

Targets for Monetary Policy After the Global Financial Crisis

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After the Crisis

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 - importance of clear commitment to a low inflation target
 - simple rules of thumb such as “Taylor rule” to conduct policy in accordance

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- Is a commitment to control inflation still helpful when policy is constrained by the **interest-rate lower bound**?

Issue 1: Policy When Financial Markets Malfunction

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 - though real GDP not yet falling, inflation possibly rising
 - apparently a departure from “Taylor rule,” yet ex post justified?

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- Early in financial crisis (by Dec 2007-Jan 2008), Fed was already aggressively cutting fed funds rate target
 - though real GDP not yet falling, inflation possibly rising
 - apparently a departure from “Taylor rule,” yet ex post justified?
- Proof that a sole focus on inflation and aggregate activity is too narrow a perspective?

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- What New Keynesian models imply:
 - inflation and output gap measure important **distortions** that should be minimized
 - criterion for optimality of policy can be formulated in terms of a **relation between paths of inflation, output gap** that must hold for optimal balance between competing concerns
 - path of policy rate should be adjusted so as to imply projected paths for inflation, output gap that satisfy this relation (**“flexible inflation targeting”**)

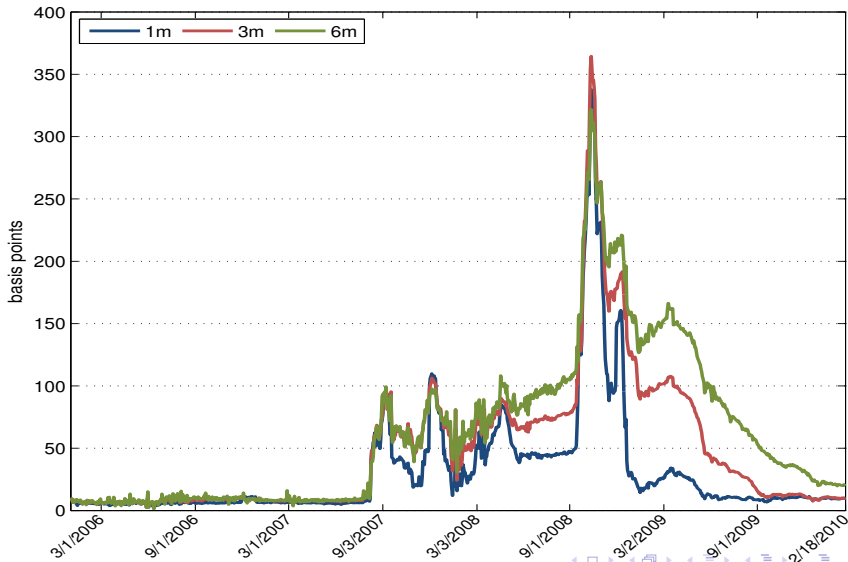
Flexible Inflation Targeting

- In general, this will **not** imply that realized inflation, output gap are only relevant information for setting interest rates
 - other information may indicate changes in the interest rate path **required** to achieve desired paths of output, inflation
 - e.g., real determinants of “natural rate of interest”

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- Evidence of financial market disruption — in particular, anomalous behavior of **spreads** — indicates that linkages between policy rate and the economy are no longer what they ordinarily are
 - hence required path of policy rate will be different, **without** any change in **target criterion**

LIBOR-OIS Spread (US\$)



Cúrdia-Woodford (2009)

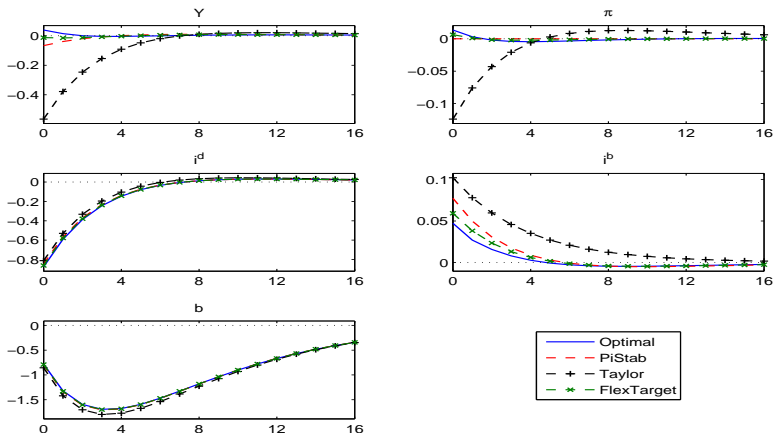
- Illustrates that the problem when credit markets are disrupted is not necessarily a need for a **target criterion** different from the standard one
 - quantitative DSGE model which introduces credit frictions into otherwise standard New Keynesian model
 - consider the effects of a disturbance to the severity of credit frictions, under alternative assumptions about monetary policy

