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Flexible inflation targets, forex interventions and exchange rate volatility in emerging countries

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A B S T R A C T

Emerging economies with inflation targets (IT) face a dilemma between fulfilling the theoretical conditions of “strict IT”, which imply a fully flexible exchange rate, or applying a “flexible IT”, which entails a *de facto* managed-floating exchange rate with foreign exchange (forex) interventions to moderate exchange rate volatility. Using a panel data model for 37 countries we find that, although IT lead to higher exchange rate instability than alternative regimes, forex interventions in some IT countries have been more effective to lower volatility than in non-IT countries, which may justify the use of “flexible IT” by policymakers.

1. Introduction

Since New Zealand adopted an inflation target (IT hereafter) in 1990, an increasing number of countries have implemented this monetary policy framework. According to IMF (2005) and Little and Romano (2009), 18 emerging countries (EMEs onwards) have changed their exchange rate regime, from fixed to floating, and their nominal anchor, from exchange rate to inflation. See Table 1 for a summary of IT adoption dates in EMEs. Although the effectiveness of IT to lower the inflation level and volatility still remains controversial,[1] this framework has been more durable than other monetary policy strategies (Mihov and Rose, 2008). One of the main reasons for this is that IT countries have benefited

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[1] See Ball and Sheridan (2005) or Brito and Bystedt (2010) for some empirical evidence against the positive role of IT in developed and emerging countries, respectively.

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Table 1
Adoption date of the formal IT in emerging markets and current target. Sources: IMF (2005), Little and Romano (2009) and national sources.

	IT adoption date	Point target (%)	Target range (%)
Israel	Jun. 1997	None	1–3
Czech Republic	Jan. 1998	3.0	±1.0
South Korea	Apr. 1998	None	3.5–4.0
Poland	Jan. 1999	2.5	±1.0
Brazil	Jun. 1999	4.5	±2.0
Chile	Sep. 1999	3.0	±1.0
Colombia	Sep. 1999	None	2–4
South Africa	Feb. 2000	None	3–6
Thailand	May 2000	None	0–3.5
Mexico	Jan. 2001	3.0	±1.0
Hungary	Jul. 2001	3.0	±1.0
Peru	Jan. 2002	2.0	±1.0
Philippines	Jan. 2002	None	4–5
Slovak Republic	Jan. 2005	None	None
Indonesia	Jul. 2005	5.0	±1.0
Romania	Aug. 2005	3.5	±1.0
Turkey	Jan. 2006	7.5	±2.0
Ghana	May 2007	None	6–8

Source: IMF (2005) and Little and Romano (2009); current IT point target and range target also obtained from national sources. Slovak Republic became non-IT in January 2009 after Euro adoption.

from the credibility gains from explicitly announcing the target, which helped to anchor and lower inflation expectations (Mishkin and Schmidt-Hebbel, 2007).[2]

A flexible nominal exchange rate constitutes, at least from a theoretical standpoint, a requirement for a well functioning full-fledged IT regime (Mishkin and Savastano, 2001). Its rationale is based on the policy dilemma of the "impossibility of the Holy Trinity", as in a context of capital mobility, an independent monetary policy cannot be combined with a fixed exchange rate or a peg to another currency through interventions in the foreign exchange markets (forex interventions onwards); see Obstfeld et al. (2005). Some economists state that one of the costs of IT is precisely the higher volatility of exchange rates as a result of the floating exchange rate regime, which can entail negative effects of particular relevance for EMEs given their greater financial and real vulnerabilities (Cavoli, 2009). In fact, this is the basis of the "fear of floating" (Calvo and Reinhart, 2002), which is a phenomenon mostly associated to EMEs.[3] Accordingly, during economic booms EMEs also experience "fear of appreciation" given their concerns for their loss of competitiveness (Levy-Yeyati and Sturzenegger, 2007).

Thus, exchange rate monitoring under IT poses some challenges for EMEs that differ from those in advanced economies. This might justify the more active role of their exchange rate policies, particularly in those countries where the exchange rate has previously played a key role as nominal anchor, despite the theoretical reservations about it. Consequently, in practice, EMEs with IT generally have less flexible exchange rate arrangements, intervene more frequently in foreign exchange markets than their advanced economy counterparts and have a greater response to real exchange rate movements (see Aizenman et al., 2008; Chang, 2008).[4]

This adaptive way of implementing IT, also known as "flexible IT", has generated an intense debate about its validity and viability in EMEs, compared with "strict or pure IT", where the exchange rate does

[2] This effect is even stronger in EMEs, as their initial credibility is lower than that of developed countries (Gonçalves and Salles, 2008).

[3] According to Cavoli (2009), the main reasons to justify the "fear of floating" are: (i) trade contraction—higher exchange rate volatility will discourage other countries to engage trade—; (ii) a higher pass-through from exchange rate to domestic prices in EMEs than in developed countries; and, (iii) balance sheet effects provoked by currency mismatches (liability dollarization).

[4] In contrast to EMEs, the most common reason to perform forex interventions in IT advanced economies is to correct an exchange rate misalignment (Stone et al., 2009). In EMEs, there are other reasons to intervene, apart from moderating the exchange rate volatility (for instance, to influence on the exchange rate or to accumulate reserves).