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A 4% inflation target?

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Olivier Blanchard, the IMF's Chief Economist, recently broached the idea that central banks should target an inflation rate of 4% during the good times to leave more room for nominal rate cutting during bad times. This column supports this view, presenting new research showing that a higher inflation target could have halved the output loss of Japan during its "Lost Decade."

The conventional wisdom in central banking circles is that monetary policy should aim for low inflation, such as 1-2%, with all other macroeconomic objectives being secondary. At the 1996 Jackson Hole conference that brought together central bankers from around the world, participants "agreed that low or zero inflation is the appropriate long-run goal for monetary policy" (Kahn 1996). Given typical estimates of inflation measurement bias, a 1-2% target for *measured* inflation corresponds to *actual* inflation close to zero (Wynn and Rodriguez-Palenzuela 2002).

In the aftermath of the global financial crisis, however, some countries with low inflation targets have run out of space for rate cuts. In some cases, the desired interest rate has fallen below the zero lower bound. For example, Rudebusch (2009) estimates that in the US, based on the Taylor rule, the federal funds rate ought to have been below -4% in 2009, well below the zero bound. So would a substantially higher inflation target have provided a panacea?

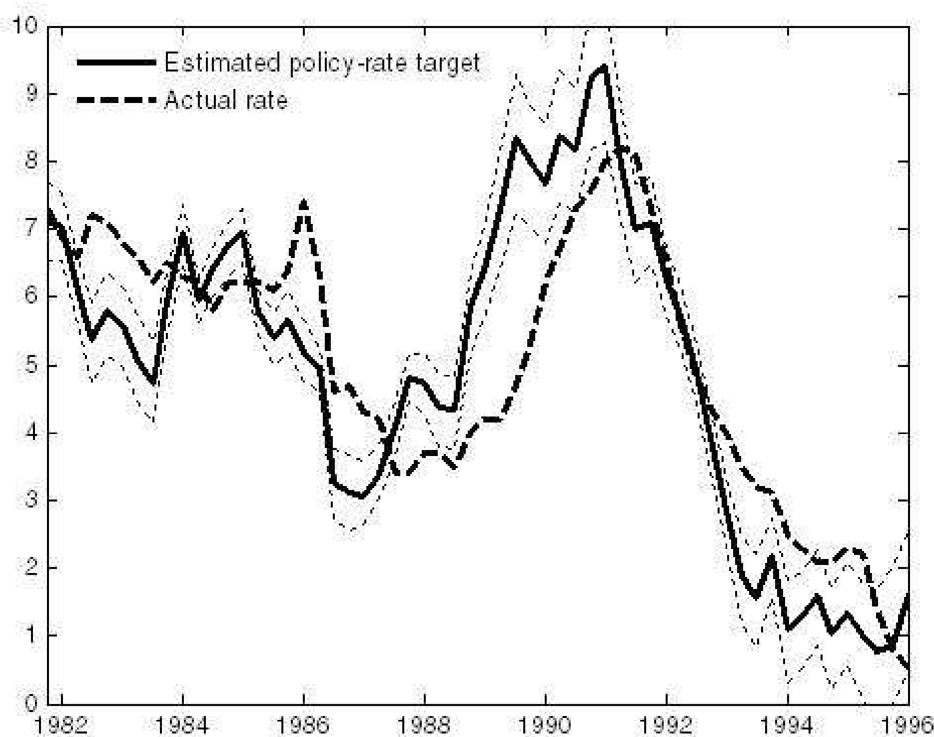
New research on the value of "room to cut"

Oliver Blanchard, IMF Chief Economist, and his colleagues recently suggested on this site that policymakers might consider a higher inflation target at around 4% (Blanchard et al. 2010). In an earlier paper (Leigh 2009), I examine whether a higher inflation target would have improved macroeconomic performance in Japan, where the policy rate hit the zero bound in the mid-1990s, and a "Lost Decade" followed. In particular, I conduct counterfactual simulations based on a standard dynamic stochastic general equilibrium model estimated using Japan data. The following three findings stand out from the analysis.

First, contrary to a widely-held view that the Bank of Japan made extraordinary

policy errors in the early 1990s, the model estimates suggest that the Bank of Japan followed a conventional Taylor-type reaction function with a strong emphasis on inflation stabilisation, and an implicit inflation target of about 1%. There was thus nothing unorthodox about Japan's interest-rate policy. Figure 1 plots the actual policy rate along with the estimated Taylor-type reaction function, showing that the actual rate followed the rate prescribed by the model in the early 1990s.

