

Available online at www.sciencedirect.com



J. Japanese Int. Economies 20 (2006) 364-379

Journal of THE JAPANESE AND INTERNATIONAL ECONOMIES

www.elsevier.com/locate/jjie

Effectiveness of state-contingent monetary policy under a liquidity trap ☆

Ippei Fujiwara^{a,*}, Naoko Hara^a, Kentaro Yoshimura^{a,b}

^a Bank of Japan ^b MIT Sloan School of Management Received 15 December 2005; revised 16 May 2006 Available online 2 August 2006

Fujiwara, Ippei, Hara, Naoko, and Yoshimura, Kentaro—Effectiveness of state-contingent monetary policy under a liquidity trap

Recent economic developments in Japan suggest that there is a growing interest in how monetary policy should be conducted under low inflation and nominal interest rates. In this paper, we first confirm the effectiveness of conventional wisdom against a liquidity trap, namely taking aggressive responses around the zero bound and variant of price level targeting so that it can intensify the policy duration effect, in the large scale dynamic general equilibrium model, the JEM (Japanese Economic Model). We then show that the optimal tangible policy rules around the zero bound are possibly state-contingent at the same time. *J. Japanese Int. Economies* **20** (3) (2006) 364–379. Bank of Japan; MIT Sloan School of Management. © 2006 Elsevier Inc. All rights reserved.

JEL classification: E52; E58; E61

Keywords: Monetary policy; Zero bound of nominal interest rates

1. Introduction

Recent economic developments in Japan suggest that there is a growing interest in how monetary policy should be conducted under low inflation and nominal interest rates. Although various

Corresponding author.

0889-1583/\$ – see front matter © 2006 Elsevier Inc. All rights reserved. doi:10.1016/j.jjie.2006.05.003

 $^{^{*}}$ The views expressed in this paper should not be taken to be those of the Bank of Japan nor any of its respective monetary policy or other decision making bodies. Any errors are solely the responsibility of the authors.

E-mail addresses: ippei.fujiwara@boj.or.jp (I. Fujiwara), naoko.hara@boj.or.jp (N. Hara), kyoshimura@sloan.mit.edu (K. Yoshimura).

different approaches have been taken to identify monetary and/or fiscal policy strategies able to reduce the economic burden imposed by the zero lower bound, the end prescription of all these approaches is always similar: namely, to increase expected inflation and lower expected future interest rates.¹ Achieving this may not be very difficult in a theoretical rational expectation model. but finding a credible means of doing so in practice is a whole new ball game. Among several proposed solutions, the conventional wisdom seems to be that the central bank should commit to lower future rates through some variation on price-level targeting. Indeed, the policy of the Bank of Japan seems to subscribe broadly to this line of thinking of committing future monetary policy. On March 19, 2001, the Monetary Policy Meeting of the Bank of Japan released the "new procedures for money market operations and monetary easing." It was stated that the new procedures for money market operations would continue to be in place until the year-on-year change in the core consumer price index (excluding perishables, on a nationwide basis) registers stably zero percent or higher."² The "new procedures for money market operations" marked, of course, the adoption of the quantitative easing policy, namely the switching of the operating target for money market operations from the uncollateralized overnight call rate, which was to be maintained close to zero, to the outstanding balance of current accounts at the Bank of Japan.³ It may reasonably be concluded that the quantitative easing policy has been successful in flattening the yield curve and therefore boosting the economy to some extent. This policy is sometimes referred to as a policy-intensifying "policy duration effect." According to Okina and Shiratsuka (2003), "Even though short term interest rates decline to virtually zero, a central bank can produce further easing effects by a policy commitment. A central bank can influence market expectations by making an explicit commitment as to the duration it holds short-term interest rates at virtually zero. If it succeeds in credibly extending its commitment duration, it can reduce long-term interest rates. We call this mechanism the 'policy duration effect,' following Fujiki and Shiratsuka (2002)." In this paper, we first reconfirm the effectiveness of the conventional wisdom, namely taking aggressive responses around the zero bound and variant of price level targeting so that it can intensify the policy duration effect using our large-scale dynamic general equilibrium model, the JEM: Japanese Economic Model.

We then show that the optimal tangible policy rules around the zero bound are possibly statecontingent at the same time. As stressed in Eggertson and Woodford (2003), Svensson (2001, 2003b) and Jeanne and Svensson (2004), it is of great importance for the central bank to commit to a certain policy scheme, especially to some forms of price-level targeting, in a liquidity trap. At the same time, the central bank needs to consider the balance between invulnerability and intelligibility in commitment since the dimension of uncertainty is higher than usual.⁴ Therefore, the mere adoption of price level target may not be enough for an economy to reach the normal state. Considering the non-linearity in a dynamic system caused by the zero bound, it is highly

 $^{^{1}}$ For details on the studies on the liquidity trap caused by the zero nominal interest rate bound, see Svensson (2003a) and Fujiwara et al. (2005a).

 $^{^2}$ In this sense, since the BOJ requires stable positive inflation, this policy can be considered a variant of a history-dependent monetary policy.

³ Although it has not experienced a liquidity trap, the Federal Reserve Board also took a similar strategy. The potential harm of deflation as a "current and present danger" since the early phase of the recent recession has been recognized by the Federal Reserve Board. A Federal Open Market Committee (FOMC) statement released on August 12, 2003, runs as follows: "In these circumstances, the Committee believes that policy accommodation can be maintained for a considerable period."

⁴ This point is analyzed in our accompanying paper, Fujiwara et al. (2005a).

دريافت فورى 🛶 متن كامل مقاله

- امکان دانلود نسخه تمام متن مقالات انگلیسی
 امکان دانلود نسخه ترجمه شده مقالات
 پذیرش سفارش ترجمه تخصصی
 امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
 امکان دانلود رایگان ۲ صفحه اول هر مقاله
 امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
 دانلود فوری مقاله پس از پرداخت آنلاین
 پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات
- ISIArticles مرجع مقالات تخصصی ایران