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Monetary policy and interest rates: evidence from Mexico

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Abstract

Using the recent experience of Mexico under a flexible exchange-rate regime and under an inflation-targeting framework, this paper examines the extent to which monetary policy has performed the role of nominal anchor for the Mexican economy. The paper identifies a set of variables together with a monetary policy rule, which offer a good approximation to the process through which interest rates are determined. The evidence suggests that recent monetary policy in Mexico has been consistent with inflation-targeting principles and has become the nominal anchor for the economy.

JEL classification: E52; F33

Keywords: Monetary policy rules; Inflation targeting; Flexible exchange rates

1. Introduction

This paper analyzes the process through which interest rates are determined in Mexico. The purpose is to formally test whether under the current flexible exchange-rate regime and inflation-targeting framework, monetary policy has served as nominal anchor for the economy. Using the framework of monetary policy rules, this paper analyzes the process through which interest rates are determined in the Mexican economy. The analysis identifies a set of variables that, combined with a monetary policy rule, offer a good approximation to the process through which interest rates are determined.

One of the key differences between a regime in which the exchange rate is fixed and one in which it floats, is the role of monetary policy in the economy. In the first case, monetary policy is constrained by the exchange rate and its role is to support that rate. The authorities

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are responsible for price stability, and it is said that the exchange rate serves as the nominal anchor of the economy. Under a floating exchange-rate regime, on the other hand, monetary policy is not constrained by any rule and the monetary authorities are responsible for setting monetary policy in order to achieve price stability. In this case, monetary policy plays an important role in providing the nominal anchor of the economy.

At the end of 1994, Mexico abandoned the fixed exchange-rate regime and adopted a flexible rate. The transition was anything but smooth, since the Mexican economy experienced a major financial crisis throughout 1995. As expected, the crisis impaired the credibility of Mexican financial and monetary institutions and thus made it more difficult for the Bank of Mexico to establish monetary policy as the nominal anchor of the economy. Over the years, however, monetary policy has evolved toward an inflation-targeting framework, allowing financial stability to be enhanced and inflation to be reduced.

The recent Mexican experience is instructive for two reasons. First, it represents an emerging market economy under a flexible exchange-rate regime that has been able to reduce inflation from two-digit to one-digit levels. Therefore, if it can be shown that monetary policy has contributed to inflation reduction, then Mexico's experience suggests that fixed-rate regimes, with endogenous monetary policy, are not necessarily the only choice for emerging market economies faced with high inflation. It suggests that an independent monetary policy can help reduce inflation.

Second, in recent years, the instrumentation of monetary policy in Mexico has experienced major changes. After the 1995 crisis, instrumentation was focused primarily on intermediate targets such as domestic credit ceilings and a buildup of international reserves. Then, as economic conditions stabilized, instrumentation gradually shifted towards inflation-targeting principles. This process culminated in 2001, when the Bank of Mexico officially adopted a fully-fledged inflation-targeting framework. Thus, if monetary policy has effectively contributed to lower inflation, then this suggests that inflation-targeting in emerging market economies is a useful mechanism for imposing discipline on monetary policy and ensuring that it performs the role of nominal anchor of the economy.

The rest of the paper is organized in four sections. Section 2 reviews the literature on monetary policy rules and shows that under a flexible exchange-rate regime this framework is useful in analyzing the role of monetary policy as the nominal anchor of the economy. Section 3 specifies a baseline monetary policy rule and describes the estimation procedure. Results from the baseline exercise are presented in this section and are used to motivate the exercises in the following section. Section 4 specifies and estimates alternative monetary policy rules and tests the role of several variables in the process through which interest rates have been determined in Mexico. Section 5 concludes.

2. Analyzing monetary policy through monetary policy rules

A key question about the conduct of monetary policy is whether it should follow a particular rule or be discretionary. The current consensus is that rules are needed to prevent time-inconsistent discretionary policies from causing the problem of "inflation bias".[1]

[1] See Kydland and Prescott (1977), Barro and Gordon (1983), and Rogoff (1985).