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Central bank credibility and monetary policy in Indonesia

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Abstract

This paper examines the role of central bank credibility in achieving an inflation target and proposes monetary policy rules for Indonesia. Towards that end, we construct and estimate a forward-looking small scale macroeconomic model (SSMM) of the Indonesian economy by adapting the theoretical underpinnings of the well-known Batini–Haldane model, along with the Taylor policy rule. Our results indicate that it is crucial for the Indonesian central bank to bolster its credibility in order to achieve a lower inflation rate. The inflation–output volatility trade-off frontier we derived from the SSMM shows that a monetary policy rule that targets both inflation and output gaps will result in less macroeconomic volatility. We also found that the inclusion of the exchange rate into the rule as an additional feedback variable warrants consideration in the future course of monetary policy management.

JEL classification: C15; C51; E17; E52; O53

Keywords: Central bank credibility; Monetary policy; Indonesia; Small scale macroeconomic model; Policy frontier

1. Introduction

Indonesia, a country with a vast archipelago, has always been the subject of fascination by people in the world for her richness in cultural diversity, abundance of her natural resources, and the remarkable economic success achieved over the last few decades—setting aside the

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incidence of the Asian financial crisis in 1997. A country that has always amazed observers is now facing uncertainties regarding her future economic direction which makes her an intriguing case study for economic discussion, policy studies, and debates at international forums. After the inception of the so-called "new order" regime in 1966, Indonesia began to experience a period of sustained economic growth that lasted for about three decades. Not long after, however, this impressive economic growth was followed by sudden economic turmoil that was sparked off by the Asian financial crisis of 1997/1998. This episode has created major structural upheavals for the Indonesian economy, leading the country to undergo several major policy changes in the areas of the exchange rate system, debt restructuring, tighter bank regulation, and inflation targeting policies, *inter alia*.

Most notably, the conduct of monetary policy has changed. The exchange rate regime has been reformed from the long-standing managed floating system, which involves the gradual depreciation of the Rupiah *via* a crawling peg, into an essentially market-determined exchange rate system. Monetary policy is now aimed specifically at stabilizing medium-term inflation to promote sustained long-term economic growth (Bank Indonesia, 2003, 2004). At the same time, the objective of the new policy is to maintain the stability of the Rupiah *vis-à-vis* other foreign currencies in order to boost trade activities and minimize costly fluctuations. Another major reform in the conduct of monetary policy in the aftermath of the financial crisis was the enactment of the new central banking law in May 1999. This law gives full autonomy to the central bank, Bank Indonesia (BI), in designing, formulating, and implementing monetary policy – including the choice of monetary policy instrument and macroeconomic targets – in relation to achieving the goal of lowering the country's inflation rate. In sum, these changes have seen Indonesia move tentatively towards the implementation of inflation targeting.

In line with this new institutional framework and objective of monetary policy, our paper attempts to shed light on the role of central bank credibility in achieving the inflation target using a small scale macroeconomic model (SSMM) of the Indonesian economy. Central bank credibility is potentially critical for the formation of inflationary expectations. In other words, how people perceive the central bank and whether they believe it will be able to meet its inflation target or otherwise is likely to have a significant impact on economic outcomes. This important role of expectations is succinctly captured in our SSMM by the inclusion of forward-looking elements that make the analysis of central bank credibility much more robust to the Lucas critique of econometric policy evaluation. Since Indonesia has a long history of combating high inflation rates, we hope to contribute to a better understanding of the strategies available for achieving a low inflation rate.

The small scale model that we built can also be used for monetary policy analysis in general. Thus, we also study feasible monetary policy rules for Indonesia aimed at countering the effects of economic shocks and stabilizing the economy. Using such a rule as a guideline, the central bank can take appropriate policy actions to minimize inflation and output variability so as to bring about sustained economic growth. As Taylor (2000a) has asserted, a very high priority in emerging countries is to build and estimate macroeconomic models, and to evaluate policy rules in these models.

The rest of the paper is organized as follows. Section 2 discusses the structure of the Indonesian SSMM and the individual equations in the model. Section 3 presents the estimation results. Section 4 presents two sets of model simulation experiments. The first set describes the design and results of deterministic simulations to evaluate the role of central bank credibility. The second uses stochastic simulation to investigate the performance of alternative monetary policy rules. Finally, Section 5 discusses the policy implications of our findings.