Inflation targeting and the exchange rate: Does it matter in Turkey?

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Abstract

This paper investigates the monetary policy reaction functions of the Central Bank of Republic of Turkey (CBRT) over the periods 1987:01–2001:12 and 2002:01–2009:05. We specifically attempt to shed light on question to what extent exchange rate developments still continue to influence monetary policy, even under inflation targeting. This study seeks to investigate how the monetary policy responded to the exchange rate shocks before and after adoption of inflation targeting regime. How large the effect of exchange rate shocks is accounted for in forecast error variances decompositions for monetary policy as compared to other shocks? Using the VAR model, this study shows that there has been strong pass-through during whole period. Moreover, in the postcrisis period, exchange rate has been the main reaction variable for the CBRT.
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1. Introduction

For decades the exchange rate was at the centre of macroeconomic policy debated in emerging markets. In many countries the nominal exchange rate was often used as a nominal anchor to bring down inflation. During the 1990s academic and policy makers debated of the alternative exchange rate regimes for emerging economies. Many authors argued that emerging countries should have rigid exchange rate regimes because of "fear of floating" (see Calvo (1999) and Calvo

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and Reinhart (2002)). After the currency crushes of 1990s and early 2000s, however, growing number of emerging economies moved away from rigid exchange rate and adopted a combination of flexible exchange rates and inflation targeting. As a consequence of this move the exchange rate has become less vital issue in economic policy debate in most of the emerging markets. This, however, does not mean that the exchange rate has disappeared from policy discussion. The combination of inflation targeting and flexible exchange rates has brought to the centre of the debate a host of new policy issues such as the role of exchange rates in monetary policy.

Most of the inflation targeting central banks do not openly recognize that they explicitly take into account exchange rate developments when conducting monetary policy. Indeed, if pressed, most inflation targeting central bankers would go as far a saying that since exchange rate changes tend to affect inflation, they play a role on monetary policy. However, they would be reluctant to acknowledge that the exchange rate plays a direct role of its own in the monetary policy rule itself (see Edwards, 2007). In fact, the relationship between monetary policy and the exchange rates is a country specific empirical question that should be dealt with by analyzing country specific evidences.

This paper looks at an important policy issue by analyzing to what extent the Central Bank of the Republic of Turkey (CBRT) targeted exchange rate developments during 1987–2009 periods. Turkey has undergone important change in her monetary policy regimes; Turkey shifted from some form of intermediate exchange rate regime (before 2002) to implicit inflation targeting (2002–2005) and finally formal inflation targeting started in 2006. We specifically attempt to shed light on question to what extent exchange rate developments still continue to influence monetary policy, even under inflation targeting. Using the VAR models, this study seeks to investigate how the monetary policy responded to the exchange rate shocks before and after adoption of inflation targeting regime. How large the effect of exchange rate shocks is accounted for in forecast error variances decompositions for monetary policy as compared to other shocks? These questions are of substantial policy relevance for several reasons. Finding answers to the questions would allow us to gain a better understanding whether there has been fear of floating in Turkey, i.e., whether the CBRT really stick to their officially announced policy regimes.

The remainder of the paper organized as follows. In the next section, we provide a brief history of Turkish monetary policy since 1990. In Section 3, we introduce a simple conceptual framework in which to analyze empirically the question of interest. The conceptual framework is constituted of a monetary policy reaction function under different policy regimes. In essence, the final model is Taylor rule-type reaction function augmented by an exchange rate. This section of the paper shows how a Taylor rule function can be combined with a monetary condition index regime as well as exchange rate targeting regime in to a single central bank reaction function. Section 4 presents VAR models for analysis of the effects of monetary policy in Turkey. The final section concludes.

2. The Turkish monetary policy

The Central Bank of the Republic of Turkey (CBRT) has put into operation several monetary programs to reduce high inflation and to achieve stability in the financial markets. In early 1990s, CBRT implemented monetary programs, targeted different items of its balance sheet or monetary aggregates with or without declaring to public. Although programs aimed at controlling inflation, monetary policy dominated by the public sector borrowing requirement, the credit advanced to government constituted a major item in the Bank's balance sheet (Berument and Malatyalı, 2000; Ozatay, 2000). The expansion of credit to the public sector forced to monetary authority to leave