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- Monetary policies to compare:
 - welfare-optimal policy commitment
 - Taylor rule
 - commitment to a target criterion of form

$$\pi_t + \phi \Delta x_t = \pi^*$$

Numerical Results: Alternative Policy Rules



Responses to financial shock, under alternative monetary policies

Simple Proposal: Nominal GDP Targeting

- Numerical results in Cúrdia-Woodford model also indicate that the exact value of ϕ in the target criterion is not too crucial, for this type of disturbance
- A case where the target criterion is relatively easy to explain: $\phi = 1$, in which case it can equivalently be written as

$$\Delta(p_t + y_t) = \pi^* + \Delta y_t^*$$

— a form of **nominal GDP target**, intended to be consistent with the desired medium-run inflation rate π^*

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- An important change in the conduct of monetary policy by the Fed (and many other CBs) in 2009-2010: short-term interest rate targets reached **effective lower bound**, below which CBs were unwilling to push them
- Conventional guidelines such as “Taylor rule” cease to be useful
 - and CBs look for alternative means through which to provide further stimulus

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- But the real rate floor is only high if **low expected inflation**
 - no coincidence that lower bound problems have arisen only in period with widespread **commitments to low inflation**
 - does this mean **inflation targets too low?** (Summers, Blanchard)
 - or at least that inflation target should be temporarily **suspended** if one hits the interest-rate lower bound? (Krugman)

Would a Commitment to Inflationary Policy Help?

- In standard models, yes (Eggertsson-Woodford, 2003)
 - higher expected inflation makes **real rate** lower, stimulating current spending
 - reduced fear of premature policy tightening also lowers expected **future path of short rates**, reducing long rates and depreciating exchange rate
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- Of course, this depends on successfully **changing expectations**
 - might be more effective if words accompanied by current actions consistent with the commitment to reflation

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- Not necessary, if can credibly commit to **temporary** relaxation of target following period of binding ZLB
- Calculations of optimal policy commitments in New Keynesian models (Eggertsson-W, Werning 2011):
 - commitment to maintain low rates for a period, even after achievement of conventional targets would again be possible
 - allows brief inflationary boom
 - but commitment to rapid return to price stability thereafter

Does It Mean Suspension of Usual Rules?

- This might seem to imply that usual rulebook should simply be thrown out when ZLB is reached
- But this raises questions:
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 - should anyone believe that the suspension of former inflation target isn't permanent?

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 - are any commitments about future policy really meaningful?
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- A superior approach: commitment to reflation as part of a **consistent approach** that applies when ZLB binds, and when it doesn't

A Targeting Framework

- What is needed is a **commitment to error-correction**:
 - if interest-rate lower bound prevents policy targets from being hit, aim to correct for the target miss later

