Optimal Monetary and Fiscal Policy Analysis for Sri Lanka; a DSGE Approach

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Abstract

This paper provides welfare maximizing optimal monetary and fiscal policy rules for Sri Lanka, in a New Keynesian Dynamic Stochastic General Equilibrium (DSGE) model, closely following Schmitt-Grohe and Uribe (2007). A standard Taylor rule type monetary policy reaction function where the nominal interest rate responds to inflation deviations and output gap, and a fairly simple fiscal policy reaction function in which tax revenue depends on the level of total government liabilities are used. The deep structural parameters of the model are calibrated to the Sri Lankan economy. To conduct welfare analysis, equilibrium solutions to the model are approximated up to second order accuracy. The optimal solution coefficients for the policy reaction functions are determined such that the welfare associated with the optimal policy rules delivers virtually the same level of welfare associated with the Ramsey optimal allocation. The monetary and fiscal policy rules that are optimal within a group of implementable and simple rules are then proposed for the Sri Lankan economy.

JEL Classification: C6; E5; E6; H2; I3

Key words: Dynamic Stochastic General Equilibrium (DSGE) Models, Monetary Policy, Fiscal Policy, Calibration, Welfare.

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The author would like to thank Dr. Denny Lie and Dr. Aarti Singh of the University of Sydney, Australia for their guidance and support in completing this work, particularly in Matlab coding. The author is grateful to Dr. Nandalal Weerasinghe, Mrs. Swarna Gunaratne, Dr. (Mrs.) Yuthika Indraratna, Dr. (Mrs). Roshan Perera, Dr. Chandranath Amarasekara, Dr. (Mrs.) Hemantha Ekanayake, Dr. (Miss.) Sumila Wanaguru, Dr. Anil Perera, Mr. Sunil Ratnasiri, Mrs. Malkanthi Bandara, Mr. Udeni Thilakarathne, Mr. Lasitha Pathberiya, Mrs. Erandi Liyanage, Mrs. Ranmini Perera, Mr. Waruna Wikumsiri and Mr. Asanka Rubasinghe of the Central Bank of Sri Lanka for their encouragement and support extended in obtaining data/information. Finally the author wishes to thank the two anonymous referees, discussant of the paper Dr. (Ms.) Hemantha Ekanayake and other participants of the 7th Central Bank of Sri Lanka International Research Conference, 2014, for their valuable comments and suggestions. All remaining errors and omissions are, however, of my own.