HSS SEMINAR SERIES

BOND DURATION, QUANTITATIVE EASING, AND THE ZERO LOWER BOUND

A Behavioral New Keynesian Analysis

Quantitative Easing (QE) is a non-conventional monetary policy instrument whereby central banks exert direct influence on long-term interest rates through the targeted purchase of long-term securities, with the explicit objective of stimulating aggregate economic activity when the Zero Lower Bound (ZLB) is binding. For QE to be effective, it must be conducted via higher-duration long-term bonds, as the price sensitivity of returns is greater for the higher duration long-term bonds. The present study develops a Behavioral New Keynesian model to derive the optimal duration of long-term bonds and characterises its dependence upon the length of ZLB episodes across a range of fiscal-monetary interaction rules. The robustness of our theoretical findings is validated against United States data. We demonstrate that the absence of a monotonic relationship between bond duration and the duration of ZLB episodes carries substantive implications for the optimal policy design at the ZLB. This paper contributes to the growing literature on fiscal-monetary interactions under conditions of bounded rationality.

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Siddhartha Chattopadhyay is Associate Professor at the Department of Humanities and Social Sciences, IIT Kharagpur. He has done his M.A. in economics from the Delhi School of Economics and PhD in economics from the University at Albany, SUNY. He specialises in Monetary Economics and Econometrics. He has published research papers in the *International Journal of Central Banking*, *Economics Letters*, *Economic Modelling*, *Asian Development Review*, *Scientific Reports*, and PLoS One. He has recently developed an interest in health economics and the analysis of sub-national economics through satellite data.

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Time: 11 a.m.
Venue: HSS Conference Hall

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