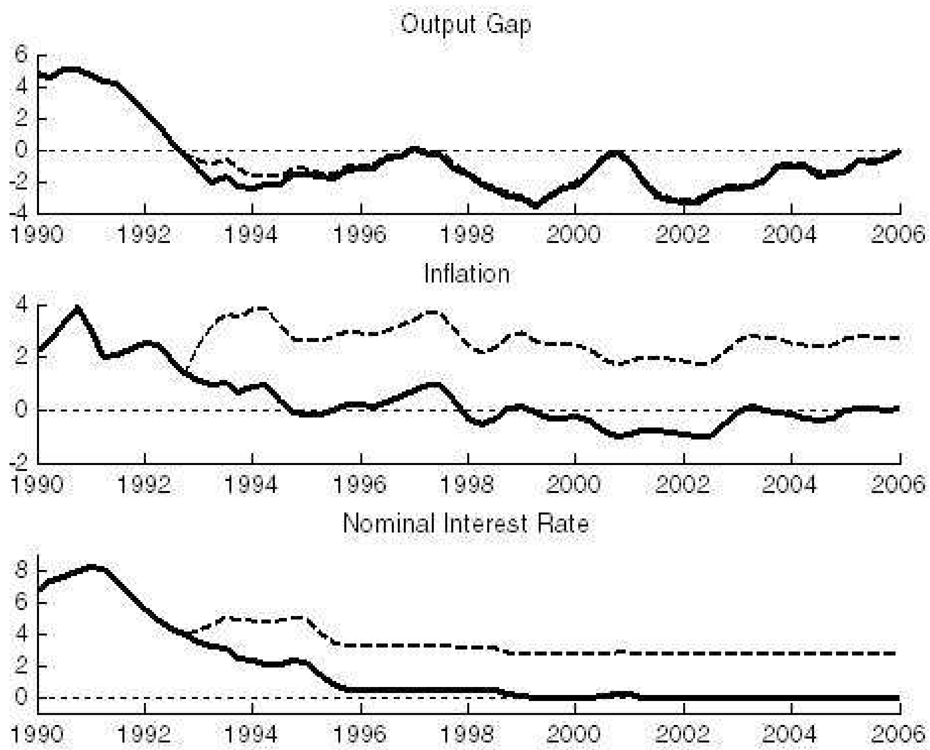
Figure 1. Japan: Estimated policy-rate target and actual policy rate



Note: Fine dashes indicate 95-percent confidence bands.

Second, counterfactual simulations suggest that an inflation target of 4% would have allowed the Bank of Japan to avoid the zero lower bound on nominal interest rates. But merely having more room for rate cuts would not have yielded much improvement in output performance. Without a strong output-stabilisation objective, the additional margin for interest rate cuts would not have been fully used. The higher inflation target raises inflation expectations in this model, but the associated improvement in output is short-lived (Figure 2).

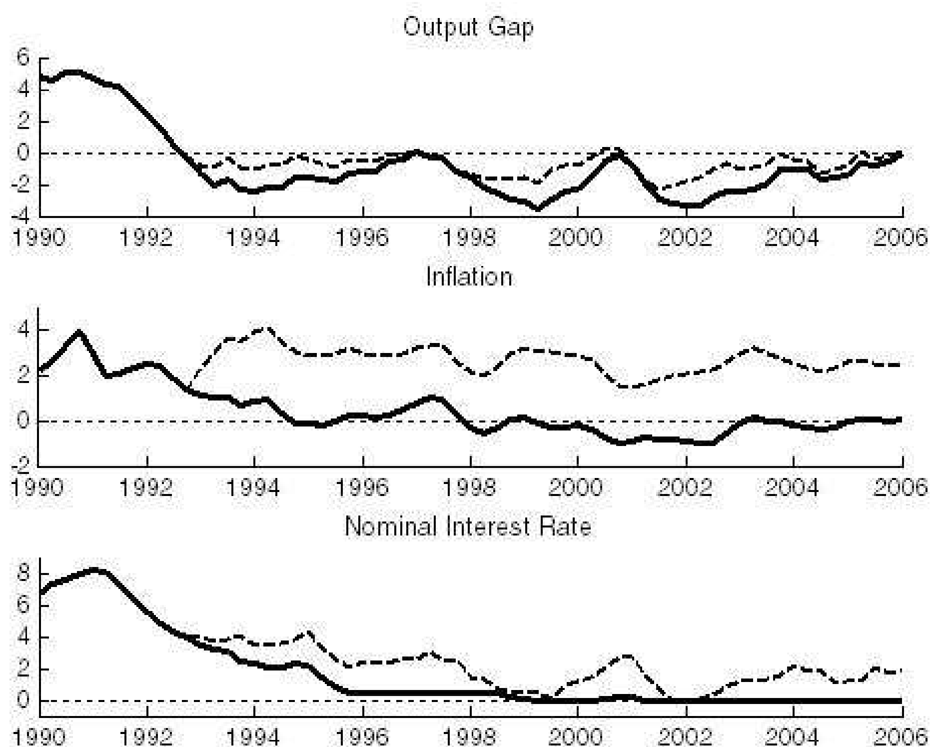
Figure 2. Japan: 4% inflation target (actual and counterfactual performance)



Note: Figure reports actual path (solid line) of output gap, inflation, and interest rate, and simulated counterfactual path (dashes).

Finally, there is evidence that a policy that combines a higher inflation target with a vigorous response to output would have substantially improved the economy's performance. In particular, the simulation results suggest that such a policy would have reduced Japan's output losses during the "Lost Decade" by half (Figure 3).

Figure 3. Japan: 4% inflation target and stronger output response (actual and counterfactual performance)



Note: Figure reports actual path (solid line) of output gap, inflation, and interest rate, and simulated counterfactual path (dashes).

What lessons from Japan's experience in the 1990s for today's policymakers?

How can monetary policy help to avoid a new "Lost Decade"? For central banks operating in economies that have similar structures to the Japanese economy, and are vulnerable to similar types of shocks, the analysis suggests two important policy changes.

- First, the inflation target should be raised to provide a greater margin for rate cuts.

My analysis has focused on a 4% target, which is substantially higher than the current norm in advanced countries, but well below what would generally be considered costly. Here, it is worth pointing out that Paul Volcker, the conservative former Chairman of the Federal Reserve, "declared victory" once inflation stabilised at around 4% in the early 1980s (Tobin 2002).

- Second, however, a more activist approach to output stabilisation is required.

This suggests that broadening the mandate of central banks to allow them to also respond explicitly to output would help to avoid a new "Lost Decade."

In the meantime, Japan faces the challenge of containing a surge in deflationary pressure after a decade of low-level deflation, which is arguably a

more involved policy issue.

Disclaimer: The views expressed in this article are the sole responsibility of the author and should not be attributed to the International Monetary Fund, its Executive Board, or its management.

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