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Can inflation targeting regimes be effective in developing countries? The Turkish experience

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ABSTRACT

This paper examines the performance of Turkey's inflation targeting (IT) experience. We find the IT regime to be an effective framework. Our judgment is based on three broad conclusions supported by empirical analyses. First, fiscal stability is an effective tool for a successful monetary policy. Second, the overnight policy of the Central Bank of Turkey rate is a significant determinant of the changes in market lending rates, which is the preliminary step in the monetary transmission mechanism. Third, recent developments on the broader issue of the effectiveness of interest rate policy in controlling inflation through aggregate demand management and through other channels are encouraging. Based on our findings, we argue that the impact of policy rate changes on economic activity and inflation have become more predictable and changed in the direction in line with theory, improving the transmission capacity of monetary policy.

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1. Introduction

For an inflation targeting (IT) regime to work, a central bank needs to be able to set its monetary instrument so as to steer inflation towards the announced target, and the connection between the two is the monetary transmission mechanism. There is little doubt that the stronger the transmission links are and the better they are understood, the more effective will be the IT policy framework in delivering and maintaining lower levels of inflation while ensuring sustainable growth. Understanding the transmission channels of monetary policy is important for achieving further gains in disinflation and the maintenance of price stability going forward.

The main objective of this paper is to examine the dynamics of the monetary transmission process in Turkey under the IT framework. In 2002, the Central Bank of Turkey (CBT) introduced an implicit inflation targeting (IIT) framework. Succesful disinflation and progress in the policy environment led to the introduction of full-fledged IT in 2006. Turkey's IT experience is important for several reasons. First, during the pre-IT period, Turkey had a high level of public debt, a very high inflation rate, high pass-through, backward-looking pricing, and a weak banking system. For example, at the end of 2001, inflation was 68%, and public debt reached 90% of GDP, causing severe fiscal dominance.[1] Second, the Turkish economy has been highly dollarized. Investigating the experience of Turkey is therefore important to draw important policy lessons based on her

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[1] See Kara and Ogunc (2004) and Ersel and Ozatay (2008) for a discussion of exchange rate pass-through and fiscal dominance issues, respectively.

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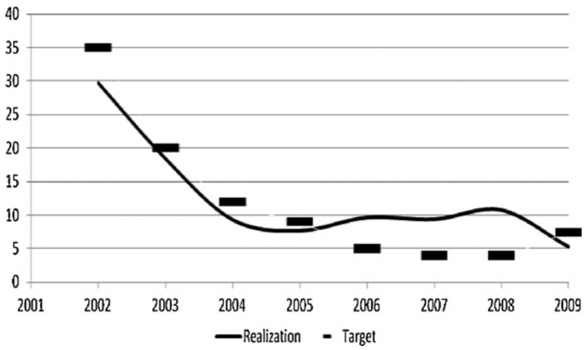

Fig. 1. Inflation target and realization.
Central Bank of Turkey.

experience during both implicit inflation targeting and full-fledged IT regimes. Third, evidence on the effectiveness of inflation targeting mainly comes from developed countries.[2] Experience of some developing and emerging markets that have adopted a regime of inflation targeting has also been investigated.[3] However, to our best knowledge, there is no comprehensive evidence on the effectiveness of inflation targeting regime in Turkey, and her experience may provide valuable lessons for other developing and emerging economies. Fourth, Turkey is a candidate for the European Union membership, and some member states of the Union have already adopted inflation targeting regimes.[4] Finally, inflation targeting is consistent with the Maastricht criteria for joining the European Monetary Union; if Turkey can conduct an effective IT regime, this can help her also satisfy the inflation criteria (Akyurek & Kutan, 2008).

This paper is organized as follows. Section 2 provides a short discussion of the path of interest rates and identifies the main drivers of policy changes seen under the new framework including a presentation of main arguments with the help of a simple Taylor Rule framework. Section 3 provides an empirical analysis of the effects of interest rate policy on key economic variables. As such, Section 3.1 presents an empirical analysis of interest rate pass-through from policy rate changes to commercial lending rates. Section 3.2 takes on the broader issue of monetary transmission and looks at whether the data suggest the existence of a plausible transmission from short-term policy rates to inflation and to level of economic activity. The performance of the IT regime during the recent global crisis is evaluated in Section 4. Concluding remarks are presented in Section 5.[5]

2. Interest rate policy

2.1. Path of policy rates

The CBT's interest rate policy helped to guide inflation from 70% at year end-2001 to 5.56% by year end-2009.[6] In due course, CPI year-end inflation actually fell below targets over the period 2002–2005 but was above them for 2006–2008, while 2009 was again below the target (Fig. 1). Along the way, successive policy rate cuts by the CBT brought the overnight interest rate from 59% to 13.75% over the first 48 months and 7% over the next 48 months. For most of the period, it seemed that the pace of CBT's nominal policy rate changes had more or less reflected the pace of decline in inflation expectations, as rate cuts appeared to be more aggressive at times of sharper decline in the credibility gap (inflation expectations less target path) and more passive (smaller cuts and occasional pause) during slow or no convergence of inflation expectations (see Fig. 2).

Four factors in particular seemed to have complicated interest rate policy in the environment of floating exchange rates and IT. First, the vulnerability of public sector debt required excellent coordination between fiscal policy and interest rate policy. When markets are concerned about public sector debt rollover, policy rate changes can have a powerful unconventional impact on expectations. As such, if rates are increased or cuts are delayed, the markets become concerned

[2] Recent studies include Dodge (2002), Johnson (2002), and Carare and Stone (2006).
[3] For individual country experiences, see Brash (2002) for the New Zeeland; Torres (2003) for Mexico. Amato and Gerlach (2002) provide evidence from many developing countries and emerging markets. More recently, Gonçalves and Salles (2008) provides evidence from 36 emerging markets and they find that those countries followed an IT regime did have a better economic performence than those that did not. Siklos (2008) examines the experince of 29 inflation and noninflation targeting countries, including both industrial and emerging market economies. An important finding is that IT regime may not be fragile in emerging market economies.
[4] Following studies focus on the experience of the new member states: Amato and Gerlach (2002), Siklos and Abel (2002), Golineli and Rovelli (2005), Orlowski (2005), and Holub and Hurnik (2008). In a recent study, Yilmazkuday (2008) finds that the introduction of an IT regime is observed in the estimated Taylor rules for some of the member states, namely, the Czech Republic and Poland.
[5] Some analysis in this section draws on Akyurek and Kutan (2008).
[6] For a policy analysis of the pre-2001 crisis period in Turkey, see Akyurek (2006).