The impact of central bank independence on the performance of inflation targeting regimes☆

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ABSTRACT

This paper examines the effects of inflation targeting on inflation in both advanced and emerging economies. We do not detect significant effects in advanced economies and only find small benefits in emerging economies, in line with previous studies. However, when we differentiate the impact of inflation targeting based on the degree of central bank independence, we find large effects in emerging economies with low central bank independence. Our results therefore suggest that central bank independence is not a prerequisite for countries to experience significant declines in inflation following the adoption of inflation targeting. Furthermore, we provide evidence that one channel through which inflation targeting lowers inflation more in countries with low central bank independence is the reduction of budget deficits following the adoption of an inflation target.

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1. Introduction

A growing number of countries have adopted inflation targeting (IT) as a monetary policy strategy. This trend began in the early 1990s with a handful of advanced economies. By the mid-

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1990s, several more industrial countries followed suit, and by the late 1990s and early 2000s, central banks in emerging economies began adopting IT. By 2006, the count was 8 advanced economies and 13 emerging market countries (Batini and Laxton, 2007). Central banks that implemented this new monetary policy framework did so because of the perceived benefits. These include achieving lower inflation and inflation variability, while retaining enough flexibility to respond to macroeconomic shocks and the ability to stabilize output. Emerging market countries in particular were searching for a nominal anchor that did not have the instability associated with fixed exchange rate regimes.

As the number of countries that have adopted IT has grown, so too has the literature attempting to determine empirically the effects of IT on average inflation, inflation volatility, average growth, and growth volatility. Early studies focused on industrial countries (c.f. Ball and Sheridan, 2005) and, in general, found only weak evidence that IT improves macroeconomic performance. More recent studies include emerging economies and tend to find stronger evidence of positive effects (Batini and Laxton, 2007; Gonçalves and Salles, 2008; Lin and Ye, 2009; Mishkin and Schmidt-Hebbel, 2007). However, Brito and Bystedt (2010), using the GMM systems estimator as opposed to the commonly used difference-in-differences estimator employed in Ball and Sheridan (2005), obtain somewhat different results. They find weaker support for the effect of IT on average inflation, inflation volatility, and growth volatility and provide evidence that average growth is lower under IT. Surveying the literature, Ball (2010) states that the evidence of beneficial effects of IT in emerging economies, while stronger than in advanced countries, is not yet conclusive.

In this paper, we attempt to explain the lack of strong evidence by arguing that not all emerging economies are the same and that IT may work better in some than others. In particular, central banks differ in their degree of central bank independence (CBI), and this may interact with an IT regime to produce different macroeconomic outcomes. It is possible, therefore, that when this distinction is not made, conclusive results for the effects of IT in a subset of countries are weakened by the inclusion of countries for which IT has no effect.

There are opposing views on whether CBI makes an IT regime more or less effective. On the one hand, central bank autonomy may be a precondition for successful IT (Mishkin, 2000, 2004; Eichengreen et al., 1999; Freedman and Ötker-Robe, 2010). For example, IT might not work in achieving low inflation if central banks can be pressured by politicians to lower unemployment or to monetize large fiscal deficits. Similarly, low CBI may imply that other preconditions are missing as well. These include priority of the inflation target as the objective of monetary policy, absence of fiscal dominance, limited liability dollarization, financial development, and effective central bank communication, transparency, and accountability (Batini and Laxton, 2007; Freedman and Ötker-Robe, 2010).[1] In this case, IT should be less effective in low CBI environments. We refer to this as the "precondition effect."

However, there is disagreement about whether these preconditions are in fact prerequisites for successful IT as opposed to simply desirable features to have in place. Certainly most would agree that these elements make any monetary regime more successful. Furthermore, the argument has been made that IT may promote the development of some of these features (Batini and Laxton, 2007; Freedman and Ötker-Robe, 2009; Mishkin, 1999). Therefore, IT may be more successful relative to other monetary regimes when these elements are lacking and there is ample room for improvement. To the extent that these elements are lacking in countries with low CBI, we might expect to see larger effects of IT in low CBI countries. We refer to this as the "improvement effect" of low CBI. In contrast, when these features are already present, there may be little for IT to improve upon.

As another example of this effect, low CBI may imply weak central bank credibility and unanchored inflation expectations, suggesting that IT can have a large impact (Bernanke et al., 1999; Mishkin, 1999; Svensson, 1997), whereas if a central bank has credibility, it does not need the credibility and anchoring of inflation expectations that comes with IT (Ball, 2010; Gonçalves and Salles, 2008). Again, we would expect to see stronger effects of IT in countries without independent central banks.

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[1] We discuss later other preconditions that CBI may be correlated with but is less likely to have a causal effect on.