Accepted Manuscript

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PII: S0304-3932(17)30121-6
DOI: 10.1016/j.jmoneco.2017.10.006
Reference: MONEC 2961

To appear in: *Journal of Monetary Economics*

Received date: 24 October 2017
Accepted date: 28 October 2017

Please cite this article as: Patrick Moran, Albert Queralto, Innovation, Productivity, and Monetary Policy, *Journal of Monetary Economics* (2017), doi: 10.1016/j.jmoneco.2017.10.006

Innovation, Productivity, and Monetary Policy*

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November 1, 2017

Abstract

To what extent can monetary policy impact business innovation and productivity growth? We use a New Keynesian model with endogenous total factor productivity (TFP) to quantify the TFP losses due to the constraints on monetary policy imposed by the zero lower bound (ZLB) and the TFP benefits of tightening monetary policy more slowly than currently anticipated. In the model, monetary policy influences firms' incentives to develop and implement innovations. We use evidence on the dynamic effects of R&D and monetary shocks to estimate key parameters and assess model performance. The model suggests significant TFP losses due to the ZLB.

Keywords: Endogenous Technology; Business Cycles; Monetary Policy.

JEL classification: E3, O3

*This paper was prepared for the *Carnegie-Rochester Conference Series on Public Policy.* We thank the Editor, Narayana Kocherlakota, and an anonymous referee for very helpful comments that greatly improved the paper. We also thank our discussant, Michael Waugh, for very insightful comments, as well as seminar participants at the April 2017 Carnegie-Rochester-NYU Conference, the Federal Reserve Board, Yale University, the 2017 meeting of the Catalan Economic Society, and the 2017 meeting of the International Economic Association for comments. The views expressed in this paper are solely the responsibility of the authors, and should not be interpreted as reflecting the views of the Board of Governors of the Federal Reserve System or of any other person associated with the Federal Reserve System.

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