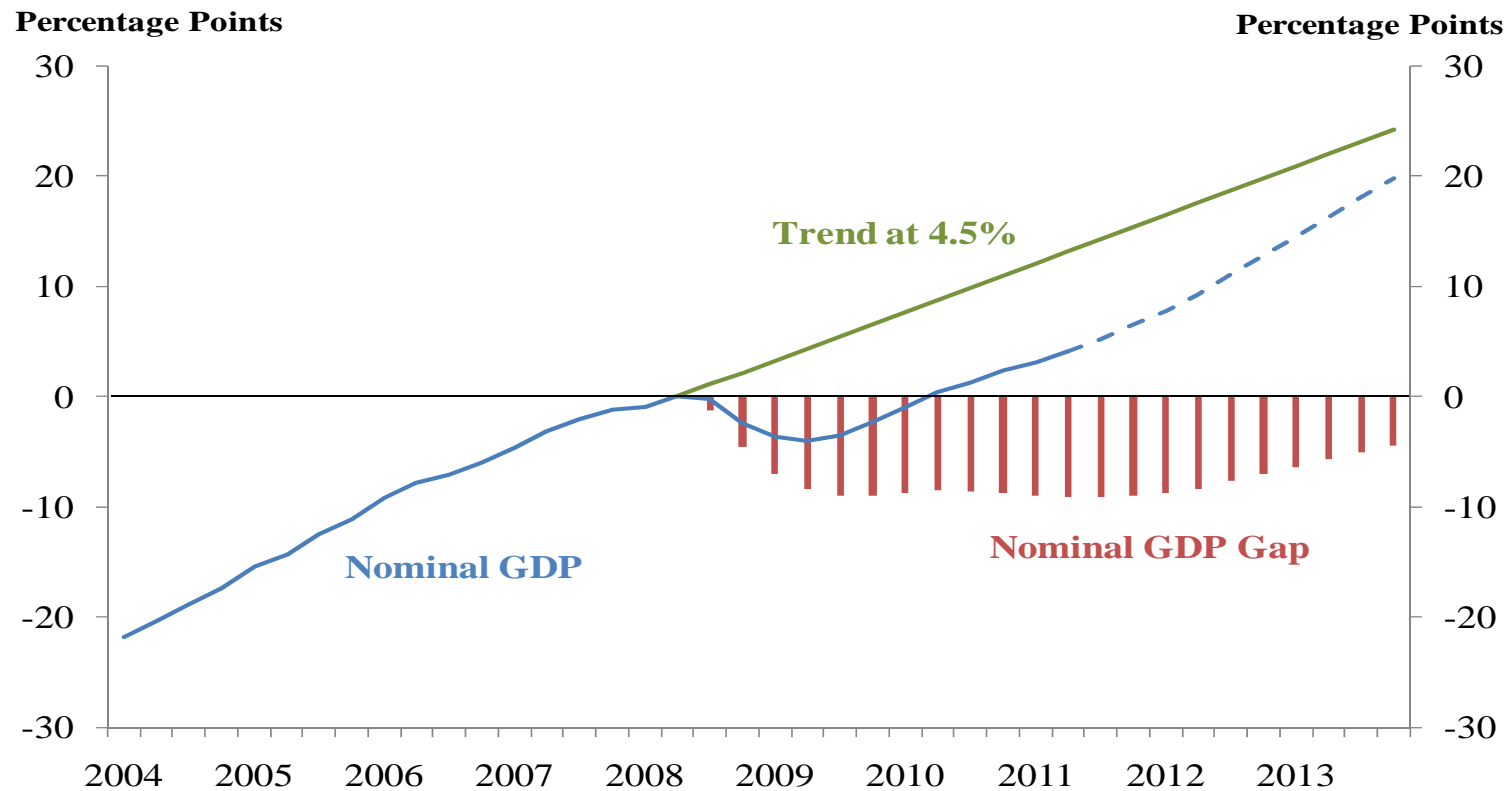
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 - if undershoot due to ZLB, appropriate to aim for **higher** than usual nominal growth rate, until “nominal GDP gap” is closed
 - automatically implies should not expect policy tightening soon
 - but also allows confidence that resulting inflation will be bounded

A Nominal GDP Target Path for US



- *Growth of nominal GDP increases from about 4.5% to about 6.5%, cutting the gap in half by the end of 2013*

Conclusion

- CBs have faced many extraordinary challenges as a result of the cris[es]
- simple formulas inadequate in such complex circumstances: must instead return to **principles** underlying them
- but not obvious that there needs to be a change in basic goals of monetary policy

Conclusion

- Important for dealing well with the particular kinds of challenges just discussed:
 - commitment to a **target criterion**, rather than to a pre-specified list of variables to be used as indicators
 - commitment to **error-correction**, rather than to a purely forward-looking target that “lets bygones be bygones”