Available online at www.sciencedirect.com
ScienceDirect
Journal of Monetary Economics 54 (2007) 2521–2533
Journal of MONETARY ECONOMICS
www.elsevier.com/locate/jme

Does inflation targeting really make a difference? Evaluating the treatment effect of inflation targeting in seven industrial countries☆

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Received 4 July 2006; received in revised form 27 May 2007; accepted 7 June 2007
Available online 20 June 2007

Abstract

We evaluate the treatment effect of inflation targeting in seven industrial countries that adopted this policy in the 1990s. To address the self-selection problem of policy adoption, we make use of a variety of propensity score matching methods recently developed in the treatment effect literature. Our results show that inflation targeting has no significant effects on either inflation or inflation variability in these seven countries. Further evidence from long-term nominal interest rates and income velocity of money also supports the window-dressing view of inflation targeting.

JEL classification: E4; E5

Keywords: Inflation targeting; Inflation; Propensity score matching

1. Introduction

Inflation targeting has become a popular framework for the conduct of monetary policy since the early 1990s. Compared to other targeting regimes (e.g., monetary or exchange rate targeting), inflation targeting features an explicit target for inflation and greater

☆The authors would like to thank Editor Robert G. King, an anonymous referee, and Kevin Grier for valuable comments. Any remaining errors are ours.
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0304-3932/$ - see front matter
doi:10.1016/j.jmoneco.2007.06.017

emphasis on central banks' transparency, credibility, and accountability in conducting monetary policies. Proponents of inflation targeting have claimed many benefits of adopting this policy, chief among which is that it helps to alleviate the dynamic inconsistency problem, and thus should lead to lower (expectations of) inflation and inflation variability.[1] The fact that targeting countries experienced lower inflation and inflation variability after adopting inflation targeting is often used as strong evidence for this framework. On the other hand, opponents argue that inflation targeting is merely conservative window dressing.[2] In their view, what actually led to the lower inflation in these targeting countries was their decision to aim for lower inflation than in earlier periods and their corresponding efforts. They argue that inflation targeting, per se, contributed very little, if anything, to the lower inflation and inflation variability, and point to evidence that non-targeting countries have also experienced lower inflation and inflation variability since the mid-1980s.

This debate is ultimately an empirical issue. Early empirical studies in the literature often apply time series techniques to country case studies and provide mixed results.[3] Recent cross-country studies in the literature include Johnson (2002) and Ball and Sheridan (2003). Johnson (2002) examines the effect of inflation targeting on the behavior of expected inflation in a panel of 11 industrial countries. He finds mixed results: the level of expected inflation in targeting countries does fall after the announcement of targeting, but neither the variability of expected inflation nor the average absolute forecast errors fall after targeting. Ball and Sheridan (2003) investigate the influence of inflation targeting on economic performance in 20 industrial countries. Using cross-section regressions, they show that the beneficial effect of inflation targeting is insignificant.

In this study, we use a new data set and a new methodology to evaluate the treatment effect of inflation targeting in seven industrial countries that adopted this policy in the 1990s. We make two important contributions to the literature. First, our study employs the most comprehensive data set to examine this issue, covering 22 industrial countries over the period 1985–1999. Second, and perhaps more importantly, we make the first attempt in the literature to formally address the self-selection problem of policy adoption by making use of a variety of propensity score matching methods recently developed in the treatment effect literature.

Our main result is that inflation targeting has no significant beneficial effects on targeting countries' inflation or inflation variability. The estimated treatment effects of inflation targeting on long-term nominal interest rates and income velocity of money are also found to be insignificant in targeting countries. The overall evidence lends strong support to the window-dressing view.

The rest of our study is organized as follows. Section 2 describes our data set. Section 3 discusses the methodology we use to evaluate the treatment effect of inflation targeting. Section 4 reports our empirical results on inflation and inflation variability. Additional evidence from long-term nominal interest rates and income velocity of money is presented in Section 5. Section 6 offers our conclusions.

[1] See Bernanke et al. (1999), Svensson (1997), and Mishkin (1999).

[2] This argument is due to Anna Schwartz. See Romer (2006, p. 532).

[3] See Ammer and Freeman (1995), Mishkin and Posen (1997), Groenveld (1998), and Kuttner and Posen (1999).