
• Beggar thy neighbor? Regional and US reactions?
  – Lower long-run real interest rate requires real depreciation
  – Current-account effects of real depreciation ambiguous
  – Region, U.S. and world gain in long run
• Other policy changes/reforms needed for Japan
  – Financial-sector clean-up (Swedish way)